

The Arts as a Way of Knowing and Expressing in Undergraduate Nursing Education

by

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“The arts inform as well as stimulate, they challenge as well as satisfy. Their location is not limited to galleries, concert halls and theatres. Their home can be found wherever humans choose to have attentive and vital intercourse with life itself” (Eisner, 1998a, p. 56).

Abstract

Background: Arts-based pedagogy (ABP) is a teaching approach in which an art form is integrated with another subject in order to foster learning. ABP demonstrates potential to engage nursing students with alternate ways of learning and to assist them to develop habits of the mind essential to excellent healthcare. However, there were notable gaps in the scholarly work about ABP. There was a need for both theoretical and empirical understanding about the phenomenon. Furthermore, there was a diverse body of research which had not been synthesized.

Purpose: The aim of this thesis was to advance understanding about the use and impact of ABP in undergraduate nursing education. The objectives were to: 1) explicate a conceptual understanding of ABL, 2) synthesize the current state of the science in regards to the impact of ABP in undergraduate nursing education, 3) analyze the most appropriate methodology with which to study the learning processes involved in ABP, and 4) elucidate the process of ABP in undergraduate nursing education through conducting a research study.

Methodology and Methods: A paper-based thesis was employed to focus on numerous objectives for knowledge development. The inquiry included a concept analysis, a Joanna Briggs Institute mixed-methods systematic review protocol and report, a methodological paper analyzing three grounded theory approaches, and a constructivist grounded theory (CGT) study exploring how undergraduate nursing students learned through ABP.

Findings: Through these investigations, a deeper theoretical and empirical understanding of ABP emerged. The concept analysis identified the antecedents, attributes, and consequences of arts-based learning, the systematic review synthesized the research about the effectiveness and experience of ABP, and the methodological paper demonstrated that CGT was the most appropriate methodology to advance the state of the science. Furthermore, the CGT study

revealed that the arts can be a powerful catalyst for learning and provided insight into why, how, and when nursing students learn through ABP, and what happens when they do.

Conclusions: The arts can be a meaningful way of knowing and expressing for undergraduate nursing students. These findings could facilitate the effective implementation of ABP into nursing education and inform arts-based educational approaches in healthcare.

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Dedication

To Nathan, Bryn and Erika, Alena, and Elias Rieger

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Chapter 1: Introduction

Well-educated nurses need more than scientific knowledge and technical skills (Carper, 1978; College of Registered Nurses of Manitoba, 2013; Pavill, 2011). Entry level practitioners must have a wide range of competencies to face the complex situations that they will encounter in practice: challenging problems demand creative approaches, diverse cultural contexts necessitate empathy and cultural sensitivity, working together intensively with other healthcare professionals requires a high level of collaborative skill, the promotion of well-being demands emotional intelligence in the caregiver, excellent practice requires reflection and critical thinking, and the vast diversity of patients necessitates dynamic ways of being both relational and ethical (Doane & Varcoe, 2007; Jack & Wibberley, 2014; Jack, 2015; Moorman & Hensel, 2016). To develop these capabilities in the over 11,000 new nursing professionals graduating every year in Canada, a wide variety of educational approaches are needed (Canadian Association of Schools of Nursing, 2015; Carper, 1978; Pavill, 2011). Numerous nurse educators have begun incorporating the arts with the belief that new pedagogical perspectives can foster these important competencies.

In recent years, there has been a growing interest in arts-based pedagogy (ABP) to broaden educational experiences and promote a well-rounded nursing education (Jack, 2015; Pavill, 2011; Rieger & Chernomas, 2013). ABP is a teaching approach in which an art form is integrated with another subject matter in order to foster student learning (Dattoo & Chagani, 2011; Goldberg, 2012; Haidet et al., 2016; Ogden, DeLuca, & Searle, 2010). The Oxford English Dictionary (2016) defines “art” as the “expression or application of creative skill and imagination, typically in a visual form such as painting, drawing, or sculpture, producing works to be appreciated primarily for their beauty or emotional power” (para. 11). The arts encompass “a wide range of visual and performing art forms, music, dance, theatre, and literature” (Arts

Council England, 2013, p. 13). In ABP, students learn about another subject through engaging in artistic processes by either responding to works of art, creating works of art, and/or performing artistic works, and this kind of artistic engagement can result in arts-based learning (ABL) (Rieger & Chernomas, 2013). ABP can be viewed as having two broad dimensions: arts-based curriculum design and arts-based student experiences (Warren, 2013). Therefore, nurse educators can make use of the arts to communicate to students about key nursing concepts, and they can also facilitate their students engaging in experiential learning through the arts. An assumption of ABP is that the artistic process is an accessible experience for everyone, not just for professional artists, and that it can form the basis for learning about diverse subjects (Bresler, 1995; Dewey, 1934). Rieger and Chernomas (2013) write that ABL is a creative teaching strategy which engages students in an active learning process and fosters the humanist elements of nursing practice. Educators are beginning to recognize that for many students, the arts can be a meaningful way of knowing and expressing in nursing education (Pellico et al., 2014; Rieger & Chernomas, 2013).

The educator's repertoire can be expanded in many ways by the arts (Lake, Jackson, & Hardman, 2015). Nurse educators have introduced various arts-based approaches into nursing education for diverse pedagogical purposes. For example, producing pictures of an emotionally significant time in nursing to promote emotional awareness (Jack, 2012); creating a wearable mask to represent an abstract interpretation of therapeutic communication skills (Emmanuel, Collins, & Carey, 2010); writing an original poem to reflect on a clinical experience with a patient who had a mental illness (Kidd & Tusaie, 2004); and engaging in theatre about ethical scenarios to learn ethical and moral decision-making skills (Coleman & Dick, 2016). There are numerous reasons for nurse educators' growing interest in ABP such as the need for specific pedagogical interventions, calls for nursing curriculum reform, shifts in educators' philosophical

views of teaching and learning, and a growing realization of the unique attributes of the arts as transformative ways of knowing (American Association of Colleges of Nursing, 2008; Forbes & Hickey, 2009; Hermann, 2004). ABP has become an important educational tool to develop key nursing competencies, meet current curriculum needs, and foster insightful ways of expressing and representing knowledge (Casey, 2009; Freeman & Bays, 2007; MacDonnell & Macdonald, 2011; Rieger & Chernomas, 2013).

ABP in undergraduate nursing education is the focus of this paper-based thesis. The thesis is comprised of a concept analysis about arts-based learning (ABL), a Joanna Briggs Institute (JBI) mixed methods systematic review about ABP in undergraduate nursing education, a methodological paper analyzing three grounded theory (GT) approaches, and a constructivist grounded theory (CGT) research study explicating how nursing students' learn through ABP. In this introductory chapter, the author will review the literature about ABP, describe the objectives and structure of the paper-based thesis, provide the purpose statement and research question for the primary research study, discuss the significance of the thesis, and explain the philosophical perspectives, theoretical orientations, methodology, and methods of the CGT research study.

Literature Review

The significance, development, and implementation of this innovative teaching approach will be explored in this literature review about ABP. First, the historical background of the arts and learning will be analyzed through looking at the development of arts integration (AI) in the discipline of education, and the educational philosophical and theoretical support for integrating the arts and learning. Then, the implementation of ABP into higher education will be discussed. Next, the author will provide an in-depth overview of the context of nursing education, including the calls for curriculum reform and the epistemological shifts in views of learning, and the potential of ABP to address these contemporary discourses. Current uses of ABP in nursing

education will also be described, and the empirical evidence for ABP in nursing education will be synthesized and analyzed. Through this exploration of the literature about the arts and learning, both generally in education and more specifically in nursing education, it becomes clear that research elucidating the ABP process is an important next step in developing knowledge about this phenomenon. In a CGT study, the literature can be useful to orientate the research study (Bryant & Charmaz, 2007a), develop theoretical sensitivity, and constitute a source of data (Charmaz, 2006; Charmaz, 2014).

The Development of Arts Integration in Education: Philosophical and Theoretical Roots

Although some may view ABP in nursing education as an innovative pedagogical approach, the concept of learning through the arts can be seen throughout human history and ABP is widely respected within the discipline of education as a powerful pedagogical approach (Burnaford, Brown, Doherty, & McLaughlin, 2007). Historically, the arts have been an important part of learning (Irwin, Rogers, & Wan, 1999). For example, many cultures have communicated important information through stories, drawings, and other forms of art (Patteson, Restoule, Margolin, & Conely de Leon, 2010; Siler, 2011). Some say that Aristotle was the father of arts education, as he valued learning through the arts for providing insight, acquiring information, and teaching universal truths (Allen, 2002). Leonardo DaVinci integrated art and science in his famous artwork, in which he immortalized his thoughts about various scientific concepts (Veltman, 2008). The integration of the arts with other subjects to enhance student learning is a contemporary and widely accepted practice in the discipline of education (Burnaford et al., 2007). The arts engage, create meaning, and communicate in unique ways; thus, numerous educational theorists have claimed that the arts are integral to a balanced education and that an AI approach has lifelong benefits for students (Eisner, 1998b; Gardner, 1999a; Gullatt, 2008). Educators claim that AI, which involves integrating the arts with other academic subjects, will

lead to deeper and enriched student learning (Winner, Goldstein, & Vincent-Lancrin, 2013). Hartle and colleagues (2015) describe four key concepts that support the integration of the arts. They assert that the arts are: 1) universal as humans have a shared aesthetic need for beauty and harmony, 2) embodied as they connect both the body and mind, as well as thoughts and feelings, 3) alternative languages as they provide multiple ways to express ideas and emotions, and 4) developmental as they have the power to move learning forward.

There are two ways to teach with the arts: the discipline specific model in which the arts are taught as an independent subject, or the AI model (Bryant et al., 2003). Further, ABP is a teaching approach that uses the AI model in order to enhance student learning (Dattoo & Chagani, 2011; Goldberg, 2012). In nursing education, the arts are generally used in an arts integration approach instead of a discipline specific art education approach (Bresler, 1995; Brown, 2007; Davis, 1999), as students learn about a nursing subject through either creating art, reflecting on another's art, or performing works of art (Rieger & Chernomas, 2013). ABP can encompass many aspects of the teaching and learning process, such as communicating concepts, representing knowledge, and assessing learning with the arts (Warren, 2013). In nursing education, ABP is frequently used as a form for students to express their thoughts and represent their knowledge. These artistic representations often become a component of assessment in nursing courses; thus, they become a form of arts-based assessment of learning.

In AI or ABP, the term 'arts' is used to represent a creative expression that is appreciated for its beauty or emotional power (Art, 2016; Rieger & Chernomas, 2013). The word, integration, comes from the Latin word *integrare*, which means to make something whole (Grumet, 2004). AI is a pedagogical approach which decreases fragmentation between subjects (Brown, 2007), and is defined as "an approach to teaching in which students construct and demonstrate understanding through an art form. Students engage in a creative process which

connects an art form and another subject area” (The John F. Kennedy Center for the Performing Arts, 2008, para. 2). AI involves the connection between the arts and other subjects; thus, addressing the duality of arts and life, and the fragmentation of knowledge (Brown, 2007).

AI is based on certain philosophical underpinnings and theoretical perspectives which provide support for this educational approach (Brown, 2007; Ellis & Fouts, 2001). These various theoretical strands include educational philosophy and theory, creativity theories, and philosophies of arts education. Thus, just as AI incorporates the integration of different disciplines, the theories that support AI also need to be integrated to understand and support this educational strategy.

The underlying philosophy for arts integration can be found in the writings of John Dewey (Dewey, 1902; Dewey, 1934; Dewey, 1938). He posited that education should focus on individual growth, the social aspects of learning, and active learning experiences (Burnaford, Aprill, Weiss, & Chicago Arts Partnerships in Education, 2009; Dewey, 1902). Furthermore, he argued that subjects should not be taught in isolation and that the arts should be integrated into the common experience (Effland, 2002; Smith et al., 2004). In Dewey’s (1934) book, *Art as Experience*, he asserted that the aesthetic origins of art are found in everyday experiences, and that art does not have significance without its context. His emphasis on the importance of holistic and active learning encouraged art educators to begin exploring interrelations with other subject areas (Bresler, 1995).

Educators who endorsed the principles of John Dewey's educational philosophy formed the Progressive Education Association, and their educational philosophy forms the theoretical basis for AI in Western education (Beane, 1997; Bresler, 1995; Ellis & Fouts, 2001; Parsons, 2004). Progressive educators wanted to make learning more relevant, and believed that the teacher’s role is to facilitate experiential and student-centered learning (Freyberger, 1985;

Skillbeck, 1970). Progressive educators also asserted that the arts are a significant part of holistic learning for all people, not just for professional artists (Burnaford et al., 2007). Moreover, they believed that children were creative beings who could express their thoughts and produce artistic pieces of work, which laid a foundation for AI (Burnaford et al., 2007; Wakeford, 2004). The idea of AI also occurred within the broader curriculum integration movement which was embraced by progressive educators as a balanced approach to education (Burnaford et al., 2007; Effland, 2002; Winerberg & Grossman, 2000). Proponents of curriculum integration believed in finding connections of processes and content between subjects (Beane, 1997; Cruikshank, 2000). Early in the twentieth century, Leon Winslow (1939) published *The Integrated School Art Program*, which described an education in which all of the subjects, including the arts, were integrated to promote deeper learning. Harold Rugg, a social reconstruction curriculum theorist, was an early proponent of integrating creative self-expression into the curriculum (Bresler, Cooper, & Palmer, 2013; Rugg, 1963). He believed that one of the primary goals of formal education should be to produce strong citizens who could be agents of social change. He proposed that this key component of a good society could be fostered through encouraging creativity and imagination (Bresler et al., 2013; Rugg, 1963).

More recently constructivist theory, which is congruent with progressive educational philosophy, has provided a theoretical basis for AI (Ellis & Fouts, 2001). Constructivist educators posit that a learner actively constructs knowledge and meaning through inquiring into topics of interest, and then integrates this new knowledge with what they already know (Marshall, 2006). Thus, the teacher facilitates the student learning process instead of focusing on the linear transfer of knowledge (Parsons, 2004). Constructivism aligns well with AI in that both support the following goals: construction of personal meaning, connecting new information to previous learning, experiential learning, real world connections, conceptual understanding, and

critical and creative thinking skills (Brown, 2007; Bryant et al., 2003; Effland, 2002; Snyder, 2001).

Other educational theorists have also bolstered the argument for AI. Eisner is an arts education philosopher and an advocate for the arts in education. In his book, *Arts and the Creation of the Mind* (2002), Eisner makes a case for the cognitive value of learning through the arts, and argues that there are complex and subtle forms of thinking which take place when students create art or critique other's art. Eisner also argues that arts can enhance the learning of other subjects, but that this quality should not be their main justification in education (Baker, 2013; Gullatt, 2008).

Howard Gardner's Multiple Intelligences Theory is widely used to support AI (Cornett, 2011; Gardner, 1999a). The Theory of Multiple Intelligences (MI) proposes that humans have a range of intelligences encompassing a number of capacities, and rejects the notion of a unitary intelligence (Gardner, 1983; Gardner, 1999b; Gardner, 2009). The goal of learning is to enhance human understanding, which incorporates students knowing who they are and what their abilities are, in order to make the world a better place (Gardner, 2009). MI assumes that students have diverse minds with differing strengths and modes of information processing. Thus, human intelligence encompasses a diverse combination of relatively autonomous intelligences. Gardner asserts that there are eight criteria for inclusion of an intelligence and at least eight intelligences. Four of these intelligences can logically be linked to arts domains: linguistic/verbal (literary arts), visual/spatial (visual art), musical/rhythmic (music), and bodily/kinesthetic (dance/drama). The others (logical/mathematical, interpersonal, intrapersonal, and naturalistic) can also be linked through creative problem solving in the arts (Cornett, 2011). Moreover, deep understanding occurs when ideas are transferred between domains, and the arts can facilitate this transformation (Cornett, 2011; Gardner, 1999a). Through using diverse pedagogical strategies, which address

the various intelligences, a broader range of students will learn effectively (Gardner, 2009). This theory supports the idea that the arts have potential for engaging multiple aspects of intelligence and fostering deep learning for many students (Bryant et al., 2003; Cornett, 2011).

However, Groff (2013) notes that MI has come under significant critique. She argues for a new theory to support the role of the arts in education, that of Wholemindedness: The Theory of Cognitive Processing Systems. This theory focuses on how individuals process information and is based on cognitive neuroscience research which has demonstrated that there are three interactive processing systems in the human brain. These systems include: visual-object (i.e. static images), visual-spacial (i.e. moving or manipulating images), and verbal (i.e. language-based). Whole-mindedness is defined as “the robust development, and awareness, of all cognitive processing systems enabling an individual to leverage these diverse capacities to meaningfully engage with and produce materials borne of one or more modalities” (Groff, 2013, p. 24). Although an individual may have a dominant cognitive processing system which educators should incorporate into learning environments and assessments, teachers should also provide pedagogical opportunities to help learners develop less dominant cognitive processing systems to promote healthy cognitive development and comprehension. Groff (2013) cites the use of art observation training for improving examination and diagnostic skills of medical students (Naghshineh et al., 2008) as an example of how visual-object processing skills, which artistic modalities can foster, are critical in diverse disciplines. She also asserts that non-verbal processing skills (visual-object and visual-spacial) have become dominant in contemporary society with the proliferation of technology and the resulting visual revolution. Young people are not just consumers of multimodal, multimedia content, but they also frequently “produce – or “write” - with it too” (Groff, 2013, p. 23). Groff (2013) concludes, “one role of the arts is to be a central modality and mechanism for shaping the cognitive aspects of all learners” (p. 34).

Dr. Jessica Hoffman Davis has published two books about the importance of the arts in education entitled *Why Our Schools Need the Arts* (2008) and *Why Our High Schools Need the Arts* (2012). In these books, Davis (2008; 2012) posits that there are five unique features of the arts which make them powerful pedagogically, and include that the arts: produce a tangible product, focus on emotion, privilege ambiguity, embrace a process orientation, and facilitate connection. As well, Davis asserts that there are ten specific learning spheres, or learning outcomes, which occur because of these unique features: imagination and agency as a result of a tangible product; expression and empathy related to a focus on emotion; interpretation and respect because of arts' ambiguity; inquiry and reflection associated with a process orientation; and engagement and responsibility because of connections. Although she writes about the arts in the education of children and adolescents, her work is insightful for understanding the unique features of the arts for enhancing student learning in general.

Theories about human creativity can also support, and provide insight into, students' learning processes with ABP. The Oxford Dictionary (2014) defines creativity as the "use of imagination or original ideas to create something" or "inventiveness" (para. 1). Another respected definition (Kelly, 2016) of creativity is: "a sequence of thoughts and actions that leads to novel, adaptive production" (Lubart, 2000, p 295). The Latin roots of the word mean to produce or to grow (Kelly & Leggo, 2008). Thus, creativity involves making something new or innovative (Kelly & Leggo, 2008; Kelly, 2016). Nurse educators are increasingly using creative strategies in order to help students develop their ability to generate ideas and think "outside of the box" (Chan, 2013, p. 1383). Creativity is also an important skill for professional nursing, as practicing nurses frequently need to come up with creative solutions for complex clinical situations (Chan, 2013).

Graham Wallas' (1926) seminal work on the four stages of the creative process has been a major influence on discourses surrounding creativity (Kelly & Leggo, 2008; Kelly 2016). In his model, the first stage is preparation, which occurs with the recognition of a dilemma which needs resolution. Second, incubation encompasses the reorganization and elaboration of ideas without consciously working on the solution. Third, illumination involves thoughts coming together in order to solve the problem. Fourth, verification follows when thoughts take a form which can be analyzed, and the person tests whether they actually work as solutions (Kelly & Leggo, 2008; Wallas, 1926). Furthermore, some scholars assert that the starting point for creativity may be critical reflection about a conflict or problem that needs resolution (Dewey, 1934; Freedman, 2010).

E. Paul Torrance (1977; 1993; 2004), an American psychologist, has written extensively on creativity and has identified the abilities of creative people. These include a sensitivity to problems, a fluency in generating ideas, a flexibility in producing a wide variety of solutions, an originality of ideas, and an ability to elaborate the details and redefine an established way of thinking (Torrance, 1977). In a longitudinal study, Torrance also identified specific characteristics of people who had exemplary creative achievements. These factors include a delight in deep thinking, tolerance of mistakes, persistence, high energy, love and enjoyment of work, purpose in life, feeling comfortable with being original, and courage to take risks (Torrance, 1993; Torrance, 2004). Furthermore, Torrance and Torrance (1973) assert that thoughtful teachers can foster the skills for creative thinking and increase the probability of creativity occurring. These essential creative skills, which can be developed, include an ability to identify a problem, draw on previous experience, develop alternative solutions, and test possible solutions to see which is the best approach. Of note, the authors discuss that the creative arts have demonstrated potential for teaching children to think creatively (Torrance & Torrance, 1973).

Other scholars also discuss how all individuals are creative at some level and that this creativity can be developed (McCaffrey & Purnell, 2007; Pavill, 2011). However, it is important to understand the difference between the creativity of exceptional artists, which pertains to only a few people with widespread impact, and the everyday creativity used for daily living (Kelly & Leggo, 2008). Csikszentmihalyi (1997) describes this difference as “Big C” and “little c” creativity. Examples of individuals with “Big C” creativity include Einstein and T.S. Elliot, whereas “little c” creativity may involve an individual developing a novel solution to an everyday problem (Gardner, 1993; Kelly & Leggo, 2008).

A number of researchers have studied the types of environments that foster creativity. In a systematic review of 210 pieces of educational research, policy, and professional literature on creative learning environments in education, researchers found a number of common characteristics that supported the creative skill development of school age children and young people (Davies et al., 2013). These factors included flexible time and space, availability of appropriate resources, working outside of the class environment, playful approaches which focused on learner autonomy, respectful teacher-student relationships, student collaboration, collaboration with outside partners, awareness of participants learning needs, and less prescriptive lesson planning (Davies et al., 2013). Furthermore, Chan (2013) conducted a systematic review of teaching creative thinking in nursing education. The following four themes about increasing students’ creativity emerged from the thematic analysis of eight qualitative studies: using diverse learning experiences (including arts-based activities), moving towards student-centered teaching to promote the freedom to learn, building students’ confidence for creative thinking, and incorporating strategies which involved group work to problem solve.

The philosophy of art education also has implications for AI. Historically, there has been a dichotomous view of art education, with some practitioners arguing that the arts should be

taught for art's sake, and others positing that the arts can be used to teach other non-art subjects (Effland, 2002; Horowitz, 2004; Russell & Zembylas, 2007). Some scholars have expressed concerns about viewing the arts as primarily a means to improving learning in non-art subjects (Eisner, 2002; Winner & Cooper, 2000). How one views art education influences one's view of AI. If the value of the arts is only intrinsic, then the arts should be taught in discipline specific settings. In contrast, if the value of art is only instrumental, then the arts should serve other subjects in a subservient manner (Bresler, 1995; Burnaford et al., 2007; Parsons, 2004; Winner et al., 2013). However, numerous arts educators assert that it is important to see the relationship between the arts and other subjects as "parallel, symbiotic, interactive or multi-layered" (Horowitz & Webb-Dempsey, 2002, p. 100), and move beyond the false dualism of art instruction or art integration (Horowitz, 2004; Rosenbloom, 2004; Russell & Zembylas, 2007). Aprill (2001; 2010) argues that the various types of art education lie on a continuum with different but inter-connected and synergistic practices. In nursing education, the arts are typically used in an instrumental way to facilitate learning about nursing concepts (Rieger & Chernomas, 2013). To summarize, there is a strong body of theoretical work supporting the integration of the arts in the discipline of education from which nurse educators can draw on to understand and support this unique approach to teaching and learning.

Here, There, and Everywhere: Arts-based Pedagogy in Higher Education

AI is widely used in education (Davis, 2008), and ABP is an emerging trend in higher and adult education (De la Croix, Rose, Wildig, & Willson, 2011; Ghanbari, 2015; Katz-Buonincontro, 2015; Magwood, Casiro, & Hennen, 2003; Sinding, Warren, & Paton, 2014; Uppal, Davies, Nuttall, & Knowles, 2016; Power & Bennet, 2016; Walker, 2002). Picasso is cited as saying, "Every child is an artist. The problem is how to remain an artist once he grows up" (Peter, 1979, p. 25). Educators in diverse disciplines are recognizing the value of

incorporating the arts into adult learning environments, and are increasingly using ABP to develop adult students' knowledge and competencies. To illustrate, Kerr and Lloyd (2008) used an arts-based intervention named *Management Jazz* in management education to facilitate transformational learning and to foster participants' creativity. In another initiative, educators used a choral conducting workshop to develop the leadership skills of management students (Sutherland & Jelinek, 2015). Master of Business Administration students participated in making a touchstone project, which is a creative artifact representing their learning (Mack, 2013). One educator writes about using collective art making with adult education students as a creative and participatory way to respond to contemporary social and environmental issues (Clover, 2006). Social work students created zines (artistic pamphlets) to learn about social justice and power hierarchies (Desyllas & Sinclair, 2014) and participated in poetry, music, film, and the visual arts to develop their emotional intelligence (Clarke, Lovelock, & McNay, 2016). In education, graduate students created a mask to explore their leadership views (Hughes, 2011).

Ghanbari (2015) conducted a case study of two university programs which integrated the arts with science, technology, engineering, and math disciplines. These disciplines are also known as the 'STEM' disciplines, but recently some educators have proposed the acronym 'STEAM' to highlight the integration of the arts with these fields. They claim that the arts "have the ability to open up new ways of seeing, thinking, and learning" (Ghanbari, 2015, p. 1) and can develop STEM students' creativity and problem solving abilities. In the first program, the ArtScience program, undergraduate honors students take one or several courses in the arts integrated program, such as an art and science photography course, an entomology/visual arts course, or a music/science course. In the second program, the ArtTechnology Program, the arts and technology are integrated within each course through artistic explorations and projects that involve creating or visualizing. Researchers found that integrating the arts into STEM fields

fostered collaborative learning in both programs, created experiential learning opportunities that helped students to retain knowledge and that were enjoyable in the ArtScience program, and facilitated experiential learning that fostered professional development and helped to broaden students' perspectives in the ArtTechnology program.

In the education of healthcare professionals, there is a growing interest in ABP. For example, dentistry students used film as a mode of narrative reflection on practice (Brett-MacLean, Cave, Yiu, Kelner, & Ross, 2010) and numerous midwifery educators have written about their ABP initiatives. Midwifery students have learned about empowerment issues through forum theatre (Kemp, 2009), explored birth experiences through screen print images and videos (Uppal et al., 2016), reflected on maternity unit policies through writing poetry (Cronin & Parry, 2006), learned about spirituality through the integration of various art-forms into a course (Mitchell & Hall, 2007), and expressed a philosophy of midwifery through creating a clay sculpture (Walker, 2007).

In medical education, ABP learning activities are often used as a strategy when teaching the medical humanities. The medical humanities are “an interdisciplinary, and increasingly international endeavor that draws on the creative and intellectual strengths of diverse disciplines, including literature, art, creative writing, drama, film, music, philosophy, ethical decision making, anthropology, and history, in pursuit of medical educational goals” (Kirklin, 2003, p. 1050). Numerous authors propose that the medical humanities are an effective way to teach subjects that cannot be reduced to the scientific phenomenon; to promote patient-centred care through nurturing professional reflexivity, to learn important clinical skills; to foster understanding and empathy through understanding the human experience; to model acceptable moral behavior; to encourage self-expression regarding clinical experiences; and to encourage skepticism about the nature of medical truth (Dennhardt, Apramian, Lingard, Torabi, &

Artnfield, 2016; Kidd & Connor, 2008; Pfeiffer, Chen, & Tsai, 2016; Zazulak, Halgren, Tan, & Grierson, 2015). Content in the medical humanities includes topics such as health care ethics, professionalism, domestic violence, and communication skills (Brett-MacLean, 2007; Gupta & Singh, 2011; Kidd & Connor, 2008; Perry, Maffulli, Willson, & Morrissey, 2011). The first medical school to introduce the medical humanities was in the US in 1967, with now over half of US medical schools including medical humanities in their program (Brett-MacLean, 2007). Although this area is young and emerging in Canada, it has expanded in the last few decades since the first implementation of medical humanities program in the country occurred at Dalhousie University in 1992 (Brett-MacLean, 2007; Elder, Tobias, Lucero-Criswell, & Goldenhar, 2006; Kidd & Connor, 2008; Magwood et al., 2003; Perry et al., 2011). One educational intervention that has been found to be particularly effective is the use of visual arts, such as paintings, to improve observational skills of medical students (Brett-MacLean, 2007; Elder et al., 2006; Kirklin, Duncan, McBride, Hunt, & Griffin, 2007; Naghshineh et al., 2013).

Another important approach that draws on the arts in medical education is narrative medicine, developed by Rita Charon (2006). She asserts that through considering people's narratives, medical practitioners can develop empathy, reflection, trustworthiness, and attentiveness to patients' concerns. She writes, "The effective practice of medicine requires narrative competence, that is the ability to acknowledge, absorb, interpret, and act on the stories and plights of others" (Charon, 2001, p. 1897). Through practices such as close reading of people's stories (which are sometimes presented through artistic modes) or reflective writing, narrative knowledge becomes valuable for promoting healing. This holistic approach to medicine aims to integrate the interpersonal, psychological, and physical dimensions of illness in order to view patients as human with their own stories and context. However, narrative medicine not only validates the personal experience of the patient, but also encourages self-awareness and self-

reflection on the part of the physician. Many medical schools offer narrative medicine training or classes, including The Columbia University Medical Center, The University of California Irvine College of Medicine, and Western University. Charon (2006) asserts that narrative medicine can be an effective frame for healthcare professionals, including doctors, nurses and social workers, to provide nuanced, effective, and respectful clinical care to every patient.

There is a wide spectrum of arts and humanities approaches in medical education, and Shapiro (2012) considered and critiqued two models delineating educators' motivations for incorporating the humanities. The first is the acquiescence model, in which educators incorporate the humanities to augment or support the goals of medical education. For example, the arts can be used in an instrumental way to develop important skills to the medical profession (i.e. to foster empathy with alternative modes) or in an ornamental way to promote the comfort of physicians (i.e. to decrease the stress of medical students through art work). The second is the resistance model, in which educators aim to create a space in which to critique the prevailing assumptions of medicine and the healthcare system. Shapiro asserts that these two dichotomous models do not adequately frame the complexity of medical humanities activities, as often the outcomes are similar and there are elements of questioning in both models despite the intentions of the instructor. She concludes that there is "room for both radical and benign approaches" to incorporating the arts and humanities in medical education (Shapiro, 2012, p. 20).

A number of researchers have systematically reviewed arts-based initiatives in medical education. Perry and colleagues (2011) conducted a literature review of arts-based interventions in medical education. They specifically limited their review to research studies which evaluated the effectiveness of observational arts-based methods, as opposed to the impact of art making on medical students. Thirteen articles, which included one mixed-methods, ten qualitative, and four quantitative studies, were included in the review. They categorized the reviewed studies into four

categories of arts-based interventions: mixed arts, literature-based arts, performing arts, and visual arts. They concluded that many of the researchers reported that ABP altered medical students' attitudes but that there was a poor description of study methods to support these claims. However, the evidence for the efficacy of ABP for improving observational skills was much stronger (Perry et al., 2011). In a qualitative study about medical students' perspectives of ABL, de la Croix and colleagues (2011) report that students seemed to value this type of learning and that there were five themes identified about their ABL experiences. Medical students found that ABL provided opportunities for them to practice acting like a doctor, developed a broader awareness of others, focused on the self, fostered the art of communication, and resulted in students' viewing ABL as having a place in medical education.

Several recent reviews have provided additional insight into the potential value of the arts and/or medical humanities in medical education (Dennhardt et al., 2016; Haidet et al., 2016; Lake, Jackson, & Hardman, 2015). Lake and colleagues (2015) conducted a literature review to specifically examine the role of the arts for learning in medical education. They reviewed 39 diverse articles, and found that the arts impacted medical education in the following four ways: 1) as a tool for the development of professional qualities such as reflection, communication, and critical thinking, 2) as a distinct pedagogical approach which fosters new and creative ways of learning, 3) as a method for critiquing the prevailing technical-rational approach, and 4) as a frame for viewing practice as a succession of social performances. The researchers concluded that the arts can provide a pedagogical means to important learning in medical education, but that they cannot be measured with standards of technical proficiency, which could overlook "the very essence of what makes the arts distinctive and important" (Lake et al., 2015, p. 770).

In a scoping review and narrative synthesis of quantitative studies (N=62) about the arts and humanities in medical education, researchers conducted three iterations of analysis:

descriptive, conceptual, and discursive (Dennhardt et al., 2016). When describing the research, they found a diverse body of work in regard to teaching initiatives and the variety of measurement approaches. In their conceptual analysis they used concept analysis principles, and found three clear groupings of studies in regard to the epistemic functions of the medical humanities. They developed a framework which depicts a continuum from content-focused to process-focused epistemic approaches for the arts: from art as expertise for mastering skill; to art as dialogue for interaction, perspective taking, and interpersonal relationships; to art as expression and transformation for personal growth and activism. The third discursive analysis, which was informed by critical discourse analysis, revealed that educators constructed the relationship between the arts and humanities and medicine in three main ways. These constructions included 1) the arts/humanities as an intrinsic but lost essential part of medicine, 2) the arts/humanities as an additive to supplement medicine with new perspectives and methods for knowledge development, and 3) the arts/humanities as a curative remedy for medicine to address deficiencies (Dennhardt et al., 2016). This scoping review provides a nuanced and insightful perspective of the arts and humanities in medical education.

Haidet and colleagues' (2016) systematic review and metasynthesis of the arts in medical education identified four common themes of the 49 included empirical studies and conceptual articles. These themes included that the arts 1) have unique qualities which can promote learning, 2) engage learners, 3) have a variety of short and long term learning outcomes, and 4) require specific pedagogical considerations when implementing arts-based initiatives. Based on these findings, the researchers developed a conceptual model that guides educators to consider implementing engagement, meaning-making, and translational strategies with arts-based educational initiatives to enhance impact (Haidet et al., 2016).

In addition to ABP in the education of health care professionals, the usefulness of the arts is being realized in other healthcare arenas such as arts-based knowledge translation for sharing research findings with diverse audiences (Rieger & Schultz, 2014), arts therapy or expressive arts activities as an intervention with patients (Cox et al., 2010; Wilson, Bungay, Munn-Giddings, & Boyce, 2016; Wood, Molassiotis, & Payne, 2011), and arts-based research for developing new knowledge (Parsons & Boydell, 2012). Cox and colleagues (2010) provide an insightful overview of the integration of the arts and health in Canada. They write that although there is a rapidly growing interest in this intersection, and some very innovative work in health-care and health-care practitioners' education, this field is "embryonic in contrast to England, the US and Australia, where governments, universities, and private organizations have supported the arts and health initiatives for several decades" (Cox et al., 2010, p. 109). Furthermore, they propose the following agenda for developing the arts and health in Canada: establishing funding and infrastructure support, improving networking and communication between initiatives, developing education and training that support the arts in health, and engaging in research and documentation about innovative developments in Canada (Cox et al., 2010). It is clear that ABP is an emerging approach in higher education and in education within other healthcare arenas, and now the focus will turn to an in-depth exploration of ABP and nursing education.

Arts-based Pedagogy and Nursing Education

There appears to be a growing interest about ABP in nursing education as numerous educators have published about their teaching innovations and some have conducted empirical investigations about their ABP initiatives. In this section, the author will describe the context of nursing education and current discourses within the discipline; discuss why ABP is an important approach to consider, especially within the current context; provide an overview of how ABP is currently used in nursing education and some of the potential challenges of this innovative

approach; examine how ABP can specifically address the pedagogical concern of developing students' reflective practices; and synthesize the state of the science in regards to ABP in nursing education.

The context of nursing education. Nursing practice has changed dramatically over the past 50 years, and nursing education has moved from vocational training to professional education (Casey, 2009). This transformation has occurred in response to the changing demands of practice; nurse educators need to prepare well-rounded graduates who can meet entry-level competencies (College of Registered Nurses of Manitoba, 2013). Competencies are defined as “the integrated knowledge, skills, abilities, and judgment required to practice nursing safely and ethically” (College of Registered Nurses of Manitoba, 2013, p. 21). Key competencies, which new practitioners need to acquire during nursing education for entry to practice, can be categorized under the following five categories: professional knowledge and accountability, knowledge-based practice, ethical practice, service to the public, and self-regulation (College of Registered Nurses of Manitoba, 2013). Educators are tasked with developing pedagogical approaches to effectively teach key content and concepts to prepare competent practitioners; however, the traditional linear strategies are often inadequate to teach the broad array of complex concepts and interpersonal competencies needed for contemporary nursing practice (Cantor, 2006; Schaefer & Zygmunt, 2003). Furthermore, some assert that in a content packed and fast-paced nursing curriculum with an emphasis on scientific and technical knowledge, some important pedagogical concerns can be overlooked (Gezarian, Fernberg, & Sheehan, 2016; McAndrew & Roberts, 2015; Pellico et al., 2014). There is a call for transformation of the nursing curriculum in order to prepare nursing practitioners who can meet the health-care needs of diverse populations, and work effectively within challenging healthcare environments (Forbes & Hickey, 2009; Hermann, 2004; Pavill, 2011).

Calls for nursing education reform. Significant changes in healthcare, and the role of nurses within dynamic healthcare systems, have prompted a call for curriculum reform in nursing education (Forbes & Hickey, 2009). In the Oxford Dictionary (2014), curriculum is defined as “the subjects comprising a course of study in a school or college” (para. 1). Another definition is the “overall structure of nursing education programs that reflects schools’ mission and philosophy, course of study, outcomes of learning, and methods of program evaluation” (Scheckel, 2009, p. 48). Instruction, a related concept to curriculum, is defined as “the teaching and learning strategies and experiences faculty and students engage in to achieve the elements of the curriculum” (Scheckel, 2009, p. 49). Numerous authors discuss how the present-day challenges in healthcare, such as diverse client populations, demographic transitions, increasing patient acuity, new infectious and environmental risks, scientific advancements, technological innovation, professional differentiation, and costly healthcare systems, place complex demands on beginning practitioners (Canadian Association of Schools of Nursing, 2014; Forbes & Hickey, 2009; Frenk et al., 2010; Institute of Medicine, 2010; Vinson, 2000). Frenk and colleagues (2010) write of the mismatch between healthcare practitioners’ competencies and the populations’ healthcare needs, and discuss the concerning educational focus on technical knowledge instead of on in-depth contextual understanding. Thus, there is a call to reform the education of nurses from key organizations such as the Canadian Association of Schools of Nursing (2014), the National League for Nurses (2003), the American Association of Colleges of Nurses (2008), the Carnegie Foundation for the Advancement of Teaching’s Preparation for the Professions (Benner, Sutphen, Leonard, & Day, 2010), the World Health Organization (2013), the Lancet Commission (Frenk et al., 2010), and the Institute of Medicine (2010).

Numerous nursing organizations have published documents which urge nurse educators to transform nursing education. At the Canadian Association of Schools of Nursing education

summit (2014), educators strongly expressed that nursing education should strengthen foundational learning, which includes scientific learning but also the developing emotional intelligence, self-awareness, cultural understanding, ability to provide person-centered care, and interpersonal skills of nursing students. Further, they assert that nursing education should mirror desired nursing practice, and should be structured to instill important practice capacities such as critical thinking and reflection. The National League for Nurses (2003) also calls for a change in nursing education, including a move away from content laden curricula with measurable behavioral outcomes that focus on teaching students what to think. Instead, they assert that educators need to teach nursing students how to think and explore “new pedagogies and new ways of thinking about nursing education” (National League for Nursing, 2003, p. 4). The American Association of Colleges of Nurses (2008) presents a framework consisting of nine essential outcomes of baccalaureate nursing education which can be used to transform nursing education. Of their nine identified essential outcomes, the first encompasses a liberal education for baccalaureate nursing education. They posit that a liberal education in nursing should encompass both the sciences and the arts, which includes fine arts like painting or sculpture, performing arts such as dance or music, and the humanities. They write that a liberal education is needed for “the development of intellectual and innovative capacities for current and emergent generalist nursing practice” (American Association of Colleges of Nursing, 2008, p. 11). Lastly, a multi-year comparative study funded by the Carnegie Foundation for the Advancement of Teaching resulted in the publication entitled *Educating Nurses: A Call for Radical Transformation* (Benner et al., 2010). The four recommendations of this work for nursing education include: moving from focusing on decontextualized knowledge to teaching for a sense of salience and contextual learning, integrating clinical and classroom teaching, emphasizing

clinical reasoning and multiple ways of thinking, and focusing on the formation of a professional identity.

Other healthcare organizations also concur that transformation of nursing education is needed. The Lancet Commission (Frenk et al., 2010) asserts that a redesign of healthcare practitioners' education, including nurses, is necessary and they recommend that this reform should be guided by the two outcomes of transformative learning and interdependent education. They claim that transformative learning is the "highest of three successive levels, moving from informative to formative to transformative. Informative learning is about acquiring knowledge and skills; its purpose is to produce experts. Formative learning is about socializing students; its purpose is to produce professionals. Transformative learning is about developing leadership attributes; its purpose is to produce enlightened change agents" (Frenk et al., 2010, p. 1924). In 2013, The World Health Organization published a set of evidence-based guidelines for transforming health care professionals' education. Of their eleven recommendations, one addressed curriculum development and urged program planners to adapt curricula to rapidly changing population needs through "identifying and defining the core competencies that are required to meet the evolving needs of their populations" (World Health Organization, 2013, p. 36). Furthermore, the Institute of Medicine (2010) acknowledges that the present healthcare environment is in need of highly educated nurses, and that the historical ways in which nurses were educated are no longer adequate for developing the needed competencies of the 21st century. Thus, nursing education needs to move from a focus on task-based proficiencies to higher-level competencies such as leadership, evidence-based practice, interpersonal skills, and collaboration. They believe that the transformation of nursing education is key to the positive future of the nursing profession.

Furthermore in a review of the literature, Forbes and Hickey (2009) found the following four themes about baccalaureate nursing education curriculum reform in the literature: incorporating safety and quality initiatives into baccalaureate curricula, re-designing conceptual frameworks which shape nursing education, addressing the content laden curricula and moving towards concept based curricula, and exploring alternative pedagogies which can teach students how to think instead of just what to think; thus, fostering the development of cognitive skills. In summary, there is a notable shift in the contemporary expectations of the learner competencies and knowledge that nursing program graduates should demonstrate. Of note, there are a number of key themes in these calls to reform which can be addressed by the inclusion of ABP as an instructional strategy. These ideas include that nurse educators need to move towards pedagogical practices which incorporate multiple ways of knowing, embrace concept based curricula that teach students how to think, include transformative learning approaches which facilitate critical reflection, foster critical and higher level thinking skills, focus on contextual knowledge, and develop students' interpersonal competencies.

Epistemological shifts and multiple ways of knowing. There are also changing views on epistemology that influence educational philosophy in both general and nursing education. Epistemology encompasses assumptions about the nature of knowledge, which are linked to assumptions about the nature of reality (ontology), and has significant implications for the methods, or approaches, used to develop new knowledge (Crotty, 1998; McEwen & Wills, 2011). Epistemology is defined as “the study of what human beings know, how they come to know what they think they know and what the criteria are for evaluating knowledge claims” and nursing epistemology is defined as “the study of knowledge shared among the members of the discipline, the patterns of knowing and knowledge that develops from them, and the criteria for accepting knowledge claims” (Schultz & Meleis, 1988, p. 217).

In nursing, education has traditionally occurred through the linear transfer of information from the teacher to the student. This conventional view of learning in nursing is based upon the assumptions of positivism. These include the realist ontological assumption that there is a real world which can be known and objectivist epistemological assumptions that this one true knowledge can be discovered and transmitted to others (Crotty, 1998). This approach to teaching is also based on a reductionist view of the world, which focuses on studying the parts to understand the whole (Booth, Kenrick, & Woods, 1997; Haase & Myers, 1988; Kincheloe & Tobin, 2009). In contrast to this linear process, constructivism posits that knowledge is constructed in the mind of the learner (Bodner, 1986), and social constructivism is an extension of constructivism which assumes that this construction of meaning occurs with others (Benson, 2001; Crotty, 1998). Thus, learning is a socially constructed process which occurs through the learner's engagement with the world and others, and results in multiple perspectives of a phenomenon or topic (Benson, 2001; Jacobson, 2007; McWilliam, Kothari, Ward-Griffin, Forbes, & Leipert, 2009). Educators' practices are influenced by these epistemological assumptions. If knowledge consists of objective pieces of information, then focusing on transferring this information in well-designed presentations or didactic lectures is appropriate, which is the historical method of teaching theoretical knowledge in nursing education (Schaefer & Zygmunt, 2003). However, if knowledge is primarily socially constructed, then enhancing learner participation, and facilitating dialogue and reflection, is valued in order to create meaningful knowledge (Wenger, 2009).

Nurse educators are increasingly drawing on the tenets of constructivism and social-constructivism to support their teaching practice (Brandon & All, 2010). Some nurse educators assert that teachers can no longer rely only on positivist linear strategies to transfer objective knowledge. They posit that pluralistic pedagogical approaches are also needed, which draw on

the arts and humanities, in order to develop well-rounded practitioners (Casey, 2009; Darbyshire, 1994; Scheckel & Ironside, 2006).

This view is congruent with Carper's (1978) seminal work, in which she asserted that nursing is both an art and a science. She argued that the epistemological base of the nursing profession is comprised of four diverse, yet integrated, ways of knowing (Berragan, 1998; Fawcett, Watson, Neuman, Walker, & Fitzpatrick, 2001; Zander, 2007): empirical, esthetic, personal, and ethical knowledge. Empirical knowledge encompasses the objective and general knowledge from science that can be quantified and empirically verified through repeated testing (Carper, 1978; Zander, 2007). Esthetic knowledge includes a holistic awareness of the unique patient and their individual circumstances, and of the combined wholeness of the situation. Carper (1978) refers to personal knowledge as a pattern of knowing which includes subjective and existential knowledge derived from an awareness of self and others in a relationship, and encompassing both self-awareness and empathy (Zander, 2007). Ethical knowledge represents the moral component, and this way of knowing is concerned with choosing and justifying moral duties and obligations (Carper, 1978; Zander, 2007). Other scholars have extended Carper's original work, and have proposed additional ways of knowing such as unknowing (Munhall, 1993), emancipatory (Chinn & Kramer, 2008), and socio-political knowing (White, 1995).

Although some authors posit that these ways of knowing have been given equal weight within nursing (Paley, Cheyne, Dalglish, Duncan, & Niven, 2007), others argue that three of the ways of knowing (ethics, personal, and esthetics) are typically not as well defined or established (Fawcett et al., 2001). Chinn and Kramer (1999) write that the diverse ways of knowing need to be integrated for nursing practice and that "Failure to develop knowledge integrated within all of the patterns of knowing leads to uncritical acceptance, narrow interpretation, and partial utilization of knowledge. We call this, "the patterns gone wild." When this occurs, the patterns

are used in isolation from one another, and the potential for synthesis of the whole is lost” (p. 12). This isolation is a concern, as the end goal of knowledge development is for the care of clients which necessitates the development of multiple ways of knowing (Berragan, 1998). There are many ways of knowing a phenomenon; however, when only one way of knowing is utilized the learner does not construct integrated knowledge, or arrive at wisdom (Stange, 2010). This concern regarding the imbalance of the ways of knowing is echoed in some of the concerns brought up in the calls to nursing education reform. Thus, it is increasingly being acknowledged that nurse educators need to incorporate multiple ways of knowing into nursing education in order to develop competent practitioners (Berragan, 1998; McNiff, 2011).

Innovation and the arts: Addressing nursing’s epistemological needs. In summary, a number of key organizations are recommending nursing education reform (American Association of Colleges of Nursing, 2008; Benner et al., 2010; Canadian Association of Schools of Nursing, 2014; Forbes & Hickey, 2009; Frenk et al., 2010; Institute of Medicine, 2010; National League for Nursing, 2003; World Health Organization, 2013), and many of their concerns can be attended to with innovative teaching approaches such as ABP. As well, it is acknowledged that nurse educators are increasingly drawing on constructivist/social constructivist approaches to teaching and realizing that they need to incorporate multiple ways of knowing. Implementing curriculum changes in response to these discourses demands new instructional strategies. ABP can address a number of the concerns put forward in the calls for transformation of nursing education and is also based on constructivist/social constructivist perspectives of teaching and learning. Through using ABP, nurse educators can implement active and constructivist learning activities, include multiple ways of knowing, enact concept-based curricula, foster transformative learning and interpersonal competencies, develop critical thinking

skills, focus on contextual knowledge, and address the needs of today's students. The potential of ABP in regards to these educational needs will be now be discussed further.

ABP initiatives are often based on constructivist/social constructivist views of learning (Bryant et al., 2003). The artistic process is an interpretive process (Foster, 2007), and the learner in ABP actively participates in the construction of knowledge (Rieger & Chernomas, 2013). In contrast, educational strategies based on an objectivist epistemology focus on transporting pieces of knowledge into the minds of individuals (Appleton & King, 2002; Crotty, 1998; Kincheloe & Tobin, 2009), but are not as focused on the creation of meaning or how the individual's experiences influence the knowledge (Zuengler & Miller, 2006). However with ABP, learners are not discovering objective truth but rather constructing knowledge through their engagement with the world and other human beings (Crotty, 1998). In contrast to linear teaching strategies, ABP values the active co-construction of knowledge as the learner actively participates and integrates new content with personal experience (Foster, 2007). Bryant and colleagues (2003) write that the constructivist perspective is central to ABP and that "Learning and teaching in the arts is characterized by authentic experience, collaborative discourse, reflection, open-ended challenges, problem solving, broad ideas and questions, and artistic inquiry" (p. 8). Accordingly, the type of learning involved in ABP is congruent with the constructivist/social constructivist views of learning increasingly being espoused by nurse educators.

Learning strategies, such as ABP, also demonstrate potential to privilege multiple ways of knowing. ABP privileges embodied and experiential learning, and values the role of emotion as essential to learning and constructing connections to develop knowledge (Lawrence, 2008). Thus, ABP initiatives can integrate thinking and feeling; personal and empirical knowledge; and cognitive and affective domains of learning (Hartle et al., 2015). There has been a tendency in healthcare education for the elevation of the rational way of knowing. In contrast, ABP

encompasses multiple ways of knowing, and this integration is needed to develop new practitioners with a holistic understanding of nursing practice and an ability to provide patient centered care (Berragan, 1998). Including multiple ways of knowing in teaching, learning, and assessment with ABP may also be more democratic, as the use of different modes may appeal to different types of learners who prefer to communicate in alternate mediums (Cantor, 2006; Hermann, 2004). ABP provides a range of ways for students to learn and show what they know (Cantor, 2006). Although some scholars propose that ABP holds potential to privilege aesthetic knowing (Hegedus & Kenefick, 2006), others assert that ABP can effectively integrate the multiple ways of knowing needed for nursing practice (Hunter, 2008).

Moreover, artistic expressions have been identified by some scholars as an important and specific way of knowing in education (Darby & Catterall, 1994; McNiff, 2011). In the nursing literature, authors refer to aesthetic inquiry, or aesthetic knowing, as a way to develop important nursing knowledge about the meaning of a lived experience (Archibald, 2012; Price et al., 2007). Aesthetic inquiry can especially elucidate the narratives which occur within the relational context of nursing (Doane & Varcoe, 2007), and this aesthetic knowing (Chinn, Maeve, & Bostick, 1997) can inform relational and artistic nursing practice. Carper writes that aesthetic knowing involves appreciating a “singular, particular, subjective expression of imagined possibilities” (Carper, 1978, p. 16), and makes possible “knowing what to do and how to be in the moment, instantly, without conscious deliberation” (Chinn & Kramer, 1999, p. 8). However, Archibald (2012) points out that there is an often overlooked difference between aesthetic knowing/inquiry for knowledge development in nursing, and the application of knowledge through the art of nursing. Aesthetic inquiry refers to knowing through an aesthetic experience (Archibald, 2012), and is defined as “a method of knowing that implies an ability to appreciate and comprehend the elements of an art form” (Price et al., 2007, p. 155). Yet, it seems reasonable that knowledge

developed through aesthetic inquiry may produce knowledge which can especially inform the art of nursing practice.

Educators can also employ ABP to enact concept-based curricula. ABP is a pedagogical strategy which is process based and student focused, and encompasses active and experiential learning (Rieger & Chernomas, 2013). All of these are desirable qualities in a move away from a focus on content memorization and towards concept-based curricula with a focus on learning processes (Forbes & Hickey, 2009). Nurse educators are increasingly recognizing the issues with content-saturation in nursing education due to the explosion of scientific knowledge (Giddens & Brady, 2007; Hardin & Richardson, 2012; Kinnick, 1990), and the need to develop new pedagogies which focus on teaching concepts and learning processes in order to support lifelong learning (Dickelmann, 2002). Learning content alone involves the memorization of often unconnected and reduced facts (Christiansen, 2011). In the ABP processes, the students must move beyond memorizing the right or wrong answer and move towards a stance of inquiry and the ability to ask salient questions to direct their learning (Booth, 2013; Bryant et al., 2003; Davis, 2012). ABP is congruent with concept-based learning, as the arts emphasize learning processes which privilege inquiry and discourse, instead of the memorization of content (Scheckel & Ironside, 2006). Thus, ABP can teach students how to think, instead of just what to think (Forbes & Hickey, 2009).

ABP changes the way students learn; thus, creating opportunities for meaningful reflection and transformative learning. ABP makes critical reflection possible through either creating art to reflect on practice, or reflecting on others' art in order to inform practice (Eisner, 2002; Perry et al., 2011; Rieger & Chernomas, 2013). The arts enable the grasping of abstract concepts and experiences, through the process of transforming them into a material of some permanence (Eisner, 2002). Thus, they become a mode of reflection on experience which allows

for a deeper and more thorough inspection (Eisner, 2002). ABP can also foster transformative learning. Instead of focusing on transferring the right answers about a subject to the students, ABP fosters the learner developing questions and making personal meaning about the phenomenon (Bodner, 1986). This development and meaning making results in the students making deep connections with the subject matter based on their previous life experience and their own knowledge needs (Inskeep & Lisko, 2001). Through this process, ABP can foster the critique of previously held assumptions (MacDonnell & Macdonald, 2011). Ayers (2004) writes about the transformative potential of the arts, “Engaging in the arts is not always comfortable, as it “challenges and transports us; it offers an invitation to transformation and an opportunity to see things anew...so it is not always sweet and pretty” (p. xiii).

Critical thinking, which is the “process of analyzing and assessing thinking with a view to improve it” (Elder & Paul, 2010, p. 41), can be developed through ABP. This higher level thinking skill is highly valued in nursing education (Hagler & Morris, 2015; Seymour, Kinn, & Sutherland, 2003); however, it can be challenging to effectively teach (Staib, 2003). Hagler and Morris (2015) write that there are two aspects to critical thinking: a critical thinking ability which involves higher level thinking skills (i.e. conceptualizing, analyzing, and interpreting) and a critical thinking disposition which incorporates characteristics of a critical thinker (i.e. inquisitiveness, open-mindedness, and mindfulness of alternatives). Teaching methods that can support the development of critical thinking involve reflection, and focus on providing rationales and developing alternative ways of thinking (Hagler & Morris, 2015). ABP can foster reflection (Casey, 2009; McAndrew & Roberts, 2015), facilitate the critique of assumptions behind previously held knowledge (MacDonnell & Macdonald, 2011), and unveil alternative perspectives and their importance (Christiansen, 2011; Darbyshire, 1994; Jonas-Simpson et al., 2012). Furthermore, critical thinking habits of the mind such as creativity, flexibility, and open-

mindedness (Staib, 2003) may be fostered through artistic processes. Thus, numerous nurse educators have written about the value of the arts for developing critical thinking amongst nursing students (Casey, 2009; Chan, 2013; Emmanuel, 2010).

ABP activities can also privilege in-depth contextual knowledge and situated learning (Lave & Wenger, 1991), as they offer a way to elucidate the complexity of experience (Pardue, 2005). Arts as a way of knowing is based on the realization that the particular situation can teach about the general (Eisner, 2002), and can be a way to understand concepts that are learned best through lived experiences (Pavill, 2011). ABP can retrieve the personal, nursing, and patient narratives which occur within nursing practice (Doane & Varcoe, 2007), and bring them into view for reflection and learning. This re-enactment and examination of the lived experience through the arts (Casey, 2009; Foster, 2007) can elucidate tacit and professional knowledge for public review (Rycroft-Malone et al., 2004). Thus, ABP can incorporate tacit knowledge into learning in order to develop phronesis (Kinsella & Pitman, 2012). While linear pedagogical strategies focus on the transfer of true knowledge, phronesis is wise, practical reasoning which considers the particulars of the local context and acknowledges the uncertainty of real life (Eisner, 2002). Aristotle identified phronesis as a type of knowledge distinct from technical knowledge (*techne*) or basic knowledge (*episteme*), and asserted that it enabled the person to act correctly in an ambiguous real-life situation (Kinsella & Pitman, 2012). Clinical experiences, knowledge of the local context, and patient experiences can be elucidated through ABP and then explored (Rycroft-Malone et al., 2004).

Furthermore, today's healthcare students are multi-literate learners, and the arts engage this generation of students in meaningful learning through use of multiple modes of meaning (Begoray & Morin, 2002; Bryant et al., 2003). These learners commonly use multiple modes such as written, oral, visual, audio, tactile, gestural, and spatial modalities, to communicate and

learn (Cope & Kalantizis, 2009). The application of multiple literacies is transforming education, and educators are increasingly including the use of not only print based media, but also music, movement, visual art, drama, and film for viewing and representing knowledge (Begoray & Morin, 2002; Cope & Kalantizis, 2009). With print based literacies, learners are often passive recipients of knowledge, but multiple literacies demand an increased agency from the learner in an active and transformative meaning-making process (Cope & Kalantizis, 2009). Thus, the use of different modes of meaning creates a more “productive, relevant, innovative, creative, and even perhaps emancipatory, pedagogy” (Cope & Kalantizis, 2009, p. 175).

In summary, there are many reasons to explore and study the innovative pedagogical strategy of ABP in nursing education. ABP incorporates constructivist views on learning, fosters multiple ways of knowing, focuses on learning concepts, provides opportunities for reflection and transformation, develops critical thinking skills, privileges contextual learning, and engages today’s multi-literate healthcare students. Therefore, the arts can promote learner competencies essential to humanistic and patient-centered healthcare, and address a number of the pedagogical needs in nursing education (American Association of Colleges of Nursing, 2008; Benner et al., 2010; Canadian Association of Schools of Nursing, 2014; Forbes & Hickey, 2009; Frenk et al., 2010; Institute of Medicine, 2010; National League for Nursing, 2003; World Health Organization, 2013).

Arts-based pedagogy initiatives in nursing education. Nurse educators write about how the use of the arts is especially congruent with nursing education (Hermann, 2004; Pavill, 2011). For example, ABP can promote holistic learning (Kidd & Tusaie, 2004), privilege the art of nursing (Darbyshire, 1994), train the mind to observe the world (Casey, 2009), generate knowledge that is sensitive to the human experience (Casey, 2009), and develop caring and empathy (Pardue, 2004). All of these are congruent with the core values of nursing practice and a

humanistic approach to patient care. Novel examples of ABP in nursing education include: using simulated ethical theatrical scenarios to teach ethics (Coleman & Dick, 2016); engaging in visual art observation to improve clinical assessment skills (Frei, Alvarez, & Alexander, 2010; Pellico, Friedlaender, & Fennie, 2009; Pellico et al., 2014), and participating in a music auditory training to improve observational and auscultative skills (Pellico et al., 2014). Nursing students have also produced a digital story to develop advocacy skills (Gazarian, Frenberg, & Sheehan, 2016); painted an art piece to foster deeper reflection and thinking about the profession of nursing (McAndrew & Roberts, 2015), and crafted a mandala to develop self-awareness and enhance emotional learning (Mahar, Iwasiw, & Evans, 2012). In a nursing theory class, students participated in various arts-based assignments involving drama, narrative, and the visual arts to learn about important nursing concepts such as adherence, uncertainty, and empowerment (Nguyen, Miranda, Lapum, & Donald, 2016). Nurse educators have also used photo-essays to develop students' cultural understanding (Killion, 2001); poetry as a way to communicate nursing knowledge (Hahessy, 2016) and to help students consider their feelings about practice issues (Jack, 2015); and visual thinking strategies with artwork to enhance students' communication and observational skills (Moorman & Hensel, 2016).

Nurse educators assert that ABP can address many pedagogical concerns in nursing education. ABP has been used by nurse educators to: explore the aesthetic way of knowing (Hegedus & Kenefick, 2006); understand the human experience of health and illness (Casey, 2009; Duffin, 2009; Hegedus & Kenefick, 2006; Hunter, 2008; Michael & Candela, 2006; Pardue, 2004; Ragland, 2006); deal with the emotions of practice (Duffin, 2009; Jack, 2015); understand complex concepts such as caring (Darbyshire, 1994), nursing diagnosis (Inskip & Lisko, 2001), mental illness (Jensen & Curtis, 2008), empathy (Özcan, Bilgin, & Eracar, 2011), advocacy (Gazarian et al., 2016), uncertainty (Nguyen et al., 2016), and culture (Killion, 2001);

increase interpersonal communication skills (Frei et al., 2010); teach observation and auditory skills (Frei et al., 2010; Moorman & Hensel, 2016; Pardue, 2005; Pellico et al., 2009; Pellico et al., 2014); increase cultural sensitivity (Newcomb, Cagle, & Walker, 2006); reflect on practice (McAndrew & Roberts, 2015; Newton & Plummer, 2009; Pavill, 2011); and decrease stress (Walsh, Chang, Schmidt, & Yoepp, 2005). In nursing, varied terminology is used when discussing ABP such as teaching aesthetics (Hegedus & Kenefick, 2006), understanding through the arts and humanities (Darbyshire, 1994), arts infusion (Jensen & Curtis, 2008), aesthetic teaching strategies (Pardue, 2004), infusion of the humanities (Pardue, 2005), integrating the fine arts (Pavill, 2011), narrative pedagogy (Gazarian, Fernberg, & Sheehan, 2016), and arts-based learning (MacDonnell & Macdonald, 2011; Nguyen et al., 2016).

Numerous nurse educators are promoting ABP as a powerful pedagogical approach; however, nursing students are diverse and may respond in various ways to this innovative approach (Casey, 2009). Further, resistance to arts integration has also been noted by nursing education scholars (Darbyshire, 1994; Hermann, 2004; Jensen & Curtis, 2008; Pavill, 2011) and there are several reasons for this hesitancy to embrace ABP. It is imperative to be aware of these potential issues when considering the significance and pragmatic usefulness of this pedagogical approach. A common concern of students with ABP is that they think they are not creative, or that they are less creative than others, which results in self-doubt and insecurity about ABP (Lillyman, Gutteridge, & Berridge, 2011; McGrath & Higgins, 2006). Additionally, nursing students may be overwhelmed by the risk-taking aspect of ABP and sharing their artistic creation with a group of peers and instructors. A related student reaction is discomfort with the non-prescriptive and unstructured approach to learning in ABP. Nursing students may be used to linear, positivist teaching strategies with measurable outcomes, and less comfortable with the ambiguity of the ABP assignment (Casey, 2009; Cheng, 2010; Copper, 2000; Pohlman, 2013).

Being asked to engage in ABL can “generate anxiety because no universally agreed-upon right answer exists” (Shapiro, Coulehan, Wear, & Montello, 2009, p. 193).

Further, there may be pragmatic and ethical concerns. Students may resent having to complete a time-consuming ABP assignment, which is not viewed as essential learning (Pavill, 2011). This approach may seem irrelevant for developing the practical knowledge and skills needed for nursing practice (Casey, 2009; Duffin, 2009). Even if students enjoy the experience, the ABP approach may seem frivolous, as it does not incorporate essential scientific knowledge (Casey, 2009; Jensen & Curtis, 2008) and is not tested on registration examinations (Pavill, 2011). Students may also be concerned about the ethical aspects of an arts-based reflection such as the risk of revealing intimate reflections on values and assumptions that infringe on their right to privacy (Epp, 2008; Shapiro et al., 2009), the confidentiality of their reflections (Boydell et al., 2012; Hannigan, 2001), or the potential inequity due to the cost of the assignment (White, Perlman, Fantone, & Kumagai, 2010). A related concern is that of student distress. Students may have strong emotional reactions when creating or presenting their arts-based reflections due to the depth of reflection elicited through ABP (Cleary, Horsfall, Happell, & Hunt, 2013; Stacey & Hardy, 2011). The arts can intensify difficult experiences, and engage students’ senses, which can increase the impact of ABP but can also cause emotional distress (Boydell et al., 2012; Grindle & Dallat, 2001; Lillyman et al., 2011; Schreiner & Bordanaro, 2012). Despite these potential negative reactions, many nurse educators are still advocates of integrating the arts with nursing education (Rieger & Chernomas, 2013) and with careful planning, many of these negative reactions and concerns can be addressed and/or mitigated.

Arts-based pedagogy and reflective practice in nursing education. It is clear that educators are increasingly using the innovative approach of ABP (Rieger & Chernomas, 2013), as ABP can attend to many significant pedagogical concerns. One such concern is finding

approaches to effectively foster reflection in nursing students, as reflection on practice is viewed as essential to relational nursing practice and professional development (Karpa & Chernomas, 2013). Reflection is posed as a competence, or habit of the mind, which can help practitioners to survive and thrive in a complex healthcare environment (Mann, Gordon, & MacLeod, 2009; Wald, Norman, & Walker, 2010). Reflection involves a “purposeful critical analysis of knowledge and experience, in order to achieve deeper meaning and understanding” (Mann et al., 2009, p. 597), and also entails an exploration of feelings (Bulman, 2013). Further, some models of reflection involve a vertical dimension encompassing different possible levels of reflection, from more descriptive to deeper analysis (Bulman, 2013; Mann et al., 2009; Mezirow, 1991). Critical reflection encompasses a higher order of thinking and a more in-depth analysis of one’s presuppositions, understandings, and beliefs (Bulman, 2013; Epp, 2008; Mezirow, 2009; Schön, 1987). Mortari (2015) identifies four main philosophical perspectives of reflection: pragmatist, critical, hermeneutic, and phenomenological. In summary, reflection facilitates the assessment of experiences and personal assumptions affecting one’s action in order to become a better practitioner (Ruth-Sahd, 2003). However, critical reflection on practice does not appear to be natural and needs to be developed through intentional activities (Murdoch-Eaton & Sandars, 2014).

Developing the nursing students’ reflective skills is important for a number of reasons (Mortari, 2015). First, reflective practice enables students to develop deep learning from experiences (Mann et al., 2009). Through reflection, students can think about their actions in practice, link new and existing knowledge, and develop insight in order to improve future practice (Duffy, 2007; Epp, 2008; Mann et al., 2009; White et al., 2010). Reflection can enable the students to develop their professional identity, and this identity requires “understanding of one’s personal beliefs, attitudes and values, in the context of those of the professional culture”

(Mann et al., 2009, p. 596). Hence, students can learn to act and think professionally, and develop skills for lifelong professional development (Brett-MacLean et al., 2010; Bulman, 2013; Smith, 2011). Reflection is also an important component of a professional's personal growth, and helps practitioners to develop therapeutic effectiveness with clients (Chochinov et al., 2013). Further, reflective practice develops the students' awareness of self and others, which is imperative for the relational nature of nursing practice (Epp, 2008; Karpa & Chernomas, 2013; Scanlan & Chernomas, 1997). A competent practitioner needs "a sensitivity in dealing with patients that is based on a knowledge of herself and her own values" (Macnaughton, 2000, p. 23). Reflective practice can promote caring practice as students reflect on patients' stories (Stacey & Hardy, 2011; White et al., 2010). There are many personal and contextual factors which influence nurse patient relationships, and reflective skills are vital to enacting responsive relationships with diverse clients (Doane & Varcoe, 2007). Lastly, historically there has been a division between theoretical and practical knowledge, and between thinking and feeling. However, reflective practice can bridge the theory-practice gap, and integrate thinking and feeling (Bulman, 2013). These connections are imperative for clinical judgment, healthy relationships, ethical practice, and evidenced-based care (Bulman, 2013; Doane & Varcoe, 2007; Duffy, 2007).

Reflective practice is a key skill which nursing students need to develop; however, it is challenging to teach and there is evidence of students' non-reflection or shallow reflection in reflective assignments (Karpa & Chernomas, 2013; Mann et al., 2009). Although nurse educators generally have a positive view towards reflection, they find it difficult to teach this complex skill and to assess students' reflections (Karpa & Chernomas, 2013; Koole et al., 2011). Yet, research demonstrates that reflective capabilities can be developed over time with pedagogical interventions (Epp, 2008; Mann et al., 2009). Moreover, in nursing education written reflections are the primary pedagogical approach, and some question the effectiveness of journaling as the

lone strategy for reflection (Epp, 2008; Mallik, 1998). Interestingly, there is limited evidence of the effectiveness of written journals, and many students' journal entries are often primarily descriptive (Karpa & Chernomas, 2013). In a literature review of reflective journaling, researchers found that students' journal entries were predominantly at the lower levels of reflection, but that many did make entries at higher levels, albeit not as frequently (Epp, 2008; Richardson & Maltby, 1995; Williams, Wessel, Gemus, & Foster-Seargeant, 2002). Thus, students have the ability to reflect at deeper levels but often do not do so. Another review also found that deeper levels of reflection are more difficult to achieve, and that students have different orientations towards reflection (Mann et al., 2009). It is apparent that some students are dissatisfied with written reflections (Murdoch-Eaton & Sandars, 2014; Smith, 2011) or find them challenging (Epp, 2008).

Thus, it is a pedagogical concern of nurse educators to develop meaningful learning activities which facilitate deeper reflection on practice and build nursing student's reflective capacities (Karpa & Chernomas, 2013). Further, nursing students are a diverse and multi-literate group who need varied ways of learning (Bradshaw & Lowenstein, 2014; Cope & Kalantzis, 2009). Not all students may relate to written reflections, and students' reflective practice may be enhanced by use of various mediums for reflection. Educators need innovative pedagogical approaches to develop reflective capacities in all students (Epp, 2008; Karkabi, Wald, & Castel, 2013). As Epp (2008) writes, "Reflection is multifaceted, so it stands to reason that more than one strategy could be employed to teach and encourage reflection" (p. 1386). Utilizing alternative modes of reflection could enable students to express their reflections in ways that are meaningful to them (Ruth-Sahd, 2003), and make reflection more valuable and desirable (Epp, 2008).

One alternative pedagogical approach to written journals is arts-based reflection on nursing practice and on issues important to nursing practice. In nursing education, often the arts-

based reflective artifact also encompasses a written or oral commentary that complements the art form. Arts-based reflection is an example of ABP in nursing education. Numerous educators have discussed the use of arts-based reflection as a pedagogical approach which can foster meaningful and deep reflection (Mann et al., 2009; Newton & Plummer, 2009; Pavill, 2011; Wald et al., 2010; Webster, 2010). In Canada, the use of the arts in healthcare education has focused on arts-based pedagogical strategies to enhance reflective practice (Cox et al., 2010).

Integrating the arts with reflection on practice may appeal to diverse learners (Murdoch-Eaton & Sandars, 2014), but artistic modes also hold promise for fostering meaningful student reflection because of their unique attributes (Stacey & Hardy, 2011; Wald et al., 2010). The arts can open up new modes of perception and expression for students (Bryant et al., 2003). Emotions are vital to the arts (Bryant et al., 2003), and they can foster reflection on human emotion (Davis, 2008); thus engaging students' minds, hearts, and bodies (Cantor, 2006; Leavy, 2009). Arts-based reflection can assist students to develop self-awareness of their complex emotions associated with practice (Davis, 2008). The arts can also raise students' awareness of others' emotions (Davis, 2008); thus, developing empathy. Empathy is the ability to "imagine oneself in another's place" (Özcan et al., 2011, p. 131), and is foundational to relational nursing (Kidd & Tusaie, 2004). Hence, ABP can provide a vocabulary for addressing the affective components of practice (Hydo, Marcyjanik, Zorn, & Hooper, 2007). Artwork also enables students to make sense of their world, through the process of "turning our thoughts into things" (Davis, 2012, p. 17). The creation of an artistic image stabilizes an idea; therefore, the artistic rendering of students' experiences and thoughts can bring them into view for critical reflection, discourse, and learning (Boykin & Schoenhofer, 1991; Eisner, 2002; Grushka, 2005). The arts "may unlock the unconscious assumptions and biases enacted by practitioners...and make visible the tacit knowledge required for reflective practice" (Cheng, 2010, p. 495). Thus, arts-based reflection can

effectively foster deep learning and interpersonal competencies that are essential to relational nursing care (Casey, 2009; Shapiro et al., 2009). Perhaps using ABP to evoke more advanced reflective thinking skills should be recognized as a higher-level teaching skill that demonstrates effective pedagogy and teaching proficiency, an important factor in student achievement (Oermann, 2015a).

Empirical evidence of arts-based pedagogy in nursing education. There is strong theoretical support for, and educator reports of, the significant impact of ABP; however, the empirical research findings need to be considered in order to fully understand the potential of this approach. Therefore, both the qualitative and quantitative research investigating the impact and outcomes of ABP in nursing education were examined. The initial literature review, described in this chapter, was conducted before the JBI systematic review (Chapters 3 and 4) or the CGT research study (Chapter 6), and provided insight into the gaps in the research that informed the design of the research study. An updated and critical review of the literature on ABP in undergraduate nursing education can be found in the JBI systematic review. However, the JBI systematic review focused on the specific review objective of synthesizing the research literature on the effectiveness and experiences of ABP in undergraduate nursing education. In contrast, the literature review in this introductory chapter was much broader, and the review of the empirical evidence of ABP did not have strict inclusion/exclusion criteria or a quality appraisal process as one would find in a rigorous systematic review. Thus, the JBI systematic review builds upon this foundational preliminary work. Of the 36 studies reviewed for this initial literature review, 24 were qualitative, eight were quantitative, and four were mixed-methods.

The analysis of the qualitative findings demonstrates that ABP has a significant impact on nursing students in a number of aspects. First, ABP altered nursing students learning and enabled transformative learning experiences. Studies reveal that ABP enables nursing students'

learning to be more authentic (Janzen, Perry, & Edwards, 2011), personal (Davidson, 2004; Shieh, 2005), in-depth (Shieh, 2005), multi-sensory (Christiansen, 2011), and participatory (Davidson, 2004). As well, learners' reported an increased sense of responsibility for learning (McKie, 2012), learning in new ways (Darbyshire, 1994), and engagement in this interesting way of learning (Grindle & Dallat, 2001; Jensen & Curtis, 2008; Lillyman et al., 2011). However, this type of learning was not without its challenges, and students also found that ABP encompassed an element of risk-taking that was initially uncomfortable (Webster, 2010), differed from original expectations of a fun and free self-expression (Mahar et al., 2012), and pushed them to discover new possibilities within themselves (Hydo et al., 2007). Findings from numerous qualitative studies show that ABP can also result in transformative learning in which students see things from a new perspective (Christiansen, 2011; Darbyshire, 1994; Grindle & Dallat, 2001; Jonas-Simpson et al., 2012; McKie, 2012; Webster, 2010), experience personal change (Kidd & Tusaie, 2004), awaken to hopeful possibilities (Jonas-Simpson et al., 2012), encounter a disconfirmation of their initial beliefs (McKie, 2012), and illuminate their inner landscapes (Pohlman, 2013). Students also reported that ABP enabled them to think meditatively and critically about nursing practice (Christiansen, 2011; Jack, 2012; Jonas-Simpson et al., 2012; Mahar et al., 2012; Newcomb et al., 2006; Shieh, 2005), and that they valued this reflective space in a very full curriculum (Jack, 2012).

There is a growing consensus that ABP also increases self-awareness and awareness of others. Through ABP assignments, nursing students experienced self-discovery (Hydo et al., 2007; Jensen & Curtis, 2008; Mahar et al., 2012), considered their own feelings (Jack, 2012), and discovered their fears (Kidd & Tusaie, 2004). ABP also enabled nursing students' self-expression with art (Hydo et al., 2007). Further, ABP was noted to enhance understanding of others' feelings (Jack, 2012), and foster ethical regard for diverse people (McKie, 2012). Numerous researchers

found that ABP fostered nursing students' empathy for the lived experience of patients (Casey, 2009; Jensen & Curtis, 2008; Jonas-Simpson et al., 2012; Kidd & Tusaie, 2004; Webster, 2010; Welch & Welch, 2008). Accordingly, ABP increased students' cultural sensitivity (Newcomb et al., 2006), and acceptance of people with different cultural practices (Jensen & Curtis, 2008; Newcomb et al., 2006; Welch & Welch, 2008). Another theme, which has emerged from the qualitative research, is that ABP develops a community of learners (Darbyshire, 1994).

Researchers found that ABP enhanced group trust (Davidson, 2004); fostered teamwork through building relationships (Hydo et al., 2007); stimulated dialogue about feelings and caring for others (Jonas-Simpson et al., 2012; Lillyman et al., 2011); and promoted effective group work (McCabe, Neill, Granville, & Grace, 2013). Not only did ABP enhance peer relationships, but it also facilitated socialization into the profession of nursing (Mahar et al., 2012), and provided a platform of connectivity for students and teachers (Pohlman, 2013).

Qualitative findings also indicate that ABP addresses the affective domain of nursing education and effectively teaches complex content. Nursing students described how ABP enabled an emotional connection with learning (Christiansen, 2011; Hydo et al., 2007), uncovered the nuances of human feelings (Jack, 2012), and fostered discussion of feelings with others (Lillyman et al., 2011; Welch & Welch, 2008). Additionally, ABP can enhance student learning of complex and essential content for nursing practice. For example, researchers convey that ABP can be used to effectively teach difficult concepts (Lillyman et al., 2011; Welch & Welch, 2008) such as professional issues (Hydo et al., 2007), the patient experience of illness (Kidd & Tusaie, 2004; Webster, 2010; Winland-Brown, 1996), coping with families in bereavement (Lillyman et al., 2011), boundaries (Lillyman et al., 2011), nursing judgment (McKie, 2012), interpersonal relationships in nursing (Welch & Welch, 2008; Wikström, 2000b), and observational skills (Casey, 2009; Wikström, 2000a). Lastly, qualitative findings about ABP reveal that this approach

can nurture holistic and caring practice in nursing students (Jonas-Simpson et al., 2012; Welch & Welch, 2008; Winland-Brown, 1996), integrate Carper's (1978) four patterns of knowing (Hunter, 2008), and facilitate a balanced curriculum (McKie, 2012). Through ABP assignments, nursing students were able to envision themselves as future caring nurses (Hunter, 2008), build relationships with clients (Webster, 2010), and understand caring as the essence of nursing (Winland-Brown, 1996). As well, students came to see the value of the art of nursing (McCabe et al., 2013), understand that the arts can relate to their clinical practice (Chan, 2014), and realize the importance of creative communication (Winland-Brown, 1996).

In quantitative research, researchers have conducted evaluation research of ABP initiatives, and have also tested the effectiveness of ABP on measured outcomes such as empathy, engagement, observational skills, knowledge, anxiety, interpersonal capacities, cognitive skills, and ethical maturity. In one study that evaluated an ABP experience, researchers found that: 72.4% of students believed it benefited their patients in some way and 68% stated that they were personally changed through this experience (Michael & Candela, 2006). In another evaluation, 70% of students found ABP helped them to learn the course content and 82% were engaged at a personal level (Emmanuel et al., 2010). Other researchers found that 80 to 84% of students reported that a drama helped them to learn about death and dying (Deeny, Johnson, Boore, Leyden, & McCaughan, 2001). In randomized controlled trials examining effectiveness, researchers found that students who participated in ABP were able to more clearly express what good nursing care was (Wikström, 2001), and were more engaged in their learning about empathy (Wikström, 2003), than the participants who did not participate in ABP. In quantitative research using quasi-experimental designs, researchers found that the students who participated in ABP approaches had significantly less stress (Walsh et al., 2005); increased empathic skills (Özcan et al., 2011); more written observations and objective clinical findings (Pellico et al.,

2009); and improved knowledge about the course content (Shieh, 2005), than the comparison group. However, Evans and Bendel (2004) did not find significant differences between groups on cognitive and ethical maturity in nursing students, and Webster (2010) found no statistically significant results between groups on the Interpersonal Reactivity Index.

In summary, there is a growing body of qualitative research evidence which indicates that ABP is a meaningful and beneficial pedagogical approach in nursing education. However, there has been negligible research developing an inductive theoretical understanding about how learning occurs through ABP. Furthermore, there is only limited quantitative research, and what was found in the literature consists of disparate studies investigating the effectiveness of diverse ABP assignments and measuring very different outcomes. Although there is some interesting evaluation research and limited findings from trials, much work has yet to be done to test the effectiveness of ABP on learning outcomes. Replication studies could also be considered in order to accumulate knowledge about ABP, as this approach can confirm or disconfirm previous findings, and also help to identify and minimize biases (Makel & Plucker, 2014).

There are a number of gaps in the research about ABP in nursing education. One of the identified gaps, that of the need for theoretical understanding about how nursing students learn through the arts, is key to promoting the understanding, development, and advancement of ABP. As well, a study that develops substantive theory seemed to be the next logical step in advancing the state of the science in regards to learning through the arts in nursing education. There are some compelling qualitative studies indicating that ABP has a significant impact on nursing students, and examining how this learning occurs builds on the previous empirical work. Furthermore, this understanding can be the basis for future quantitative studies about ABP in nursing education as developing substantive theory is highly valued as a basis for quantitative investigations (Streubert & Carpenter, 2011).

To conclude, this initial literature search highlighted both the importance and potential of ABP in nursing education, and has also uncovered the gap in the research which the thesis research study addressed. The **problem** addressed by the CGT research study was the clear need for research on the process of ABP in nursing education and for inductive theory development, in order to facilitate the advancement and utilization of this teaching innovation. This examination of the literature was the foundation for the CGT research study purpose and question.

Objectives of the Paper-based Thesis

The **aim of this paper-based thesis**, of which the CGT research study was one component, was to advance understanding about the use and impact of ABP in undergraduate nursing education. As this pedagogical strategy is fairly new to nursing education, there was a need for both theoretical and empirical understanding about this topic. Thus, a paper-based thesis was chosen in order to address a number of objectives for knowledge development in regard to ABP. The **objectives of this paper-based thesis** were as follows:

1. To explicate a conceptual understanding of ABL, as presented in the literature.
2. To synthesize the current state of the science in regards to the impact of ABP in undergraduate nursing education.
3. To analyze the most appropriate methodology with which to study the learning processes involved in ABP.
4. To elucidate the process of ABP in undergraduate nursing education through conducting a primary research study.

Research Study Purpose Statement and Question

The specific **purpose of the qualitative research study**, which is part of this paper-based thesis and addressed objective number four, was to develop an in-depth theoretical understanding of how undergraduate nursing students learn through the process of ABP. The

research question guiding the CGT research study was: How do nursing students learn through ABP in undergraduate nursing education? The author believes this question to be salient, and its answer, transformative.

Structure of the Paper-based Thesis

The paper-based thesis is structured around five published/publishable manuscripts. Each of the papers addresses a specific thesis objective. First, a concept analysis of ABL is included which is entitled (Chapter 2), “Arts-Based Learning: Analysis of the Concept for Nursing Education” (Rieger & Chernomas, 2013). This work resulted in a conceptual understanding of ABL and addressed the first objective of the paper-based thesis. In order to address the second objective, a JBI (Pearson, 2004; Pearson, Wiechula, Court, & Lockwood, 2005) systematic review was conducted. The review protocol (Chapter 3) is entitled, “The Effectiveness and Experience of Arts-Based Pedagogy Among Undergraduate Nursing Students: A Comprehensive Systematic Review Protocol” (Rieger, Chernomas, McMillan, Morin, & Demczuk, 2015), and the systematic review report (Chapter 4) is entitled, “The Effectiveness and Experience of Arts-Based Pedagogy Among Undergraduate Nursing Students: A Mixed Methods Systematic Review” (Rieger, Chernomas, McMillan, Morin, & Demczuk, 2016). This review provides an in-depth critical analysis, and synthesis, of the research literature investigating the impact of ABP in nursing education. The fourth paper is a methodological paper (Chapter 5) comparing and contrasting the three main approaches to GT that are found in the literature (Charmaz, 2006; Charmaz, 2014; Corbin & Strauss, 2008; Glaser & Strauss, 1967; Glaser, 1978; Glaser, 1992; Strauss & Corbin, 1990; Strauss & Corbin, 1998). This methodological paper, “Determining the Fit: Comparing Three Grounded Theory Approaches” provides a comprehensive analysis of the methodology that was utilized for the primary research study; thus, addressing objective three. Lastly, the fifth paper is a research-based manuscript entitled, “You

Want Me to do What? Nursing Students' Experiences with Arts-Based Pedagogy" (Chapter 6).

To answer the research question and address the fourth objective, a CGT research study was conducted (Charmaz, 2006; 2014). This manuscript provides a detailed description of the CGT study and findings.

The thesis is comprised of this introductory chapter (Chapter 1), the five thesis manuscripts (Chapters 2, 3, 4, 5, and 6), the preceding linking text (preludes) which introduce, explain, and link the manuscripts, and a concluding chapter (Chapter 7) which integrates this diverse body of work and describes future research and policy/practice recommendations. There are notable redundancies between the description of the research study in this introductory chapter (Chapter 1) and the CGT research report (Chapter 6), as an explanation of the research study elements was also required in the stand-alone publishable research manuscript (Chapter 6). Of note, the references, appendices, and tables for each of the manuscripts (Chapters 2, 3, 4, 5, and 6) are located within the respective manuscript. The references and appendices for the introductory chapter (Chapter 1), the preludes to each chapter, and the concluding chapter (Chapter 7) are located after at the end of the thesis document. The tables for the introductory chapter (Chapter 1) and the concluding chapter (Chapter 7) are located within these respective chapters. The authorship, publication details, and copyright permissions (if appropriate) for each manuscript will be discussed in the associated preludes (Chapters 2, 3, 4, 5, and 6).

Significance of the Paper-based Thesis and Research Study

This thesis advances the understanding of ABP in undergraduate nursing education. The advancement of ABP is significant as meaningful knowledge construction is a key factor in the effective development of new professionals and in the lifelong learning of all professionals, and is an antecedent to excellent healthcare. The ABL concept analysis and the JBI systematic review synthesized the current understanding of ABL/ABP in the literature. A systematic review is a

form of research, and is key to the knowledge translation of previous findings about this important topic (Pearson, 2004; Pearson et al., 2005; Vardell & Malloy, 2013). This synthesized knowledge can inform future nursing education initiatives and research endeavors. The analysis of the various GT approaches developed important knowledge about a methodology that is very useful to explore social processes, such as learning through the arts. Although a significant body of work can be found in the literature about the various approaches to GT, this paper compares and contrasts three widely used GT variations, and their most recent published texts, and presents this analysis in an understandable manner for nurse researchers and educators.

The research manuscript makes an important contribution to the field of nursing education. As described in the literature review, there is a need for curriculum change, and innovations need to be evaluated to in order to understand their meaningfulness and effectiveness as a teaching strategy, and to refine new pedagogical approaches (Brown, Kirkpatrick, Greer, Matthias, & Swanson, 2009; Iwasiw, Goldenberg, & Andrusyszyn, 2005). Thus, through the in-depth CGT research study findings about ABP, this innovative and impacting teaching practice can be further refined to enhance student learning. The study may offer some significant insights into ABP in other fields of educational practice. The findings could also inform the education of other health professionals and other uses of the learning through the arts in healthcare, such as arts-based knowledge translation (Rieger & Schultz, 2014). Therefore, there are several important areas where this study makes a unique and original contribution to the understanding of how adults learn through the arts.

Theoretical Orientations

In this section about theoretical orientations, the various levels of theory that informed the research study, will be explained. Crotty (1998) proposes a scaffolding approach to guide the researcher's choices of the epistemological stance, theoretical perspective(s), research

methodology, and methods utilized for a study. Using this approach ensures these elements are congruent with each other, which he argues will result in the soundness of the research findings (Crotty, 1998). This framework will be used to organize this section; however, one adaption will be made to Crotty's (1998) scaffolding approach (see Appendix A). As epistemology is embedded in one's philosophy of science (McEwen & Wills, 2011), the concept of 'philosophical perspective' or 'philosophy of science' will also be referred to here when discussing the epistemological stance that Crotty (1998) writes about.

Theoretical Perspectives, Qualitative Research, and Grounded Theory

Theory is "a human construct which helps us to sort out our world and make sense out of it" (Puig, Koro-Ljungberg, & Echevarria-Doan, 2008, p. 139). In this study, theory was not utilized for deducing a research hypothesis as in a quantitative study, but rather for theoretically guiding and situating the study (Charmaz, 2006). With an inductive qualitative study, the researcher does not have ideas to prove or disprove, but instead issues of importance emerge through the research process which are informed by the theoretical framework (Ghezeljeh & Emami, 2009; Mills, Bonner, & Francis, 2006; Puig et al., 2008). These perspectives help the researcher to see a certain aspect of reality, and it is important to remember that any perspective both highlights and hides certain aspects of the studied phenomenon (Charon, 2010). Thus, although philosophical and theoretical perspectives are somewhat limiting, they also help human beings to make sense of their world (Charon, 2010).

In the original conceptualization of GT (Glaser & Strauss, 1967), the researcher did not need an initial research question or guiding theoretical perspective, as it was viewed that these preconceived ideas could foster unwanted researcher influence (Glaser & Holton, 2007). In contrast, Charmaz (2014) writes of how theory can be useful throughout a CGT study. Theoretical frameworks can guide the research and interview questions, help to develop

sensitizing concepts, inspire theoretical questions about one's data, inform data analysis, and enhance the theoretical depth of the findings (Charmaz, 2006; 2014). However, if a grounded theorist uses a theoretical framework, they should be transparent about the perspective's influence (Streubert & Carpenter, 2011). One needs to ensure that one is not forcing the data into a pre-specified theory; therefore, employing reflexivity and transparency regarding its influence on the research process is essential (Charmaz, 2006).

Philosophy of Science: Social Constructivism

The first step in creating the research scaffolding, is clarifying the epistemological stance that is encompassed in one's philosophy of science (Crotty, 1998). This process is key as having a clear philosophical foundation has implications for knowing which processes will be utilized, and what types of knowledge will be produced (Chen, Shek, & Bu, 2011; Crotty, 1998; Koro-Ljungberg, Yendol-Hoppey, Smith, & Hayes, 2009). The research question, in this study, was to explicate an in-depth understanding of nursing students' learning process with ABP, which is best accomplished with a qualitative research design (Creswell, 2007). Thus, the type of knowledge desired was not objective knowledge which is discovered, but knowledge which is co-constructed by participants and the researcher, and is subjective in nature. This desired knowledge is congruent with the core tenets of social constructivism, and its subjective epistemological stance informs many qualitative research projects (Cisneros-Puebla & Faux, 2008; Crotty, 1998).

The term social constructivism was used, as opposed to constructivism or (social) constructionism, as this term was the most consistent with the knowledge desired in this investigation and is congruent with the philosophical stance taken by Charmaz (2014). There are nuanced differences between the three philosophical stances. Constructivism is a term which encompasses ideas related to learning as an active cognitive process of knowledge construction

(Adams, 2006). Constructivism posits that the individual mind constructs reality within a relationship to the world, while social constructivism proposes that the mental processes of knowledge development also involve social processes (Appleton & King, 2002; Chen et al., 2011; Hruby, 2001; Raskin, 2002; Talja, Tuominen, & Savolainen, 2005). Thus, while constructivism involves the meaning making of the individual mind, social constructivism additionally includes the shared generation of meaning with others (Benson, 2001; Crotty, 1998). Taking a slightly different perspective, constructionists claim that discourse within social processes is the primary vehicle through which knowledge is co-constructed, and has shifted away from a focus on cognitive processes alone (Chen et al., 2011; Raskin, 2002; Talja et al., 2005). It is acknowledged that the term constructionism is a shortened form of social constructionism, so the two terms are often used interchangeably (Chen et al., 2011; Crotty, 1998; Raskin, 2002; Talja et al., 2005).

Although constructionism informs the theoretical perspective of symbolic interactionism, Charmaz (2014) states that she chose to identify herself, and establish her methodology, on the tenets of constructivism to “acknowledge subjectivity and the researcher’s involvement in the construction and interpretation of data and to signal the differences between my approach and conventional social constructionism of the 1980s and early 1990s” (p. 14). The conventional social constructionism that she refers to was more focused on studying people’s constructions as opposed to acknowledging the researcher’s co-construction of knowledge with the participants. Charmaz (2014) defines her version of constructivism as a social scientific perspective that “assumes that people, including researchers, construct the realities in which they participate” (p. 342). However, she admits that social constructionism has evolved and is now more consistent with her philosophical views. In her latest book, she also highlights that her perspective of

constructivism is more congruent with social constructivism than with individual constructivism.

She writes:

My position aligns well with social constructivists whose influences include Lev Vygotsky (1962) and Yvonna Lincoln (2013), who thus stress social contexts, interaction, sharing viewpoints, and interpretive understandings. These constructivists view knowing and learning as embedded in social life. Other constructivists sometimes assume a more individualistic stance and a radical subjectivism to which I do not subscribe. For me, subjectivity is inseparable from social existence...Strong currents of social constructionism are apparent in constructivist grounded theory, as are its links to social constructivism (p. 14).

Thus, the philosophical perspective of social constructivism will be discussed here to differentiate it from individual constructivism, and to maintain the emphasis Charmaz (2014) places on the importance of acknowledging the co-construction of knowledge which involves the cognition of the researcher. To summarize, social constructivism was selected as the most appropriate philosophical stance for this study.

Social constructivism has roots in developmental and cognitive psychology (Young & Collin, 2004). In the 1980s and 1990s, a number of prominent discourses drew attention to the need to include the social communicative aspect of learning in constructivist views. These discourses included the linguistic turn in social psychology, the development of social constructionism which shifted to the study of interpretive discourses, the growth of situated cognition from cognitive anthropology, the renewal of interest in the Vygotskian tradition from cultural psychology, and the resurgence of pragmatism (Miettinen, 2002). Hence, social constructivism became a more prominent perspective, and moved away from focusing on the individual's mental processes to focusing on the integration of people's mental processes with

social processes (Appleton & King, 2002; Chen et al., 2011; Hruby, 2001; Raskin, 2002; Talja et al., 2005). As opposed to radical or individual constructivism, social constructivism takes social interaction into account, and views it as a significant factor for knowledge creation (Miettinen, 2002; Young & Collin, 2004).

Ontology is the study of what exists (McEwen & Wills, 2011), and social constructivists reject the realism of positivism and embrace a relativist position; therefore, acknowledging the construction of multiple legitimate realities (Charmaz, 2014; Cruickshank, 2012; McEwen & Wills, 2011; Raskin, 2002). While objectivist ontology assumes that meaning resides in objects and is independent of consciousness, relativist ontology assumes that no meaning exists without a mind (Crotty, 1998; Cruickshank, 2012; Schwandt, 2007). Hence, no direct route to knowledge of the physical world can be obtained, but instead, humans create multiple and diverse constructions from their interaction with the world (White, 2004). This relativist position assumes that reality cannot be objectively grasped and does not seek one objective truth (Chen et al., 2011; White, 2004). Instead, reality is considered within context and the subjectivity of knowledge is valued (Weaver & Olson, 2006).

Epistemology is the study of the nature of knowledge (McEwen & Wills, 2011), and social constructivists have a subjective epistemology in that they posit that knowledge and meaning cannot be discovered, but are instead constructed through human interactions (Benson, 2001; Chen et al., 2011; Jacobson, 2007; Lincoln & Guba, 2013; Raskin, 2002; Schwandt, 2007). Therefore, social constructivists reject the idea that “knowledge (i.e., the mind) simply reflects or mirrors what is ‘out there’” (Schwandt, 2007, p. 38). Social constructivists also refute the constructivist view that the locus of knowledge is in the individual, and embrace the interdependence of social and individual processes in knowledge creation (Palincsar, 1998). Congruent with the ontological stance of relativism, the relationship between the knower and the

known is acknowledged as a fundamental part of knowledge development and is valued for the production of knowledge. As well, this co-construction of knowledge is viewed as occurring within a particular context which influences the construction of reality (Lincoln & Guba, 2013). Therefore, knowledge is situated in a certain time frame, and its development is influenced by many contextual and individual factors (Lincoln & Guba, 2013).

These relativist ontological and subjectivist epistemological stances have implications for axiology. Axiology is the branch of philosophy that studies the nature and role of values (McEwen & Wills, 2011). In regards to axiology, social constructivists acknowledge that values are inherent in knowledge development (Polit & Beck, 2012). Thus, the values of the researcher and participants influence the knowledge which is co-constructed, and must be uncovered and made transparent in a rigorous research study (Lincoln & Guba, 2013).

The ontological, epistemological, and axiological assumptions of social constructivism also have implications for methodology, or how new knowledge is developed (Polit & Beck, 2012). Research based on this theoretical perspective focuses on understanding the ways in which social constructions occur. Thus, social constructivism often informs qualitative research which provides an in-depth description and understanding of a phenomenon from participants' perspectives (Crotty, 1998; Lincoln & Guba, 2013; Weaver & Olson, 2006). With this approach, researchers use quotes and themes/categories to provide evidence of multiple and subjective perspectives, which is based on the assumption that there are multiple realities and that these realities are subjective (Creswell, 2007). The epistemological stance of social constructivism also assumes that intimate knowledge of the phenomenon enables the researcher to foster knowledge development as opposed to valuing an objectively neutral researcher who can discover the one true reality. Thus, the researcher spends time in the field, conducts intensive interviews, tries to gain the insider perspective, and collaborates with research participants (Creswell, 2007).

Implications of the axiological assumptions for research include that the researcher needs to discuss their position in a study and acknowledge that the findings include the researcher's interpretation (Creswell, 2007). In summary, the assumptions of social constructivism have the following implications for research: people's described reality is considered in context, thick descriptions are provided of the context, findings are viewed as the creation of the interactive process, subjectivity is desirable, values need to be acknowledged, research procedures are emergent; and holistic aspects of human life are emphasized (Creswell, 2007; Weaver & Olson, 2006). Lincoln and Guba (2013) write that this approach often encompasses both an in-depth exploration of the constructions of reality held by the participants, and then a comparison and contrast of the different and multiple constructions about a phenomenon during data analysis.

Theoretical Perspectives: Symbolic Interactionism and Transformative Learning Theory

Symbolic interactionism (SI) and Transformative learning theory (TLT) are the two theoretical perspectives which were used to guide this study. ABP learning experiences are a multi-faceted phenomenon, and multiple theoretical perspectives can provide different lenses with which to view the phenomenon (Charmaz, 2014). Therefore, these two perspectives provided important insights into study design, analysis, and findings. Additionally, both of these theoretical perspectives are congruent with social constructivism (Charmaz, 2014; Charon, 2010; Mezirow, 2000).

Symbolic Interactionism

SI is a theoretical perspective which focuses on the meaning derived from human interactions and the resulting behavior based on this constructed meaning; hence, it provided an insightful lens for exploring the interactive processes of student learning with ABP (Benzies & Allen, 2001; Burbank & Martins, 2010; Crotty, 1998). Charmaz (2014) writes that SI is a perspective for viewing social realities, and that it is "not an explanatory theory that specifies

variables and predicts outcome” (p. 262). The focus of this view is on symbolic interaction as the foundation of individuals and societies, and trying to understand why human beings act in a certain way (Charon, 2010). The importance of meaning is a central tenet of this theory and people are viewed as meaning making beings (Burbank & Martins, 2010). Accordingly, a central principle of SI is “that we can understand what is going on only if we understand what the actors believe about their world” (Charon, 2010, p. 187).

SI is also congruent with the philosophical stance of social constructivism, as both view knowledge and meaning as constructed through social interactions (Charmaz, 2014; Crotty, 1998). Symbolic interactionists do not actually deny that there is a reality, but assert that it is socially interpreted, and that these constructions are important to understand in order to comprehend human behaviour (Charon, 2010). Thus, they believe that humans socially construct ideas in relation to something real. In fact, from this perspective there are three important realities: objective reality, social reality, and an internally created reality (Charon, 2010). Epistemologically, symbolic interactionists believe that the individual and society exist in relation to each other, and are in a reciprocal relationship through which meaning is derived (Benzies & Allen, 2001; Charmaz, 2014; Crooks, 2001).

SI is a sociological theory with roots in American pragmatism, and is a branch of interpretivism (Benzies & Allen, 2001; Crotty, 1998; McCann & Clark, 2003). Three main perspectives within social science include: sociology (study of society), psychology (study of the person), and social psychology which have roots in both sociology and psychology. Charon (2010) writes that SI specifically comes from the social psychology perspective. George Herbert Mead (1934) proposed the foundations for the interactionist perspective when he postulated that humans come to understand through a social process which involves active interpretation of their world (Annells, 1996; Benzies & Allen, 2001; Burbank & Martins, 2010). Another strong

influence on the development of SI was the philosophy of pragmatism, which posits that although ultimate truth is possible, it is not practically valuable, as the use of the thing has greater value than the knowledge of the thing (Benzies & Allen, 2001). Pragmatists assume that the meaning of objects resides in the behavior towards the objects instead of residing in the objects themselves (Benzies & Allen, 2001). A number of the tenets of pragmatism inform SI, including that humans learn and retain what they see as useful and that they define objects and situations according to how they are helpful to themselves (Charmaz, 2014; Charon, 2010). Moreover, pragmatism inspired SI's focus on studying human action in situations in order to understand human beings (Charon, 2010). Herbert Blumer, a student of Mead, refined, developed, and named SI (Benzies & Allen, 2001; Blumer, 1969; Charon, 2010).

Basic tenets of symbolic interactionism. Three underlying premises of SI have been described by Blumer (1969):

- 1) human beings act towards things on the basis of the meanings the things have for them
- 2) the meaning of such things is derived from, or arises out of, social interaction that one has with one's fellows
- 3) these meanings are handled in, and modified through, an interpretive process used by the person in dealing with the things he encounters (p. 2).

Charmaz (2014) adds three premises to clarify Blumer's seminal ideas. These include that

- 1) Meanings are interpreted through shared language and communication.
- 2) The mediation of meaning in social interaction is distinguished by a continually emerging processual nature.
- 3) The interpretive process becomes explicit when people's meanings and/or actions become problematic or their situations change (Charmaz, 2014, p. 271).

Furthermore, Charon (2010) posits that the following five ideas are central to SI: 1) the human is a social person, 2) the human is a thinking being, 3) humans do not react to their environment

directly, instead they define the situation, 4) the cause of human action is the present situation, and 5) humans are active agents in relation to their environment.

Key concepts of symbolic interactionism. From the SI perspective, humans create and depend on symbols in order to interact (Charon, 2010). Symbols, and particularly words, are socially created objects that hold meaning to those who use them, and can be used to intentionally communicate with self and others (Benzies & Allen, 2001; Burbank & Martins, 2010; Charon, 2010; Crooks, 2001). Thus, language and discourse are viewed as primary ways of interacting with others, and of developing meaning (Crotty, 1998). Furthermore, symbols can be words or other objects, and Charon (2010) writes “a piece of art is almost always a symbol” (p. 51). Learning a new symbol can also give one a new perspective on reality or a new definition of the situation, and to the symbolic interactionist, “symbols in fact become the reality we see” (Charon, 2010, p. 60). Accordingly, symbols can change how we view reality as the symbol “translates the world from a physical sensed reality to a reality that can be understood, interpreted, dissected, integrated, and tested. Between reality and what we see and do stands the symbol” (Charon, 2010, p. 59). Hence through interaction with symbols, humans give the world meaning and develop the social reality which they act towards (Charon, 2010).

The concept of self is also central to this theory, and is viewed as arising and changing through social interaction (Blumer, 1969; Charon, 2010). Significant others can foster the construction of the self in childhood, and reference groups become influential on the development of self in adulthood. Mead also developed the concepts of self into the spontaneous “I” and the socially constructed “me” (Aldiabat & Le Navenec, 2011). The concept of self is the basis for the SI beliefs that the individual can be active within the environment and that self-control and cooperative action are possible (Charon, 2010; Crooks, 2001).

Moreover, humans have the capacity for thought which is shaped through social interaction, and thus, they do not just respond directly to situations (Burbank & Martins, 2010; Crooks, 2001). The person can engage in self-talk and this internalized conversation constitutes thinking (Burbank & Martins, 2009). Charon (2010) writes, “Human beings engage in continuous mind action in almost every situation...we work out in our heads how to deal with problems we encounter” (Charon, 2010, p. 25). As a result of this ability to interact with themselves, people modify meanings as they interpret their situations (Crooks, 2001). Accordingly, SI views humans as free to make meaning of their worlds and choose their responses (Burbank & Martins, 2009). This view on human agency is a non-deterministic view which assumes freedom of choice for the individual, although this freedom is somewhat influenced by social and cultural norms (Benzies & Allen, 2001). As part of mind action, humans also try to understand others around them through attempting to understand others’ perspectives (Charon, 2010). Symbolic interactionists view this core aspect of being human as taking the role of the other, which means “understanding the perspective of others as we act” (Charon, 2010, p. 112).

Furthermore in SI, individuals’ actions are complex and congruent with the meanings they hold towards a situation or an object (Burbank & Martins, 2010; Charon, 2010). Thus, instead of just responding to stimuli in the environment, the individual’s mind is active in interpreting and defining the situation, which influences their action (Charon, 2010). Meaning also emerges from the ways in which significant others act towards or define the thing for which meaning is being developed, and this interaction helps to define the thing or situation for the person (Benzies & Allen, 2001; Burbank & Martins, 2010). Through social interaction, definitions are co-constructed, and people who provide definitions for the person can include orientational others, those who the individual is most committed to emotionally and psychologically; and reference groups, the person’s social units and their accompanying culture

(Aldiabat & Le Navenec, 2011; Burbank & Martins, 2010; Mead, 1934). According to SI, prior to action the individual engages in personal and social deliberation which results in a definition of the situation (Aldiabat & Le Navenec, 2011; Burbank & Martins, 2010; Thomas, 1972).

Instead of responding directly to situations, human actions are based upon the definitions that the person has developed for the thing or situation, and these meanings are derived from social interactions and internal thought processes (Benzies & Allen, 2001; Burbank & Martins, 2010; Crooks, 2001).

Limitations and strengths of symbolic interactionism. The main criticism regarding SI is that this theory offers a micro perspective (Burbank & Martins, 2010). Numerous authors argue that SI ignores other influences such as class struggle and culture; does not recognize the objective restraints on social action; views the individual within society but does not address the larger questions surrounding the society; and lacks the ability to address issues of power (Annells, 1996; Benzies & Allen, 2001). Although SI does focus on the individual's interpersonal interactions with other human beings, it does not focus the researcher on structural factors or larger social processes shaping those interactions. Thus, in contrast to a more critical theoretical stance, SI did not focus this research study to primarily address macro issues in education that may be influencing the student experience of ABP (Crotty, 1998). Benzies and Allen (2001) also criticize SI for not offering a clearly articulated systematic theory.

Although there are limitations in every theoretical framework (McEwen & Wills, 2011), SI was an appropriate choice as the theoretical perspective for this study for several reasons. First, ABP is a process based teaching/learning strategy and the central research question was exploring how this process occurs. This research question was congruent with SI which emphasizes process, and is concerned not only with the person's point of view but the process through which this perspective developed (Benzies & Allen, 2001; Burbank & Martins, 2010;

Crooks, 2001). Charon writes (2010), “realistically the classroom experience is part of a long stream of action for each person...the class has made the students aware, however briefly, of a new perspective, and the classroom interaction, if the symbolic interaction perspective is correct, has changed their direction, one hopes in a way that will contribute to a better world” (p. 207). SI is a perspective that was useful for exploring and understanding students’ learning processes with ABP (Burbank & Martins, 2009).

Second, nursing students’ meanings and actions regarding ABP change over time. Factors and significant others within the students’ social world influenced the undergraduate nursing students’ perspectives of, and action towards ABP. SI provided insight into this process as it proposes that humans develop meaning through interaction with self and others, which can result in a modified definition of a situation and therefore altered action towards the object (Aldiabat & Le Navenec, 2011; Burbank & Martins, 2010; Crooks, 2001). SI is a theoretical framework which explicated students’ behavior towards ABP, and the ways in which it is influenced by the creation of meaning through interaction (Burbank & Martins, 2010). Third, students had unique perspectives on ABP, with notable variations in student perspectives and experiences of ABP within nursing education. SI is a theoretical framework which attends to individual’s experiences, and their understanding of situations; thereby facilitating understanding of the participants’ experiences and meanings of ABP (Benzies & Allen, 2001; Crooks, 2001). However, it also focuses on the individual’s interpersonal interactions with others as a key component of developing personal meaning about situations and constructing reality (Charon, 2010); thus, it is congruent with the philosophical perspective of social constructivism. Lastly, the arts are symbol systems, and SI guided an exploration of the meaning and impact of using art as a form of symbolic interaction in nursing education (Charon, 2010). SI guided the exploration of the students’ perspectives of using art as a symbol for both internal conversations with self

(critical reflection) and external communication with group members (social discourse). In summary, SI provides insight into the ways in which people create meaning and how this meaning influences actions; therefore, this framework was useful for guiding this investigation of ABP as a social learning process (Polit & Beck, 2012).

Transformative Learning Theory

Another important consideration was identifying the pedagogical theoretical perspective that could inform this study exploring students' learning through ABP (Freeman & Bays, 2007). A learning theory is "a coherent framework of integrated constructs and principles that describe, explain, or predict how people learn" (Braungart, Braungart, & Gramet, 2014, p. 65). For this study of ABP, there were a number of considerations for choosing an appropriate learning theory (Braungart et al., 2014). First of all, the learners were adults. Important concepts in adult education are andragogy, which assumes that adults learn differently than children (Knowles, 1990), and self-directed learning, which posits that adults desire to collaborate about their own learning (McMillan et al., 2007). Second, adult learners come with preconceived ideas about the subject to the learning environment, and nursing students may have to adjust their schemes to fit new experiences (Morris & Faulk, 2012; Parker & Myrick, 2010). Third, the pedagogical approach is within the context of professional nursing education, in which a diverse group of nursing students need socialization into a professional role and empowerment to become lifelong learners (Morris & Faulk, 2012; Parker & Myrick, 2010). Fourth, ABP is an active and constructivist learning process (MacDonnell & Macdonald, 2011). Lastly, this ABP approach incorporated both personal reflection, and a group presentation and discussion, in order to promote reflective learning (Slavich & Zimbardo, 2012). Transformative learning theory (TLT) was selected for this study as it addressed these concerns and has been used to support ABP in

the nursing literature (MacDonnell & Macdonald, 2011; Spadoni, Doane, Sevean, & Poole, 2015).

Tenets of transformative learning theory. Jack Mezirow (1978; 1991; 1995; 1996; 2000; 2003; 2009) is the founder of TLT, which explains the way adults make sense of experience and “transform problematic frames of reference” (Mezirow, 2003, p. 58) to better guide future action. TLT originated in 1978 from a GT study which explored women re-entering higher education (Mezirow, 2000). TLT is a humanistic perspective on learning as it focuses on human development (Merriam, Caffarella, & Baumgartner, 2007). TLT also assumes that humans need to learn to negotiate contested meanings (Mezirow, 2000). There are a number of variations of TLT (Merriam et al., 2007); however, only Mezirow’s widely used version will be discussed here. In TLT, transformative learning is “the process by which we transform problematic frames of reference...to make them more inclusive, discriminating, open, reflective and emotionally able to change” (Mezirow, 2009, p. 92). The goal is to promote learner development and foster learners who are socially responsible and use good judgment (Merriam et al., 2007; Mezirow, 2000).

Perspective transformation is a key component of TLT, and Mezirow (2009) has delineated three types of meaning structures. Frames of reference are meaning perspectives which are comprised of structures of assumptions and experiences through which the individual interprets life’s experiences (Mezirow, 2000). Frames of reference have two dimensions: habits of the mind and points of view (Mezirow, 2009). Habits of mind are “broad, abstract, orienting, habitual ways of thinking, feeling and acting, influenced by assumptions that constitute a set of codes” (Mezirow, 2009, p. 92), and are expressed in points of view, or meaning schemes, which are “the constellation of belief, memory, value judgment, attitude and feeling that shapes a particular interpretation” (Mezirow, 2009, p. 92). For example, ethnocentrism can be a habit of

the mind, with the resulting point of view being negative judgments about another group's cultural practices (Merriam et al., 2007).

Perspective transformation often involves some variation of ten identified phases (see Appendix B), and starts with a disorientating dilemma which challenges the individuals' meaning structures (Mezirow, 1991; Mezirow, 2009). Two major elements of this process are critical reflection on assumptions and reflective discourse (Merriam et al., 2007; Mezirow, 2009). Reflection "involves the assessment of the assumptions implicit in beliefs...the term critical reflection...refers to challenging the validity of presuppositions in prior learning" (Mezirow, 1990, p. 12). There are three levels of reflection: content, process, and premise (critical) reflection (Mezirow, 2000) (see Appendix C). The learner then tests the validity of new interpretations through reflective discourse, which is the "specialized use of dialogue devoted to searching for a common understanding and assessment of the justification of an interpretation" (Mezirow, 2000, p. 10).

Mezirow (2000) writes that there are four possible ways to learn: "by elaborating existing frames of reference, by learning new frames of reference, by transforming points of view, or by transforming habits of mind" (p. 19). Perspective transformations can be sudden or cumulative (Morris & Faulk, 2012); thus, there may be epochal transformations in habits of the mind or incremental changes in points of view which can lead to perspective transformations (Mezirow, 2000). Researchers have found that perspective transformation is an enduring process (Courtenay, Merriam, & Reeves, 1998). As well, a perspective transformation includes an ontological change which fosters action (MacLeod, Parkin, Pullon, & Robertson, 2003), an important component of full transformation (Mezirow, 1995).

According to TLT, the educator's role is that of a facilitator, or provocateur, to foster the students' becoming critically aware of their own assumptions (Mezirow, 2000; Slavich &

Zimbardo, 2012). Although transformative learning predominately takes place outside of the human awareness, educators can facilitate this process to enhance the learner's ability to engage in transformative learning (Mezirow, 2009). The educator should strive to provide students with opportunities for meaningful reflection on experience and participation in social discourse about their reflections (Mezirow, 2000). As well, the educator needs to establish an environment in which there is enough trust for this discourse to occur (Taylor & Cranton, 2012). A transformative learning environment, in which students can authentically engage in critical reflection and reflective discourse, encompasses an environment characterized by trust, esteem for individual student's goals, empathetic active listening, and respect for diverse viewpoints (Mezirow, 1995; Morris & Faulk, 2012; Taylor, 2008). In TLT, the learner is actively involved in the learning process through critical reflection on their own experiences, and reflective discourse with others about their own and others critical reflections (Mezirow, 2000). Thus, the learner must be willing to critically evaluate one's own assumptions and to enter into discourse with others. In summary, transformative learning is a process by which "we transform our taken-for-granted frames of reference (meaning schemes, habits of the mind, mind-sets) to make them more inclusive, discriminating, open, emotionally capable of change, and reflective so that they may generate beliefs and opinions that will prove more true or justified to guide action" (Mezirow, 2000, p. 8).

Limitations and strengths of transformative learning theory. A learning theory provides a lens with which to view learning, and can both hide and reveal important aspects of the phenomenon (Merriam et al., 2007). Scholars have also noted limitations about TLT. First, some students may have short-term learning goals, informed by assumptions from prior learning, which can be at odds with the goals of TLT (Morris & Faulk, 2012). Second, mature cognitive development may be necessary to engage in critical reflection and discourse (Merriam, 2004;

Taylor, 2008). Critical reflection can also be influenced by the learner's readiness to change (Cragg, Plotnikoff, Hugo, & Casey, 2001). Thus, not all nursing students are predisposed to engage in transformative learning (Taylor, 2008). Third, some have critiqued TLT for its rational process and assert that TLT should be approached from a more holistic perspective with a higher value on the affective component (Dirkx, 2006; Taylor, 2008). Fourth, others critique TLT for its individual focus and lack of emphasis on social action (Mezirow, 2009). Lastly, there are ethical questions surrounding the educator's right to challenge students to transform their assumptions (Baumgartner & Merriam, 2001). It is important to be aware of TLT's limitations, so one can thoughtfully address issues associated with identified weaknesses.

TLT had a number of notable strengths, both generally and specifically, for this research project. First, TLT has had a significant impact on adult education (Mezirow, 2009), and has been used widely in educational research (Snyder, 2008; Taylor, 2008) and in a number of nursing studies (Morris & Faulk, 2012). Importantly, TLT incorporates both individual and social dimensions in perspective transformation, and both reflection and social discourse were present in the ABP assignments from which students were recruited (Mezirow, 2000). TLT also contributed to understanding of the type of learning which occurred through ABP. TLT focuses on developing critical reflection; therefore, addressing adult students' preconceived assumptions. TLT asserts that "Art, music and dance are alternative languages" (Mezirow, 2000, p. 6); thus, it provided insight into how ABP provided a transformative opportunity for nursing students to critically reflect on their experiences and assumptions. As well, the type of learning which occurs with TLT is consistent with the desired outcomes of ABP such as critical reflection on experience, self-direction, and lifelong learning skills (Mezirow, 2000; Parker & Myrick, 2010). TLT also takes into account the characteristics of adult learners (Mezirow, 2009), and is especially useful for learning experiences which are self-directed and involve group work, such

as ABP (Hutchinson & Estabrooks, 2014). Furthermore ABP has an affective component, and educators assert that transformative learning is enhanced through connecting students' rationale thoughts and emotions (Davis-Manigaulte, Yorks, & Kasl, 2006). Thus, TLT offered important insights into the learning process experienced by students through ABP.

TLT also appeared to be congruent with the theoretical perspective of SI. TLT was actually developed from a GT study of women reentering higher education (Mezirow, 2000), and Taylor and Cranton (2012) write that "symbolic interactionism appeared in Mezirow's early work on transformative theory" (p. 100). As well, both of these theoretical perspectives focus on how meaning is developed through the processes of internal reflection and social interaction (Blumer, 1969; Charon, 2010; Mezirow, 2000); however, TLT is more focused on this process within the context of education. Both perspectives also see knowledge as socially constructed, and encompass a relativist ontology and subjective epistemology which is congruent with the philosophical perspective of social constructivism (Blumer, 1969; Charon, 2010; Mezirow, 2000). Although they are congruent, SI and TLT offered differing lenses with which to view the phenomenon. Charmaz (2014) writes about the use of multiple theoretical perspectives in a CGT study: "Can you integrate several theoretical perspectives? Of course. Purity fosters preconception. Theoretical integration may expand and enlarge your methodological directions and your theoretical insights" (p. 279). Together, the complementary theories of SI and TLT guided the research questions and design, enabled the researcher to develop theoretical sensitivity, inspired thoughtful questions about the data, and provided insight into the study findings (Charmaz, 2014).

Research Methodology: Constructivist Grounded Theory

Little theoretical understanding existed about the process of ABP. Thus, the main research question for this study was: How do nursing students learn through ABP in

undergraduate nursing education? This research question explicated an in-depth understanding of undergraduate nursing students' learning process with ABP, which was best accomplished with a qualitative methodology such as CGT (Charmaz, 2006; 2014; Polit & Beck, 2012; Streubert & Carpenter, 2011).

The Qualitative Paradigm

Charmaz (2006) clearly identifies CGT as a grounded theory approach within the qualitative paradigm. The qualitative paradigm was fitting for this exploratory study about ABP, as it is appropriate for developing a holistic understanding in a little researched area which will not overlook pertinent factors (Charmaz, 2006). Additionally, an in-depth understanding of students' experience within their context was desired. Qualitative research can elucidate participants' inner experiences and look at the context of the phenomenon of interest (Corbin & Strauss, 2008; Hood, 2007). Lake and colleagues (2015) also write of how qualitative approaches may be especially useful to elucidate the varied, subtle, and complex ways in which the arts impact students' learning. Streubert and Carpenter (2011) write that there are six common characteristics of qualitative research methodologies. These characteristics include: researchers acknowledging multiple realities, ensuring congruence of the chosen methodology with studied phenomenon, focusing on the participants' viewpoint, studying phenomenon within their natural context, viewing the researcher as a subjective instrument, and reporting research findings in a literary style that includes participants' quotes (Streubert & Carpenter, 2011). However, there are numerous approaches within the qualitative research paradigm such as phenomenology, ethnography, and grounded theory, and each has a unique empirical focus (Creswell, 2007).

Constructivist Grounded Theory

CGT was the chosen qualitative research methodology, or design which "shapes our choice and use of particular methods and links them to desired outcomes" (Crotty, 1998, p. 7).

GT is an approach to data collection and analysis which emerged from SI, and provides flexible guidelines for developing a theory about a social process that is grounded in the data (Charmaz, 2014). Recently, Charmaz (2006; 2014) proposed CGT, which takes a constructivist view. It assumes that data are a co-construction of meaning between the researcher and participants, and focuses on explicating participants' liminal meanings. CGT was an appropriate approach for studying this multi-faceted process (Charmaz, 2006). One can learn more about this methodological approach, and the rationale for its use in this study in Chapter 5. To summarize, the research purpose and question were congruent with CGT, which could elucidate an in-depth theoretical understanding of undergraduate nursing students' learning process with ABP (Charmaz, 2006; 2014; Polit & Beck, 2012). As a substantive theory about a practice issue was desired, rather than a high-level abstract theory, this purpose also fit well with CGT. Charmaz's constructivist stance was also congruent with the researcher's personal philosophical beliefs (Charmaz, 2014; Ralph, Birks, & Chapman, 2015). Other appealing features of CGT (Charmaz, 2014) were that it could facilitate the primary researcher's reflexive integration of her nurse educator and arts experiences, allow for the use of extant theories throughout the research process, and elucidate the student participants' voice with flexible procedures.

Research Methods

Methods, or the "techniques used to gather and analyze data" (Crotty, 1998, p. 3), flowed from, and therefore were congruent with, the researcher's choice of philosophical stance (social constructivism), theoretical perspectives (symbolic interactionism and transformative learning theory), and methodology (CGT). CGT has unique, flexible, and well-defined methods which were utilized in this study (Charmaz, 2006; 2014).

Recruitment and Sampling

Participants for this study were nursing students and instructors in a baccalaureate nursing program in a mid-western Canadian city. Students and instructors were recruited from a number of courses that incorporated an ABP assignment. The students had experienced reflecting on nursing practice, or issues important to practice, with ABP. Recruitment from various courses ensured a variation in the sample in regards to stage in the program, social group dynamics within course sections that could influence the students' experiences of the assignment, and learning environments. This variation provided information-rich sources that contributed to and challenged emerging conceptual categories (Charmaz, 2006; 2014). Inclusion criteria for the nursing students included participant willingness to be involved in the research project, experience with an arts-based assignment, enrollment in an undergraduate nursing program, and the ability to speak and read/write English. Inclusion criteria for the nursing instructors included participant willingness to be involved in the research project, experience teaching with an arts-based assignment in an undergraduate nursing program, and the ability to speak and read/write English.

Recruitment for purposive sampling. In CGT, researchers often start with purposive sampling, and then move to theoretical sampling (Charmaz, 2006; 2014). Purposive sampling is “a nonprobability sampling method in which the researcher selects participants based on personal judgment about which ones will be the most informative”(Polit & Beck, 2012, p. 739). During purposive sampling, nursing students were recruited from the Red River College and the University of Manitoba Baccalaureate Nursing Programs. Nursing students were recruited from two courses at Red River College. The first course was a community nursing course, in the third year of the program. This course has an ABP experience in which the students develop a creative artistic reflection on clinical nursing practice. The students share their creative reflection in a

group seminar in which they interact with their peers and instructors. The second course was a third year professional nursing theory course at Red River College which addresses issues, politics, and public policy in professional nursing. In this course, nursing students create a photo essay that highlights a local social justice issue and its health impacts, and then they identify potential advocacy initiatives to address the issue with government and policy makers. The students share their photo-essay in a class presentation. The same group of third year Red River College students participated in both assignments, although they took the courses in different semesters. As they were recruited after both assignments, one participant could participate in two interviews if they chose to volunteer twice. At the University of Manitoba, nursing students were recruited from a palliative nursing care course. In one of the course assignments, students had the option to select a creative reflective expression of their past grief experiences and its impact on their nursing practice.

In order to commence initial recruitment, site access was requested from the Chair of Nursing at Red River College (see Appendix D) and from the Associate Dean of Research through the Manitoba Centre for Nursing and Health Research (MCNHR) at the University of Manitoba. At the University of Manitoba, the Recruitment Access Policy (2016) was followed. After access to the site was formally granted at Red River College, course leaders were contacted and ten minutes of class time was requested in order to share information about the study with the nursing students, and to ask for volunteers. Nursing students were informed that in order to offset the potential participant burden, \$25 would be offered for participating in the semi-structured interviews. An intermediary, who was not employed at Red River College, was used for recruitment in order to avoid double agency as the primary investigator was also a nursing instructor at the College (Edwards & Chalmers, 2002) (see Appendix E for the recruitment script). A participant response document, along with written information about the study, was

handed out and students were able to indicate if they were interested in participating in the semi-structured interview (see Appendix F for the response form and study information). Additionally, a follow-up email was sent to nursing students (see Appendix G). At the University of Manitoba, it was not feasible to conduct in-class recruitment as only one student participated in the arts-based option over two semesters. Thus, an email invitation was sent to the potential student for recruitment (see Appendix H) by the MCNHR staff. However, the student was not successfully recruited into the study.

Recruitment for theoretical sampling. Although initial sampling for this CGT study was purposive, the need to illuminate, elaborate, and/or confirm the developing categories informed theoretical sampling. Theoretical sampling is the recruitment of additional people or other sources of data to define and develop the emerging theoretical ideas (Charmaz, 2006; 2014). Once eleven student interviews were conducted and analyzed, and the CGT data analysis yielded initial categories, a theoretical sampling plan was developed. Theoretical sampling included additional data sources (Charmaz, 2006; 2014) such as interviewing students from other course sections with a revised interview guide, and interviewing nursing instructors who taught in the two Red River College courses. Nursing students were only recruited from Red River College at this time, using the same manner and the same courses that were used with purposive sampling, as these students were deemed the best participants to explicate the emerging GT. Additionally, nursing instructors were recruited to provide their perspectives on the students' experiences with ABP. The phase of theoretical sampling required the submission of two amendments to the approved ethics protocol. The Education and Nursing Research Ethics Board and the Red River College Research Ethics Board approved these amendments.

In order to commence recruitment with nursing instructors, site access to nursing instructors was requested from the Chair of Nursing at Red River College (see Appendix I) for

letter requesting access). After access to the instructors was formally granted, the Chair of Nursing's administrative assistant emailed a letter of invitation (see Appendix J), study information (see Appendix K), and participant response form (see Appendix L) to the nursing instructors in the two aforementioned RRC courses. Additionally, a mailbox letter of invitation (see Appendix M), study information (see Appendix K), and participant response form (see Appendix L) was left in the same nursing instructors' mailboxes. The instructors were informed that in order to offset the potential participant burden, \$25 would be offered for participating in the semi-structured interviews for this study. Instructors were offered additional information about the study, and were able to indicate their interest by either emailing the researcher, responding to a Fluidsurvey link, or returning a hard copy of the participant response form (see Appendices J, K, L, and M).

Recruitment and sampling ended when theoretical saturation was noted, which is the criteria in CGT for stopping data collection (Charmaz, 2006; 2014). Theoretical saturation is when new data no longer provides theoretical insights or new properties for the theoretical categories that have developed (Charmaz, 2006; 2014). When analyzing the final interviews, the researcher was able to categorize all new data into the focused coding framework with no new category properties emerging. Theoretical saturation was then deemed adequate for the purpose of this study (Charmaz, 2014; Malterud, Siersma, & Guassora, 2016). See Appendix N for details about the recruitment process and participant response.

Participants and Setting

Thirty nursing students and eight nursing instructors participated in the study. As students were recruited from a pool of students that had completed two ABP assignments, some chose to volunteer twice ($n=4$); thus, 34 student interviews were conducted. Initially, 11 students were interviewed during purposive sampling. Theoretical sampling commenced once theoretical

categories were identified from coding the first 11 interviews, and included interviewing students (n = 23) with a revised interview guide and interviewing their nursing instructors (n = 8). In total, 19 students shared their perspectives about the creative reflection (55.9%), and 15 about the photo-essay (44.1%). The majority of the student participants were under the age of 35 (66.6%), female (93.3%), and white (80.0%) (see Table 1 below). Of the 30 students, 86.7% had been in the program for three years or less, indicating that they were in synchrony with their cohort. They had an average of 2.6 years of post-secondary education before entering nursing. For 64.7%, this was their first or second ABP experience in the program. To frame their ABP experiences, students rated the value of ABP out of 100, and 47.4% rated the creative reflection as 76 or higher, and 26.3% between 51-74. For the photo-essay, 40.0% rated it as 76 or higher, and 46.7% between 51-72. Of the eight instructors, the majority were over the age of 45 (75.0%), female (100.0%), white (100.0%), and had 20 or more years of experience as a nurse (62.5%) and five or more years as a nurse educator (87.5%). Three taught in the course with the photo-essay (37.5%), and six with the creative reflection (75.0%). Of note, one of the instructors had experience teaching in both of the courses.

Table 1

Participant Demographics

Student Participants (n=30)	
Characteristic	n (%)
Age range (years)	
20-24	8 (26.7)
25-29	8 (26.7)
30-34	4 (13.3)
35-39	7 (23.3)
40 and above	3 (10.0)

Gender	
Female	28 (93.3)
Male	2 (6.7)
Ethnicity	
White	24 (80.0)
Asian	1 (3.3)
Metis	4 (13.4)
Other	1 (3.3)
Years of post-secondary education (pre-nursing)	
None	4 (13.3)
1 year	5 (16.7)
2 years	7 (23.4)
3 years	6 (20.0)
4 years	4 (13.3)
5 or more years	4 (13.3)
Years in nursing program	
3 years or less	26 (86.7)
Over 3 years	4 (13.3)
Number of arts-based assignment in the nursing program (n=34)	
1	7 (20.6)
2	15 (44.1)
3	5 (14.7)
4 or more	7 (20.6)
Value of the assignment total (n=34) out of 100	
0-25	4 (11.8)
26-50	3 (8.8)
51-75	12 (35.3)
76-100	15 (44.1)
Value of the creative reflection (n=19) out of 100	
1-25	2 (10.5)
26-50	3 (15.8)
51-75	5 (26.3)
76-100	9 (47.4)
Value of the photo essay (n=15) out of 100	
1-25	2 (13.3)
26-50	0 (0.0)
51-75	7 (46.7)
76-100	6 (40.0)
Instructor Participants (n=8)	
Characteristic	n (%)

Age range (years)	
Under 29	0 (0.0)
30-34	1 (12.5)
35-39	1 (12.5)
40-44	0 (0.0)
45-49	2 (25.0)
50-54	2 (25.0)
55 and above	2 (25.0)
Gender	
Female	8 (100)
Male	0 (0.0)
Ethnicity	
White	8 (100)
Other	0 (0.0)
Years in the nursing profession	
0-9	0 (0.0)
10-19	3 (37.5)
20-29	3 (37.5)
30 and above	2 (25.0)
Years as a nurse educator	
0-4	1 (12.5)
5-9	3 (37.5)
10-14	3 (37.5)
15 and above	1 (12.5)

The semi-structured interviews were held at a mutually convenient location that protected the participants' confidentiality. Locations included a private room at Red River College, a private room at a clinical placement site, or at another location of the participant's choosing.

Data Generation

CGT begins with the generation of data, and researchers immerse themselves in the field in order to co-construct data about the studied phenomenon (Charmaz, 2006; Streubert & Carpenter, 2011). In a CGT study, the aim is to develop rich data which elucidates the participants' subjugated meanings of the phenomenon, and which can advance the emerging

theoretical ideas (Charmaz, 2006; 2014). Charmaz (2014) writes that rich data come from seeing the world the way the participants do, and reveals the participants “views, feelings, intentions, and actions as well as the contexts and structures of their lives” (p. 23). Generating this quality of data often involves using multiple sources of data which can reveal interesting disparities that can then be compared and contrasted to develop nuanced theoretical ideas about the research question (Charmaz, 2006; 2014). Data generation methods also evolve throughout a CGT study in order to elaborate the developing theory (Charmaz, 2006; 2014). Four sources of data collection were utilized for this study: a socio-demographic questionnaire, in-depth semi-structured interviews, photo/visual-elicitation, and field notes. Data were collected from February to December 2015.

Socio-demographic data. Pertinent socio-demographic information was collected from all participants in order to describe participant characteristics. This socio-demographic information enabled a thick description of the sample in order to promote transferability of the research findings (Polit & Beck, 2012). See Appendices O and P for the socio-demographic questionnaire that the student and instructor participants completed at the beginning of the semi-structured interview.

Semi-structured interview. One semi-structured interview was held with participants who volunteered and provided written informed consent for the study in order to gather rich narrative descriptions of the nursing students’ learning process with ABP (Charmaz, 2014; Morse, 2001; Polit & Beck, 2012). Interviewing involved a directed conversation in order to facilitate an in-depth exploration of the phenomenon, and is congruent with qualitative inquiry and CGT (Charmaz, 2006). Interviews are often a primary method for data collection in CGT (Charmaz, 2014). Furthermore, a social process encompasses a beginning and end and therefore, this temporal data may be best collected through a narrative form that lets participants share events as they unfolded (Morse, 2001). Accordingly, Morse (2001) argues that the best data for a

GT study comes from interviews which allow participants to tell their stories so that an overview of the process is elucidated.

Charmaz (2006) notes that for a novice researcher an interview guide, with thoughtful open-ended questions chosen to foster participants' reflections on the phenomenon, is helpful (Charmaz, 2006). Thus, an initial interview guide (see Appendix Q) was formulated for the student participants, and the initial interview questions were informed by CGT procedures (Charmaz, 2014), symbolic interactionism (Blumer, 1969; Charon, 2010), transformative learning theory (Mezirow, 2000), sensitizing concepts, and the researchers' experience with ABP . Theoretical sampling involved using a revised interview guide (see Appendix R), with additional students from different course sections, with the aim to elucidate the developing theoretical categories. Further, an instructor interview guide (see Appendix S) was formulated to elicit instructors' perspectives of the students' reported learning process with ABP. The interview duration ranged from 30 to 67 minutes for nursing students, and 45 to 80 minutes for nursing instructors. The average interview duration was 47 minutes for nursing students and 63 minutes for instructors. The doctoral student conducted all of the interviews.

Photo/visual-elicitation. Photo/visual elicitation was also used for data generation (Harper, 2002; Liebenberg, Ungar, & Theron, 2013). Harper (2002) asserts that the use of photographs in a research interview is a form of symbolic representation that elicits different types of information. As opposed to verbal communication, photographs incorporate visual information; thus, stimulating diverse and deeper ways of thinking. The student participants used their mobile device cameras, or available digital cameras, to take pictures of their creative reflections. Students emailed or brought these pictures in an electronic format to the interview where they were viewed on a laptop computer. Alternately, some students brought their actual artistic reflection to the interview. For students who participated in the social justice photo essay,

they were asked to bring their photo essay to the interview and were invited to provide digital copies of the pictures which they utilized for their project. Most students (n=32) brought pictures of their creative reflection (or their actual work), or brought their photo-essay, to the interview. During the interview the students were asked questions about these photo(s) or their artwork. Thus, photo elicitation, in which “an interview is stimulated and guided by photographic images” (Polit & Beck, 2012, p. 737), was used during the interview to collect rich data. The data collected and analyzed about the photographs were the students’ narratives about the photos, as opposed to analyzing the photos or student artwork themselves. This arts-based research method provided significant insight into the student process of ABP, introduced stimulus for the interview discussion, promoted collaboration between the researcher and participants, and fostered the recall of pertinent experiences during the retrospective interview (Frith & Harcourt, 2007; Harper, 2002; Harrison, 2002; Najib Balbale, Schwingel, Chodzko-Zajko, & Huhman, 2014; Polit & Beck, 2012). At the end of the instructor interviews, instructors were shown a visual diagram of the emerging GT and asked for their feedback. This form of visual elicitation provided insightful data for the emerging theory.

Descriptive field notes. Descriptive field notes were documented by the researcher after each interview and included as part of data collection. Descriptive field notes are “objective descriptions of observed events and conversations; information about actions, dialogue, and context are recorded as completely and objectively as possible” (Polit & Beck, 2012, p. 549).

Data Analysis Procedures

The socio-demographic data were analyzed with descriptive statistics using the Statistical Package for the Social Sciences (SPSS), and other data with CGT analysis methods. CGT data analysis encompassed simultaneous data collection, analysis, and theory construction (Charmaz, 2006; 2014). Coding and memo-writing began early with the first few interviews, and when

theoretical ideas began to emerge from the data, the emerging conceptual ideas directed future theoretical sampling (Charmaz, 2006). This analytic process integrated data collection and analysis, and is a strength of the CGT methodology as it is self-correcting in nature (Charmaz, 2000).

All interviews were recorded and transcribed verbatim by a hired transcriptionist into an electronic document. In order to improve the quality of the transcripts, empower participants, and uphold research ethics, the participants were offered the opportunity to review their verbatim interview transcript (Hagens, Dobrow, & Chafe, 2009; Mero-Jaffe, 2011). Interviewee transcript review, or verification, included an invitation to identify and correct errors, clarify information, delete any identifying text, and provide additional insights into their interview responses (Hagens et al., 2009). The procedure set out by Hagens and colleagues (2009) was followed. First, the interview was transcribed verbatim, and the transcript was reviewed by the researcher and corrected if necessary. Next, the verbatim transcript was emailed to participants who had indicated that they would like to review their transcript. The participant was asked to provide comments and feedback by either entering them with a word processor's track changes feature or entering changes with coloured text. They were then asked to return the reviewed transcript within one week, and if no response it received, it was assumed that they are not requesting any changes. Although 15 participants (12 students and 3 instructors) requested a transcript review, no participants made any changes.

Interview transcripts, photo/visual-elicitation images, and field notes were stored electronically. Photographs taken, or provided by the participants, were stored in a digital format and linked to the participant's transcript. All identifying information was removed from the electronic formats, and the transcripts and other participant data were assigned a code number. Electronic data were managed with ATLAS.ti research software.

Data analysis began early in the data collection stage through coding, constant comparison, and memo-writing (Charmaz, 2014). Coding is “naming segments of data with a label that simultaneously categorizes, summarizes, and accounts for each piece of data” (Charmaz, 2014, p. 111). These codes provided analytic handles and were the first step towards the analytical interpretation of the data and the beginning of the GT (Charmaz, 2006). The constructed codes were viewed as representing the researcher’s interpretation rather than viewed as objectively emerging in a neutral way from the data (Charmaz, 2006). In CGT, codes stick “closely to the data, show action, and indicate the progression of events” (Charmaz, 2014, p. 112). Thus whenever possible, gerunds were used to code data (Charmaz, 2006) in order to indicate action and illuminate processes (Morse, 2001). A gerund is a “verb...that functions as a noun” (Gerund, 2016). In addition to gerunds, *in vivo* codes were used, when appropriate, in order to reveal implicit meanings which are highly valued in CGT (Charmaz, 2006).

CGT researchers utilize at least two phases of coding which were used in this study: initial coding which starts to build concepts inductively, and focused coding which categorizes large amounts of data by using the most analytically significant codes from the line-by-line coding (Charmaz, 2006; Mills et al., 2006). Initial coding involved studying fragments of data and labeling them with codes (Charmaz, 2006). Fragments can be words, lines, or incidences, although Charmaz (2014) advocates beginning with line-by-line coding to elicit an interpretation that is firmly grounded in the data. In this study, coding began with line-by-line coding in which each line of the written text was coded. Next, in focused coding, the researcher used the initial codes that reappeared frequently, and were the most relevant, to sort the data. After 11 interviews were analyzed during initial coding, a focused coding framework was developed. The researcher used this emergent framework to code all the following interviews, and new participants’ data were compared to focused codes from previous participants, and their data was added to the

framework. During focused coding, the codes became increasingly conceptual and explicated, and certain focused codes were elevated to abstract categories. These categories were chosen for their incisiveness, theoretical reach, generic power, and relationships to other categories.

Theoretical integration, which involved analyzing the linkages and relationships between categories, began during focused coding and continued until the construction of the final GT.

Theoretical integration was achieved through coding, constant comparison, memo-writing, and diagramming a visual representation of the emerging GT (Charmaz, 2014).

Throughout the data collection and analysis process, the researcher also made preliminary analytic notes called memos. Memo-writing is an essential element in CGT data analysis, and involves keeping a written record of one's comparisons and analytical thoughts about the data and data analysis process (Charmaz, 2006; Charmaz, 2014). Memos enabled the researcher to reflect and clarify, make precise comparisons, keep the participants' voices present, and record analytical thoughts and development (Charmaz, 2006; Mills et al., 2006). For example, memos were written about the rationale for research decisions, the development of each focused code, and the researcher's analytical thoughts.

An important process in simultaneous data collection and analysis is constant comparison. Constant comparison develops successively more abstract ideas (Charmaz, 2000; Glaser, 1978; Polit & Beck, 2012) through comparing "data with data, data with category, category with category, and category to concept" (Bryant & Charmaz, 2007b, p. 607). Constant comparative methods rely on both inductive and abductive logic (Birks & Mills, 2011).

Abductive logic is increasingly used in the comparisons as they become more abstract, such as when the researcher compares categories to data, or categories to categories during theoretical integration (Birks & Mills, 2011). Therefore in this study, constant comparison was used to understand the similarities and differences in the data, and to develop theoretical ideas (Polit &

Beck, 2012). The development and refinement of concepts, which occurred through comparative methods, enabled the researcher to focus further data collection in new directions which informed developing theoretical ideas and theoretical sampling (Charmaz, 2000; Ghezeljeh & Emami, 2009; Polit & Beck, 2012).

Another important component of data analysis in a CGT study is theoretical sensitivity (Charmaz, 2014). Theoretical sensitivity is the “ability to understand and define phenomena in abstract terms and to demonstrate abstract relationships between studied phenomena” (Charmaz, 2014, p. 161). The researcher’s knowledge of nursing education and creative processes, experiences with the arts, and the reflexive use of the literature and theories, contributed to her theoretical sensitivity (Charmaz, 2014). Furthermore, the researcher has been involved in the development and implementation of arts-based assignments within nursing education. Although the use of theories, extant ideas, and personal experience can develop theoretical sensitivity in a CGT study, this contribution was balanced with reflexivity to ensure that the researcher was not forcing the data with preconceived ideas (Kelle, 2007). Charmaz (2014) also refers to the use of a sensitizing concept to enhance theoretical sensitivity. She writes that a sensitizing concept is a “broad term without definitive characteristics; it sparks your thinking about a topic” (Charmaz, 2014, p. 30). However, Charmaz (2006; 2014) notes that they should be “points of departure” to develop ideas rather than limiting data into preconceived ideas (p. 30). Potential sensitizing concepts were developed from guiding interests, extant theories, and disciplinary perspectives (Charmaz, 2014). Although the researcher started with a variety of sensitizing concepts, additional sensitizing concepts emerged throughout the research process. In this study, disciplinary perspectives, and symbolic interactionism, transformative learning theory, and creativity theories informed the initial sensitizing concepts. Sensitizing concepts for this study

included concepts such as ‘disorientating dilemma’, ‘transformative learning’, ‘symbols’, ‘taking the role of the other’, ‘definition of the situation’, ‘reflection on practice’, and ‘creative process’.

This simultaneous data collection and analysis by a theoretically sensitive researcher, who engages in CGT coding procedures, constant comparison, and the integration of researcher memos, is fundamental to CGT methodology (Charmaz, 2014). Through these analysis strategies, levels of abstraction were induced from the data, additional data were gathered to refine the analytic categories, and the research culminated in a substantive GT.

Study Trustworthiness and Evaluation Criteria

Trustworthiness and evaluation criteria for this study came from two sources. Lincoln and Guba’s (1985) trustworthiness criteria of credibility, dependability, confirmability, transferability, and the more recently added criteria of authenticity (Guba & Lincoln, 1994), informed this study in order to have a broad perspective of trustworthiness. Additionally, Charmaz (2006; 2014) proposed the four evaluation criteria of credibility, originality, resonance, and usefulness, which were used to enhance the quality of this study. Charmaz (2006; 2014) acknowledges that criteria, in addition to her own, may be helpful for evaluating a CGT study. Although her criteria are quite pragmatic and focus on the research outcomes, they subsume rather than highlight the evaluation of the research process, and she does not clearly identify strategies with which to meet these criteria. However, they are specific to her methodology, and therefore were important to consider.

Specific strategies were employed in order to address Lincoln and Guba’s (1994; 1985) trustworthiness criteria. Credibility is “confidence in the truth value of the data and interpretations of them” (Polit & Beck, 2014, p. 323) and was enhanced through a number of strategies. In order to have an in-depth understanding of the context, phenomenon, and participants’ perspectives, the researcher engaged in prolonged engagement and persistent

observation. Prolonged engagement involved spending sufficient time collecting data. Persistent engagement is a related concept to prolonged engagement, but is more focused on depth instead of scope and was achieved through in-depth semi-structured interviews along with photo/visual-elicitation (Polit & Beck, 2012). Additionally, the researcher has considerable teaching experience (eleven years) and has been involved in the creation and implementation of three ABP assignments. Although this prolonged engagement in nursing education likely resulted in theoretical sensitivity, it could also introduce preconceived ideas which could force the data (Charmaz, 2014). The primary researcher also teaches in the same nursing program in which the study was conducted, and brought her perspective as an educator within this context to this research project (Mortari, 2015). Thus, reflexivity was an important component to enhance the credibility in this study. Reflexivity involved “attending continuously to the researcher’s effect on the collection, analysis, and interpretation of the data” (Polit & Beck, 2014, p. 326). The student researcher engaged in reflexivity throughout the research process through writing memos and reflective journal entries, and in discussions with her advisor.

As well, a number of forms of triangulation were utilized to increase the credibility of the study. Triangulation, or the use of multiple research strategies to draw conclusions, is based on the assumption that one approach may compensate for the limitations of the other (Polit & Beck, 2012; 2014). Data triangulation encompassed the use of multiple sources of data in order to validate research analysis/findings and included three various approaches: time, space, and person (Polit & Beck, 2012; 2014). Time triangulation encompassed the collection of data about the same phenomenon at different points in time, space triangulation involved collecting data from at least two different courses, and person triangulation occurred through collecting data from different types of people (i.e. students and instructors) through the multi-staged purposive/theoretical sampling plan of this study. Method triangulation included the use of

multiple methods of data collection such as interviews and photo/visual-elicitation (Polit & Beck, 2012; 2014). Additionally as this was a doctoral dissertation project, the student's advisor was involved in making data collection and analysis decisions (Polit & Beck, 2012; 2014). This supervisory relationship encompassed a form of auditing and debriefing to explore and discuss aspects of the study (Polit & Beck, 2012; 2014).

Additionally, strategies to address credibility were embedded in CGT methods as theoretical sampling encompasses a form of member checking and searching for confirming/disconfirming evidence (Charmaz, 2014; Polit & Beck, 2012). Other strategies which were employed to enhance credibility of this study included: compiling comprehensive field notes, carefully digitally recording interviews, and using theoretical saturation as the indication for stopping data collection (Polit & Beck, 2012; 2014). The transcription and interviewee transcript review process, as described previously, also helped to support the credibility of the study.

Dependability is the "stability...of data over time and conditions" (Polit & Beck, 2014, p. 323), and this aspect was addressed through a variety of strategies. Careful documentation of all facets of the study, including key analytical decisions, occurred through memo-writing (Charmaz, 2014). Memos formed an extensive audit trail, and the advisor conducted an audit of the student's analysis and research decisions at key junctures in the research project. The previously mentioned strategies of data triangulation and member checking through theoretical sampling, also contributed to the dependability of this study (Polit & Beck, 2012; 2014).

Confirmability refers to the "potential for congruence between two or more independent people about the data's accuracy, relevance, or meaning" (Polit & Beck, 2014, p. 323). Numerous strategies, which were previously described, were employed to attend to this criterion. These

strategies included: searching for confirming evidence through theoretical sampling and advisor/committee review (Polit & Beck, 2012; 2014).

Transferability is the “extent to which qualitative findings can be transferred to or have applicability in other settings or groups” (Polit & Beck, 2014, p. 323), and were enhanced with a number of tactics. Thick description refers to a “rich, thorough, and vivid description of the research context, the people who participated in the study, and the experiences and processes observed during the inquiry” (Polit & Beck, 2014, p. 331). Thus, the researcher provided thorough information about the setting and sample so that other practitioners and researchers can assess contextual similarities to see if they can transfer findings to their setting (Polit & Beck, 2012; 2014). Other strategies which contributed to the transferability of findings included: taking comprehensive field notes, ensuring theoretical saturation of data, searching for confirming evidence through theoretical sampling, and documentation of strategies to increase trustworthiness (Polit & Beck, 2012; 2014).

Authenticity refers to “the extent to which researchers fairly and faithfully show a range of different realities” and “emerges in a report when it conveys the feeling tone of participants’ lives as they are lived” (Polit & Beck, 2014, p. 323). Therefore, key components of enhancing the authenticity of the study included evocative writing, and thick and vivid descriptions of demographics and context (Polit & Beck, 2012; 2014). As well, Polit and Beck (2014) note that previously described strategies, such as reflexivity, prolonged engagement, and transcription rigour, also support the authenticity of a research project.

Furthermore, Charmaz’s (2006; 2014) criteria were considered and addressed throughout the research study. Although Charmaz does not provide definitions for her criteria, she does provide questions to guide the evaluation of each criterion which can be utilized to develop effective strategies for quality enhancement of the study. These questions were used to

address Charmaz's (2014) evaluation criteria of credibility, originality, resonance, and usefulness (see Appendix T). However, Birk and Mills (2011) do provide brief definitions of Charmaz's criteria. They write that credibility reflects "the logic and conceptual grounding", originality includes "reference to the significance of the study", resonance concerns "the need for the theory to have meaning and scope for all those for who it may be relevant", and usefulness encompasses "relation to knowledge development and practical application" (Birk & Mills, 2011, p. 152). Charmaz (2014) claims that "A strong combination of originality and credibility increase resonance, usefulness, and the subsequent value of the contribution" (p. 338).

Credibility, as discussed by Charmaz (2014), was achieved through the researcher's intimate familiarity with the topic and setting of the research (Charmaz, 2006; 2014). Specifically, this familiarity was enhanced by her experience with nursing education, prolonged engagement in data collection, and use of theoretical saturation to indicate the end of data collection. Further, in order to substantiate that the data collected were sufficient to merit the analysis claims, and to ensure a wide range of categories about the phenomenon, data triangulation was employed in this study. Constant comparison, which enhances the credibility of a CGT study, was carefully documented in the researcher's memos and these memos formed an audit trail of this comparative analytical work. Memos also demonstrated the logical links between data and analysis, and these links were made more credible through researcher discussions during advisor debriefing. Evidence for the claims of the GT were provided through a thorough description of research process, and a provision of participant quotes which support the research findings (Charmaz, 2006; 2014).

A number of components of this research project fostered the originality of the study findings. In order to ensure categories were fresh and offered a new conceptual rendering about the phenomenon, the researcher employed line-by-line coding to elucidate hidden meanings,

engaged in reflexivity to address preconceived notions which may force the data, and integrated the literature before, during, and after the study to ensure that this project built on the state of the science (Charmaz, 2006; 2014). These strategies also increased the social and theoretical significance of the study, as did the researcher's background as a nursing educator. Additionally, the careful implementation of the essential elements of CGT, such as theoretical sensitivity and adequate theoretical sampling, provided rigorous strategies which fostered an insightful rendering of the data (Charmaz, 2006a; 2014).

Resonance is another important evaluation criteria in CGT. The meaning and scope of the GT was supported by well-defined and fully explicated categories that were achieved through CGT analysis methods, theoretical sensitivity, and theoretical sampling (Charmaz, 2006; 2014). Theoretical sampling is a key component of meaningful theoretical development; yet, remains a challenging element in many GT studies (Makdisi et al., 2013; Roberts, Camic, & Springham, 2011; Rodkjaer, Sodemann, Ostergaard, & Lomborg, 2011). Thus, the researcher employed intentional and creative strategies, and consulted with her advisor, to ensure that the theoretical sampling plan was adequate. Data triangulation also contributed to a meaningful research product, and revealed liminal meanings. Other strategies to ensure a meaningful GT included engaging in reflexivity (Charmaz, 2006; 2014) and paying careful attention to ethical considerations, as the researcher was also an educator at Red River College. Thus, strategies to avoid the coercion of students, which could affect authentic conversations in an interview, were employed as outlined in the following discussion about ethics. Lastly, in order to ensure that the findings make sense to participants, the CGT strategies of theoretical sampling and constant comparison provided a form of member-checking.

The usefulness of the study findings were enhanced with a number of strategies, including incorporating an integrated knowledge translation strategy in order to make the study

interpretations more useful for practitioners (Charmaz, 2006; 2014). As well, data triangulation, thick descriptions of the context and participants in the research manuscript, and visual diagramming to illustrate the GT, were used to increase the usefulness of the research products for end-users. In order to spark future research ideas, the researcher noted ideas for future studies which developed during this study. Charmaz asserts that if one is thoughtful about their dissertation research, this early research project can inspire one's research endeavors for the next ten years (K. Charmaz, personal communication, July 23, 2013). Lastly, as part of the iKT approach, the researcher will collaborate with research end-users and develop intensive dissemination practices in order to ensure that the research outcomes contribute to the present state of knowledge about ABP, and that they also inspire change in educator's practices based on this new knowledge (Charmaz, 2006; 2014).

Ethical Considerations

Ethical considerations for this research study were based upon the consideration of the following ethical principles for protecting study participants: beneficence, human dignity, and justice (Polit & Beck, 2012; 2014). These ethical considerations formed the basis for the ethics protocol, which was approved by the University of Manitoba Research Ethics Board and the Red River College Research Ethics Boards. Further, two requests for amendments were submitted to these research boards to facilitate theoretical sampling, and one to address an issue that arose at the beginning of the research study regarding the recruitment procedures.

The principle of beneficence addresses the researcher's responsibility to minimize harm and maximize benefits for all participants. An assessment to determine an acceptable risk-benefit ratio was conducted to protect participants (Polit & Beck, 2012). This study posed minimal risks to participants, and the primary discomfort was the cost of time and money to attend the semi-structured interview. In order to offset this potential participant burden, each participant received

a small honorarium of \$25 in compensation for his or her time at the completion of the interview. This monetary honorarium was a reasonable compensation for the participant's time and effort, and was not enough to exert undue influence to participate in the study (Erlen, Sauder, & Mellors, 1999; Grady, 2001; Ulrich & Grady, 2004). The benefits of the study were also considered. Student and instructor participants may have benefited from involvement in the research study as it may have increased their understanding of the qualitative research process. As well, the student participants may have learned about nursing practice and practice issues from these interviews, as discussing and reflecting on one's learning through the arts-based assignment may have helped the student to further develop new knowledge from their experience.

In this study, special consideration was given to students, who are a vulnerable group of people due to the power differential that exists between faculty and students (Aycock & Currie, 2013; Bradbury-Jones & Alcock, 2010; Clark & McCann, 2005; Ferguson, Myrick, & Yonge, 2006; Ridley, 2009). Polit and Beck (2014) write that if researchers have a bond with their participants, that "special care need may be needed to avoid exploiting that bond" (p. 83), especially if this researcher has another role with the participant. Although this relationship can result in an intimate knowledge of the learners' context and increase theoretical sensitivity, double agency was an important consideration to avoid as the researcher had been involved with teaching the very students who were under study (Edwards & Chalmers, 2002). Thus, students could be viewed as being in a captive role, in which they may be concerned about repercussions for their decision to not participate in the study (Aycock & Currie, 2013; Bradbury-Jones & Alcock, 2010; Clark & McCann, 2005; Ferguson et al., 2006; Ridley, 2009). Consequently, only students with whom the researcher no longer had a current/future teaching or evaluative role were recruited into the study.

The second ethical principle, the respect for human dignity, encompasses the participants' right to self-determination and to full disclosure (Polit & Beck, 2012; 2014). Informed consent was important to safeguard research participants and to ensure that these rights were respected (Polit & Beck, 2012). The participants who decided to take part in the study were fully informed about the study in an understandable way. The recruiter and/or recruitment documents described the nature and purpose of the study; provided a detailed explanation of what was expected of participants, the benefits and risks of participating, and confidentiality procedures; emphasized that participation was voluntary and that there would be no repercussions for not participating; and explained that participants could withdraw from the study at any time and that they had the right to refuse to answer any questions (see Appendices E, F, G, H, I, K, L, M, and N). Participants were offered an opportunity to ask questions about the study and their involvement before signing the informed consent form. All participants signed an informed consent form, which indicated their understanding and consent to be part of the study (see Appendices U and V for informed consent forms), before the commencement of data collection. A copy of this consent form was given to all participants to keep for their records and reference. Through the process of interviewee transcript review, participants were also be able to withdraw any responses, if they so desired (Hagens et al., 2009; Mero-Jaffe, 2011). Additionally, the study findings will be offered to the research participants by providing a brief lay summary (1-3 pages) of the research findings and contact information for the researchers should they want any further information about the study results. In order to facilitate this communication, the participants were asked during the informed consent procedures if they wished to receive this feedback, and if so, what format they wanted to receive it in (email or personal mail) (Polit & Beck, 2012; 2014).

There are also concerns about perceived coercion in this study, related to the researcher's previous teaching position with the Red River College students which encompassed a role with

formal authority (Polit & Beck, 2012; 2014). In regard to the faculty participants, there were concerns regarding perceived coercion due to their collegial relationship with the researcher. If participants felt coerced to volunteer for the study, because they were either concerned about the repercussions of not participating or they felt pressured to please a previous instructor or professional colleague, their consent would be informed but perhaps not be voluntary (Aycock & Currie, 2013; Bradbury-Jones & Alcock, 2010; Clark & McCann, 2005; Ferguson et al., 2006; Ridley, 2009). Thus, their autonomy would be limited (Aycock & Currie, 2013). In order to avoid an undue influence resulting from the researcher's previous relationship with participants, and to protect the participants' freedom to make a decision free from coercion, an intermediary was used to recruit all student and instructor participants.

Lastly, the third principle concerns justice, or the study participants' right to fair treatment and privacy (Polit & Beck, 2012; 2014). Although complete anonymity was not possible in this qualitative study with face-to-face interviews, a pledge of confidentiality was given to the participants. Confidentiality procedures were explained to participants; specifically, that others would not be informed about the participants' decision regarding participation in the study, collected data would only be made available to those for whom the participants have consented to give access to, and findings would not be reported in a way that identifies individual participants. The confidentiality procedures were also explained to the transcriptionist, and she was asked to sign a confidentiality pledge (see Appendix W). The collected data was de-identified during the transcription process, and all hard-copy documents were stored in a locked cupboard in the researcher's home office. All participants were assigned a code number. This code number, along with the corresponding participant name and their informed consent form, was kept in a locked cabinet in the same office, but in a separate file and locked cabinet from all other collected data. The digitally recorded data, electronic transcripts, field notes, and digital

photographs were stored on the researcher's password protected laptop computer. Although the researcher had full access to the data, her supervisor and committee members only accessed the de-identified data. The interviewee transcription review also strengthened the fair treatment and privacy of participants, as the participant were able to delete any text which they felt identified themselves and make revisions to their transcripts.

Another important consideration for informed consent in this study, which encompassed photo-elicitation for data collection and which will potentially utilize an arts-based knowledge translation strategy, is the storage and use of images of the students' creative assignments.

Numerous scholars highlight the following ethical considerations of arts-based research:

ownership of the artwork, informed consent to store and use the artwork, interpretation and representation of the artwork, and anonymity/confidentiality of the participant (Boydell et al., 2012; Clark, Prosser, & Wiles, 2010; Koski, 2012; Lafrenière, Hurlimann, Menuz, & Godard, 2012). Strategies were employed to address each of these ethical concerns. First, the artwork was viewed as the property of the participant, and informed consent was requested for the storage and/or use of photographs of the student participant's creative work in the research report, subsequent publications, and arts-based knowledge translation initiatives (see Appendix U). On the informed consent form, student participants were able to choose their level of disclosure in regards use of the photographs within the research project: to participate in the interview and bring a photo(s) for photo elicitation which will be stored electronically for data analysis purposes; or to participate in the interview, bring a photo(s) for photo elicitation which will be stored electronically for data analysis purposes, and provide consent for their photo(s) to be used in dissemination activities. Second, diligent care was taken to ensure that the photographs did not contain any details through which the participant or another individual could be identified. If it did, this work will not be used in any publications or dissemination strategies. Although

photographs of their creative work will be anonymous to the general public, the photo may be identifiable by their fellow classmates or instructors with whom they shared their original creative work as part of the course activities. Therefore, this potential for participant identification by other students or instructors was highlighted on the consent form. Third, strategies were used within the semi-structured interview to clarify the meaning of the creative work to the participant in order to ensure that it was represented properly in the data analysis and subsequent research reports.

In summary, procedures to protect participants in this study included informed consent, confidentiality protocols, strategies to address double agency and coercion with participants, communicating research results to the participants at the end of the study, and ethical approval. Through careful consideration and planning, the beneficence, human dignity, and justice of all study participants was protected (Polit & Beck, 2012; 2014).

Knowledge Translation

The researcher used an integrated knowledge translation (iKT) plan for this study, and will also use an intensive end-of-project dissemination plan (Canadian Institutes of Health Research, 2012). iKT involves knowledge end users throughout the research process to enhance usability of findings (CIHR, 2012). Accordingly, nurse educators' input into the research and dissemination plans was elicited. One nursing educator from Red River College, and two from the College of Nursing, University of Manitoba, were invited to form an iKT team. These educators were embedded in nursing education and positioned to influence decisions about knowledge translation of the study findings into their place of employment, and some were engaged in a previous relationship with the researcher (CIHR, 2012).

Of note, there was a need for some adaptations to the conventional iKT components within this doctoral research study. As this was a thesis research project, the role of the iKT

group was to solely inform the student and her committee, and group members had no formal voting authority on the thesis committee or on research decisions. As well, this team did not identify the problem to be studied or the main research question for the research proposal (CIHR, 2012), as these aspects had been established through the researcher's discussions with her advisor/committee throughout the process of graduate studies. Although these constrictions may have limited the impact of the iKT approach, CIHR (2012) writes that it is important to "ensure that the engagement is appropriate for both the project objectives and the availability of the knowledge users" (p. 3). Thus, the iKT team only had an advisory role. Furthermore, the iKT team discussions were not transcribed and analyzed, and the iKT members were not represented in the research study findings.

This small group met with the researcher before commencement of data collection (an individual meeting) and during data collection/analysis (group meeting). After the completion of this project, the researcher will meet with group members in order to discuss the dissemination plans (group or individual meetings/phone calls). At the first meeting, the research project and iKT member's responsibilities were described and discussed. During the second meeting, the researcher presented the preliminary analysis, and elicited the iKT member's feedback about the analysis and potential dissemination plans. At the final meeting, the researcher will share the final analysis, and the focus of the discussion will be on creating a feasible and effective dissemination plan for the research findings. Thus, this team was asked to provide feedback on the research project, data collection and analysis, and dissemination plans.

This inclusion of end-users viewpoints into the research project, and its emergent design, was intended to make the research findings more relevant to end-users of the research and also inform effective dissemination strategies (CIHR, 2012). It is important to distinguish between the iKT users that are part of this project, and the target audiences of the intensive dissemination

strategies for sharing the research findings at the completion of the project (CIHR, 2012).

Intensive dissemination activities may include conference presentations/workshops and academic journal publications, as well as making a short YouTube video, or digital story, which communicates the findings. An art-based knowledge translation initiative may include photos of the students' creative works, if the student provided written informed consent for the use of their photograph(s) for dissemination of findings. The potential platforms for dissemination of the video includes viewings at conferences, sharing via YouTube, and linking the video to the researcher's academic website. The dissemination plans will be discussed in more depth in the concluding chapter of the thesis.

Summary

In this introductory chapter, the author provided an overview of ABP, reviewed the background information and relevant research about ABP, described the objectives and structure of the paper-based thesis, defined the CGT research study purpose and question, discussed the philosophical perspectives and theoretical orientations of the research study, and identified the research study methodology and methods. This chapter provides the foundation for the theoretical and empirical work of this thesis. The objectives and structure of the paper-based thesis enabled a broad and multi-faceted inquiry about ABP in undergraduate education. A thoughtful consideration of the primary research study ensured that the research question, theoretical perspectives, methodology, and methods were congruent and could adequately address the research question. The following chapters contain the five thesis manuscripts, the preceding preludes and abstracts, and a conclusion chapter which integrates this diverse body of work.

Chapter 2: Arts-Based Learning: Analysis of the Concept for Nursing Education

Prelude

Chapter 2 is a concept analysis of ABL. As the use of the arts in nursing education is a new and emerging phenomenon, a concept analysis was conducted to develop the conceptual clarity of ABL for its use in research (McEwen & Wills, 2011). A concept analysis is an approach used to “clarify the meanings of terms and to define terms (concepts) so that writers and readers share a common language” (McEwen & Wills, 2011, p. 54). This process of inquiry was conducted through analyzing dictionaries, historical literature, multi-disciplinary academic literature, and the grey literature with Walker and Avant’s (2011) method of concept analysis. Their approach includes the following eight steps: selecting a concept, determining the purpose of the analysis, identifying uses of the concept, determining defining attributes, identifying a model case, identifying additional cases, identifying antecedents and consequences, and defining empirical referents. This process resulted in a description of ABL’s attributes, antecedents, and consequences.

This inquiry produced a more precise definition of ABL which provided a conceptual basis for the subsequent JBI systematic review protocol and report, and the CGT research study about ABP in undergraduate nursing education. After this paper was published, a decision was made by the student and her advisor/committee to use the conceptual term ‘arts-based pedagogy’ to define the phenomenon of interest, as this concept was more focused on a teaching approach. However, the published concept analysis informed the future work about ABP.

The article, “Arts-based Learning: Analysis of the Concept for Nursing Education”, has been published in the International Journal of Nursing Education Scholarship. According to their copyright transfer agreement, the “Author/Editor may deposit the Publisher’s PDF version of the Article on Author’s/ Editor’s own website or Author’s/Editor’s institute’s designated repository,

provided it is not made publicly available until 12 months after official publication” (De Gruyter, 2016, p. 2). Thus, the publisher’s PDF version of the concept analysis was inserted into this paper-based thesis. The initial manuscript draft was written by the student, and revised with her doctoral advisor who provided constructive criticism of the initial draft, re-analyzed the included literature, revised and confirmed the critical attitudes of ABL in collaboration with the student, and contributed written text to the revised manuscript. The final publication is available at [www.degruyter.com](http://www.degruyter.com/view/j/ijnes.2013.10.issue-1/ijnes-2012-0034/ijnes-2012-0034.xml) at the following link: <http://www.degruyter.com/view/j/ijnes.2013.10.issue-1/ijnes-2012-0034/ijnes-2012-0034.xml>

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Arts-Based Learning: Analysis of the Concept for Nursing Education

Abstract

Teaching and learning strategies are needed to support learner-centered curricula, and prepare nurses who are capable of working in today's challenging health care environments. Although the traditional lecture is still widely used in nursing education, innovative approaches are needed to encourage discussion, debate, and critical reflection, activities that support lifelong learning. Arts-based learning [ABL] is a creative strategy with the potential to engage learners, foster understanding of multiple perspectives, and simultaneously connect cognitive and affective domains of learning. Walker and Avant's method of concept analysis is applied to examine the uses of ABL in the literature, define the attributes, distinguish the antecedents and consequences, identify model and other cases, and determine empirical referents of this concept. This analysis is presented to facilitate the conceptual understanding of ABL for use in research and nursing education.

Keywords: arts-based, learning, nursing students, concept analysis, arts

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The challenges of scientific advancement; the diversity of learners and patients; and countless changes in the health care system have created a need for educators to prepare nurses to be critical thinkers, creative problem solvers, and effective communicators (Hermann, 2004; Pavill, 2011). Within nursing education, there is a call for a significant shift in curricula away from content-focused, teacher-centered designs to align with the learning needs of students for the changing expectations of nurses in practice. Educators are tasked with developing environments in which learning processes are emphasized, and active student engagement is a critical component in this shift (Forbes & Hickey, 2009). Informed by

constructivism, student-centered learning environments foster collaborative relationships between students and educators, and encourage discussion, debate, and critical reflection, activities that support lifelong learning (Schaefer & Zygmunt, 2003).

Arts-based learning [ABL] is a creative strategy that relies on an art form to facilitate learning about another subject matter. ABL engages learners and simultaneously connects thoughts with feelings as part of the learning process. However, the concept is not clearly defined and lacks distinct boundaries. The purposes of this article, therefore, are to define the attributes of ABL for use in nursing education, connect ABL with student-centered learning environments, and facilitate future research regarding the effectiveness of this learning strategy through a concept analysis.

Approach to concept analysis

Walker and Avant's (2011) method was used to guide the analysis of ABL since this method is suitable for examining a vague concept that needs clarification. This approach was used to guide the synthesis of the ABL literature as a basis for facilitating dialogue, research, and development of this concept. There are identified limits to the realist ontology underpinning Walker and Avant's approach, such as – the decontextualization of the phenomena in the search for abstract truth which transcends a particular context (Duncan, Cloutier, & Bailey, 2007). However, consistent with realist ontology, the identification of defining attributes that are observable and measurable facilitates a shared understanding about a phenomenon and also enables empirical research about the concept (Duncan et al., 2007). Yet, the authors acknowledge that this analysis will result in an interpretation of that reality and that this interpretation is not a static entity, but will continue to change and evolve over time.

Walker and Avant's method includes the following steps: select a concept, determine the purpose of the analysis, identify uses of the concept, determine defining attributes, identify a model case, identify additional cases, identify antecedents and consequences, and define

empirical referents. Thus, to analyze the concept of ABL, a literature search was conducted for relevant articles about ABL in academic literature, and popular culture. CINAHL, Scopus, Psycinfo, Academic Search Premier, ERIC, and the grey literature were searched for articles containing the key-words: *art-based*, *arts*, *aesthetic*, *humanities*, *education*, *nursing*, *learning*, and *teaching*. No year limit was placed on searches, and reference lists were further reviewed to identify additional relevant articles. Articles from the initial search results were chosen purposively for their ability to provide context for the historical development of ABL and to inform the concept analysis. Articles from a wide variety of disciplines such as education, business, higher education, medicine, midwifery, and nursing, were purposively selected for their ability to provide breadth of insight into ABL across specialties. Within nursing, articles were chosen which facilitated an understanding of the use of ABL within nursing education. Nursing articles that addressed arts-based therapy or continuing education were not included in the analysis. The next step was to identify and consider all the various explicit and implicit uses of the concept (Walker & Avant, 2011).

Uses of the concept

Dictionary definitions

The three root words of ABL will be a starting point for understanding the concept. Arts is defined as “the various branches of creative activity, such as painting, music, literature and dance” (para. 1), and arts as the “subject of study primarily concerned with human activity and social life” (Oxford Dictionary, 2013, para. 1). These nuanced differences of the definition of *arts* were kept in mind as the literature was examined. The adjective, *based*, is defined to “situate at a specified place at the center of operations” (Oxford Dictionary, 2013, para. 1). Lastly, *learning* is defined as “the acquisition of knowledge or skill through study, experience, or being taught” (Oxford Dictionary, 2013, para. 1).

Review of the literature

Historical uses of the concept

The term ABL is not found in historical literature; however, the concept of using the arts as a means to learning

can be seen throughout history, with the earliest examples in prehistoric cave paintings (Siler, 2011). The Aztecs of Mexico also painted on walls and carved on stone providing an arts-based medium for others to learn of their history, ideology, and culture (Boone, 2009). Canadian Aboriginal peoples have utilized many forms of art, such as cultural dancing and songs, to facilitate learning about their culture, and to make meaning of life’s experiences (Irwin, Rogers, & Wan, 1999; Patteson, Restoule, Margolin, & Conely de Leon, 2010). Aristotle wrote that learning from the arts leads to the development of insight, acquisition of information, and understanding of universal truths (Allen, 2002). Leonardo Da Vinci was fascinated with the relationship of art and science, and used artistic drawings to illustrate his study of science and technology (Carrier, 2008; Veltman, 2008).

Development of the concept in education

The origins of ABL can be found early in the twentieth century. John Dewey (1934), an American philosopher, described art experience as an intensified ordinary experience that did not just belong to professional artists, but could also provide a foundation for meaningful learning within education. Over the past few decades, prominent educators have proposed that arts are integral to learning as a method to educate the senses and nurture the imagination (Bresler, 1995; Eisner, 1999; Gardner, 2006). In this regard, the arts reflect the integration of cognition and affect which fosters the learner’s ability to comprehend the world by encouraging multiple ways of viewing it (Bresler, 1995). This interest in arts integration occurred within the context of significant developments in the ways in which progressive educators viewed knowledge and learning. Challenging traditional assumptions that learning is an individual and linear process, constructivism is an educational theory which encompasses ideas related to learning as an active process of knowledge construction (Adams, 2006). Hence, certain educators began to see that the arts facilitated student-centered active learning, and could be taught in “an interdisciplinary manner as part of the broader curriculum and can make immense contributions to the teaching of other disciplines” (Bresler, 1995, p. 3).

Present uses of the concept

ABL is a term used to describe a pedagogical method, and is closely related to the concept of arts integration

in education. The term *arts integration* refers to the general idea of “arts instruction as a means of enriching the teaching of other subject matter” (Burnaford, Brown, Doherty, & McLaughlin, 2007, p. 5). Within Davis’ (1999) schema of eight roles of the arts in arts integration, the first role is *arts based*, and she writes “the arts are viewed here as the basis, means, and threshold for student learning ... through the lens of the arts, they learn other subjects” (p. 24). *Arts-based* is then compared to other roles such as *arts infused* in which “the arts are injected into the setting in order to enrich student learning” (Davis, 1999, p. 24). Thus, ABL is a concept which falls under the broad umbrella of arts integration, but is a teaching strategy in which there is significant learner engagement with the art form. Additionally, Patteson et al. (2010) offer one of the few explicit definitions and define *arts-based teaching and learning* as “that which uses student art-making as a means for promoting learning in non-arts subjects areas” (p. 4). Another author defines ABL as “a wide range of approaches ... using the arts as a pedagogical means to contribute to learning” (Nissley, 2010, p. 13).

As defined earlier, *the arts* can have a number of meanings, such as a broad category of study or specific creative art forms. However, when specifically using the term *ABL* in the literature, the following art forms are identified: quilting, murals, photography, poetry, sculpting, dancing, theatre, drama, drawing, mask making, music, narratives, literature, and film (Clover, 2006; Froggett, 2007; Hughes, 2009; Hughes, 2011; Kerr & Lloyd, 2008; Lawrence, 2008; MacDonnell & Macdonald, 2011; Patteson et al., 2010; Rooney, 2004). Burnaford et al. (2007) discuss four major art disciplines in arts integration: visual art, drama, dance, and music. The *arts* in ABL refer to a creative activity, as opposed to the broad study of human activity.

The literature includes two uses of the arts to facilitate learning in other subjects: the student observes another’s art or the student actively participates in the artistic process (Perry, Maffulli, Wilson, & Morrissey, 2011). Although both uses create valuable, experiential learning opportunities, a number of authors propose that active art-making activities are more effective at promoting student learning when integrating the arts into education (Bresler, 1995; Elster, 2001; Hermann, 2004; Jackson & Sullivan, 1999; Koithan, 1996; Patteson et al., 2010; Rooney, 2004; Smithrim & Uptis, 2005; Tunks & Mosely Grady, 2003). Within the context of medical education, however, the results of a literature review of the effectiveness of arts-based approaches indicated the

strongest empirical support was for learning experiences that use reflective observation of visual art to improve students’ diagnostic skills (Perry et al., 2011). Furthermore, many experts concur that consultation with an artist/art-teacher, in order to develop meaningful learning activities, is an integral step in effectively integrating the arts and another subject (Brett-MacLean, 2007; Burnaford et al., 2007; Cattarall & Waldorf, 1999; Inwood & Rose, 2012; Patteson et al., 2010; Smilan & Miraglia, 2009). Nevertheless, through teacher–artist collaboration and either active student participation in the artistic process or reflective observation of the art form, the arts become the basis for learning in this pedagogical method.

Diverse uses of ABL for learning

Although the exploration of ABL began in education, interest has expanded to a diverse array of authors ranging from business professionals to medical educators, to social justice advocates. ABL is a strategy that is effective for a plurality of learners as it addresses many different learning styles, thus facilitating access to knowledge for those who find it difficult to learn from traditional teaching approaches (Cantor, 2006; Catterall & Waldorf, 1999; Lawrence, 2008; Rooney, 2004). Within the business world, ABL is recognized for developing creative and innovative ways for viewing the world, and holistic ways of engaging with others which are vital to this industry (Nissley, 2010; Taylor & Ladkin, 2009). ABL has also been implemented as a learning strategy with Canadian Aboriginal learners. Patteson et al. (2010) propose that ABL is a holistic, integrated way of learning, and is congruent with Aboriginal culture which did not traditionally divide knowledge into categories. The Learning Through the Arts program, involving over 370,000 students in the last 10 years (Learning Through The Arts, 2012), is well established with elementary age Aboriginal students in Canada. Teachers purposefully integrate traditional art forms with other subjects to foster a sense of identity and cultural pride. An example of such an activity is Aboriginal students creating a dance about the seasons using traditional ceremonial shawls (Patteson et al., 2010).

ABL strategies have been used with education (Hughes, 2011), management (Kerr & Lloyd, 2008), midwifery (Walker, 2002; Walker, 2007), medical (Kidd & Conner, 2008), engineering (Osburn & Stock, 2005), business (Nissley, 2010), and nursing students (Hermann,

2004). In higher education, integration of the arts with other disciplinary areas enables learners to consider multiple perspectives, adapt skills across contexts, and derive meaning from the connections (Burnaford et al., 2007; Jackson & Sullivan, 1999). Examples of ABL across disciplines include: educating students who learn about the facets of leadership by sculpting leadership masks (Hughes, 2011); midwifery students who reflect on labor ward policies through poetry (Cronin & Parry, 2006); business students who learn leadership skills through producing a film (Nissley, 2010); management students who define their personal theory of management through sculpting with clay (Kerr & Lloyd, 2008); and medical students who gain professional communication skills through acting (de la Croix, Rose, Wildig, & Wilson, 2011). In medical education, ABL is discussed as one of the strategies used in teaching the medical humanities which are defined as “works of narrative, the visual arts, anthropology, history, and journalism that encourage reflection and critical thinking about the human body and mind” (Kidd & Connor, 2008, p. 47).

A related concept of the ABL is the use of the arts to create and share new knowledge. Arts-based research includes studies that incorporate the arts at any step in the research process (Parsons & Boydell, 2012). Arts-based knowledge translation is the specific use of art forms such as theatre, dance, poetry, and photography to disseminate research findings to audiences. This knowledge translation approach is increasingly being recognized as an innovative strategy which communicates research findings in a non-linear, interactive, and engaging format to varied audiences (Boydell, Gladstone, Volpe, Allemang & Stasiulus, 2012).

ABL: a concept for nursing

Many authors suggest that nursing education and the arts are well poised to integrate, since nursing is traditionally seen as an art and a science; complex and abstract concepts are well suited to the arts which are a means to understand multiple meanings; the arts promote the envisioning of the whole which is vital to the nursing practice; nursing requires knowledge generation that is sensitive to the human experience; and to give nurses a voice through expression in art (Carper, 1978; Casey, 2009; Chinn, Maeve, & Bostick, 1997; Darbyshire, 1994; Duffin, 2009; Jensen & Curtis, 2008; Kothian, 1996; Michael & Candela, 2006). ABL is a term rarely found in the nursing literature; however,

there are descriptions of arts-based teaching strategies that are comparable to the concept of ABL, although labeled differently. For example, Valiga and Bruderle (1997) wrote *Using the Arts and Humanities to Teach Nursing*, and provided many examples of learning activities utilizing the arts in nursing education. In the literature, the arts are discussed as arts integration into the curriculum, and as a vehicle to the aesthetic way of knowing. There are numerous terms used when discussing learning through the arts in nursing education, such as aesthetic teaching strategies (Pardue, 2004), integrating the humanities (Frei, Alarez & Alexander, 2010), teaching aesthetics (Hegedus & Kenefick, 2006), and arts infusion (Jensen & Curtis, 2008). Hegedus and Kenefick also propose that the use of arts in nursing education is congruent with the concept of aesthetic knowing developed in Carper's (1978) seminal work. The arts logically fit with the aesthetic way of knowing; however, Hunter (2008) alternatively writes about utilizing storytelling to teach all four patterns of knowing in an integrated manner. Although there are concerns with integrating the arts into nursing education, such as, the need to teach scientific concepts, time-consuming preparation, and students' focus on learning nursing skills (Casey, 2009; Duffin, 2009; Jensen & Curtis, 2008; Pavill, 2011), there is a growing body of nursing literature about this concept.

The nursing literature consists of both research articles investigating the use of the arts in nursing education, and descriptions of art-based approaches to teaching. Of the 25 nursing articles examined (see Table 1), nine include active student participation in the artistic process; nine include exposure to art as an observer to facilitate learning; and seven include both participation in the artistic process and exposure to an art form. Although there are numerous reported ABL innovations within nursing education, there is limited rigorous research or theoretical development about this innovative approach to learning.

In summary, ABL is a concept that was developed within the academic discipline of education; is closely related to the concept of arts integration; and has been adopted by various organizations and academic disciplines as an effective method of enhancing student learning (Burnaford et al., 2007). Within the nursing literature, ABL is largely associated with arts integration in the curriculum and aesthetics in nursing. As a concept in nursing, a clearer understanding of its meaning and conceptual boundaries would benefit the use of ABL in nursing education and research.

Table 1 ABL in nursing education.

Article	Terminology used	Exposure to the arts	Description and use
Casey (2009)	Arts-based Inquiry	RO* and AP**	Undergraduate arts-based workshop using the visual arts to understand human experiences and nursing identity.
Darbyshire (1994)	Understanding through arts and humanities	RO and AP	Development of a new course “Understanding Caring Through the Arts and Humanities” utilizing literary works, visual art and performing art.
Duffin (2009)	Did not specify	RO and AP	Reading and writing creative literature to facilitate reflection on the patient experience.
Ewing and Hayden-Miles (2011)	Narrative pedagogy	RO and AP	The use of various visual art forms in nursing education to develop aesthetic ways of knowing.
Frei et al. (2010)	Integrating the humanities	RO	An art-museum art observation experience to improve observational skills; and to increase empathy and communication skills
Hegedus and Kendrick (2006)	Teaching Aesthetics	AP	Undergraduate theory course with a creative assignment for gaining a deeper understanding of the human experience of health and illness.
Hunter (2008)	Storytelling	AP	Students composed a story about a women’s health issue in order to understand the art and science of nursing.
Inskeep and Lisko (2001)	Not specified	RO	Art-museum art observation experience to teach nursing diagnosis.
Jensen and Curtis (2008)	Arts infusion	RO	Use of the arts in a psychosocial nursing class to enhance student understanding of mental illness.
Khillion (2001)	Not specified	AP	Using photo-essays to increase the understanding of the cultural aspects of health.
MacDonnell and Macdonald (2011)	Arts-based critical inquiry	RO and AP	Use of guided imagery, images, narratives, and poetry to develop transformative insights in diversity education.
Michael and Candela (2006)	Aesthetic knowing	RO	Use of the visual arts, with clients to understand patient’s experience of illness.
Newcomb, Cagle, and Walker (2006)	Not specified	RO	Using literature to foster culture sensitivity.
Newton and Plummer (2009)	Not specified	AP	Using creative media and the student creation of an artistic expression to reflect on the process of becoming a nurse.
Özcan, Bilgin, and Eracar (2011)	Use of expressive methods	RO and AP	Using expressive arts (literature, painting, music, sculpture, drama, etc.) to increase the level of empathy.
Pardue (2004)	Aesthetic strategies	AP	Utilized reader’s theatre to increase the understanding of the human experience.
Pardue (2005)	Infusion of the humanities	RO	Teaching health assessment and observational skills through observation of the visual art in an art gallery.
Pavill (2011)	Integrating the fine arts	AP	Reflection on practice through the creation of an expressive assignment using various art forms.
Pellico, Friedlaender, and Fennie (2009)	Did not specify	AO	Using visual art at an art museum to increase observational skills.
Ragland (2006)	Learning through poetry	AO	Understanding the human experience of aging and death through reading poetry.
Robinson (2007)	Did not specify	RO and AP	Integration of the arts into a third year nursing course to enable nursing students to look beyond illness and physical care.
Walsh, Chang, Schmidt, and Yoepp (2005)	Creative arts intervention	AP	Using a creative expression of various art forms to lower stress in a research class, and to also learn the research process.
Webster (2010)	Creative teaching strategy	AP	Reflective journals and creative activities were utilized to reflect on a clinical experience.
Wikstrom (2000)	Visual art program	RO	Using a visual art program to improve subjective and objective observational skills.
Wright (2006)	Did not specify	AP	Student’s poetry writing about a clinical experience to promote learning within the affective domain.

Notes: *RO: Reflective observation **AP: Active participation.

Defining attributes of arts-based learning

The defining attributes of a concept are the ones that are most frequently associated with the concept being analyzed, provide the best insight, and differentiate it from similar or related concepts (Walker & Avant, 2011). Although, it is recognized that *teaching* and *learning* are wed within the concept, ABL is largely discussed as a teaching strategy. For this analysis, *learning* is viewed as a consequence of ABL and the different kinds of anticipated learning will be identified and discussed with consequences of the concept. The critical attributes of ABL are: a time and setting in which the active learning experience occurs; learning is designed to occur through the use of one or more art form(s) integrated with a subject matter from another academic discipline; and active learner participation in the artistic process and/or reflective observation of an art form.

The first attribute situates ABL within learner-centered teaching activities, which emphasize students' potential to construct knowledge within any given learning experience. The remaining attributes regarding the inclusion of active participation in the artistic process and/or reflective observation of an art form, and the integration of the art learning experience with another subject, distinguish ABL within arts integration in education. Within ABL, the role of the arts is specified as active engagement with the arts to produce learning. Furthermore, we chose the label *reflective observation* to incorporate the importance of critical thinking as part of art observation, and to be consistent with the engagement aspect of the concept. Literature-based descriptions of observational learning experiences often include discussions of the simultaneous inclusion of reflective thinking as part of observing the art form even though "reflection" is not explicitly labeled. ABL, through either active participation or reflective observation, is reminiscent of the adaptive modes in Kolb's Experiential Learning Theory (1984). Kolb proposes that both active participation and reflective observation are important for student engagement and effective learning.

Arts-based learning case presentations

Model case

To further illustrate the attributes of ABL, a model case is described. It is a created yet realistic scenario, encompassing all the defining attributes of ABL (Walker & Avant, 2011).

Vicki is a nursing student in the second year of an undergraduate-nursing program, enrolled in a course entitled, *Professional Communication Skills*. One class has been developed by her professor in collaboration with an artist from the Theatre for Young People, and integrates learning theatre skills with learning professional communication skills. In the class, the professor facilitated learning about communication skills by engaging the students in short theatre exercises with reflective discussions afterwards. When talking with her colleagues after the class, Vicki shared that she realized how body posture could affect the professional communications skills of a health care professional, as she experienced the emotions of intimidation during one of the theatre exercises in which she played the role of a patient.

In this case, all the attributes of ABL are present: a scheduled time and place for the ABL in which an active learning experience was facilitated by the course professor; the art form, theatre, was integrated with another subject, professional communication skills; and the students took part in the creative process.

Borderline case

The following is a borderline case which contains some, but not all the defining attributes of the concept being analyzed (Walker & Avant, 2011).

Adam is an undergraduate nursing student who is required to take several elective courses. He has chosen a course in the Faculty of Arts, *Visual Arts in the Twentieth Century*. In one class, the professor facilitated learning about watercolors by having students experiment with painting. This was followed by a discussion of the methods and challenges of this art form.

In this scenario, facilitated active learning occurs at a specific time and place, an art form is utilized to facilitate learning, and Adam experiences direct participation with the artistic process. However, the art form was not integrated with a topic from another academic discipline, with the result that Adam learned about art and not another subject through the arts. Although this activity resulted in effective learning using the arts, it did not contain all the defining attributes of ABL.

Related case

A related case is one which illustrates a related concept. Some attributes of the focal concept are present, however, when all the attributes are considered they are more consistent with a related concept (Walker & Avant, 2011).

In teaching maternal-child health, the professor uses photographs and illustrations as visual examples of concepts she is

discussing. Her PowerPoint slides are colorful and cartoon images are used to capture student attention.

This case is more consistent with the concept of arts-infused education. The educator is using various images to enhance student learning, and to make her oral presentation interesting. One could argue that the use of the images or art form is designed to enhance student learning of maternal-child health concepts. However, absent from this case is active student involvement in creating the art form or reflective observation of the art, a necessary attribute of ABL.

Contrary case

Lastly, a contrary case is a clear example of what the concept is not (Walker & Avant, 2011).

Lee is a student in the third year nursing class, *Adult Health*. Today's class is about fluid and electrolyte balance in the surgical client. She brought her PowerPoint student notes to class and took notes as the professor lectured for three hours on this topic.

This case contains none of the attributes of ABL: although it took place at a certain time it was not an active learning experience, an art form was not present in the learning, and the student did not engage in the artistic process or reflectively observe an art-form.

Antecedents and consequences

Walker and Avant (2011) define antecedents as “those events or incidents that must occur or be in place prior to the occurrence of the concept” (p. 167). For ABL to occur, the learner must be willing to engage in this type of active learning, which occurs in a learning environment that is not highly prescribed (Catterall & Waldorf, 1999; Casey, 2009; Clover, 2006; Darbyshire, 1994; Manning, Verenikina, & Brown, 2010). Adopting this attitude becomes significant since more responsibility rests with the students in the ABL process. The teacher must also be willing to tolerate a level of uncertainty, enabling the change of teaching style from being an information transmitter to a facilitator of an integrated learning process (Casey, 2009; Catterall & Waldorf, 1999; Darbyshire, 1994; Elster, 2001). Another antecedent is careful attention to integration between the disciplines; consequently, many authors argue that consultation with an artist/art-teacher is important when preparing art-based activities (Bresler, 1995; Catterall & Waldorf, 1999; Elster, 2001; Smilan & Miraglia, 2009). Consultation with an artist may also include formal instruction in art analysis, such as when nursing students visited an art gallery to increase

observational skills (Pellico et al., 2009). Lastly, the learner and teacher must be open to the belief that all individuals are creative to some extent, and have the ability to participate in the artistic process (Pavill, 2011).

Consequences are defined as “those events or incidents that occur as a result of the occurrence of the concept” (Walker & Avant, 2011, p. 167). One of the most important consequences of ABL is an increased engagement in learning and the subject matter, which increases student motivation (Elster, 2001; Hermann, 2004; Jensen & Curtis, 2008; Manning et al., 2010; Rooney, 2004; Smithrim & Uptis, 2005). ABL also enables learners to see concepts or problems in a different, holistic, deeper way. Learning about the subject matter is accomplished through enhancing critical thinking, inviting multiple ways of viewing a topic, and encouraging imagination (Burnaford et al., 2007; Darbyshire, 1994; Elster, 2001; Inskeep & Lisko, 2001; Jackson & Sullivan, 1999; Pardue, 2004; Steidl, Tishman, Winner, Hetland, & Palmer, 2009; Smith, 2004). Another consequence of ABL is an increased awareness of self and/or others which is linked to increased empathy (Elster, 2001; Gupta & Singh, 2011; Hermann, 2004; Jackson & Sullivan, 1999; Jensen & Curtis, 2008; Killion, 2001; Pardue, 2004; Perry et al., 2011). Improved self-awareness and capacity for empathy are proposed to enhance one's ability to work with others. ABL also results in the learner's expression of thoughts, ideas, and/or experiences in new, creative, and artistic ways (Cantor, 2006; Darbyshire, 1994; Davis, 1999; Elster, 2001; Gupta & Singh, 2011; Jackson & Sullivan, 1999; Manning et al., 2010; Rooney, 2004). Additionally, many authors propose that the learners' self-confidence increases, due to the use of multiple ways of learning in ABL (Davis, 1999; Elster, 2001; Gardner, 2006; Gupta & Singh, 2011; Manning et al., 2010). ABL activities can simultaneously impact multiple learning domains. For example, enhancing self-awareness, improving observational skills, and understanding other perspectives of a phenomenon can result from one ABL experience. Lastly, an outcome of ABL is the development of a community of learners, as students share experiences and creative works together (Catterall & Waldorf, 1999; Clover, 2006; Jackson & Sullivan, 1999; Manning et al., 2010; Pardue, 2004; Smith et al., 2004).

Empirical referents and future research

The final step in a concept analysis is identifying empirical referents (Walker & Avant, 2011). Although no tools were found that measured ABL, analysis of the concept

facilitates both the creation of research instruments and future research (Walker & Avant, 2011). Numerous research approaches could be used independently or in combination to investigate ABL; such as a survey questionnaire developed from the critical attributes, antecedents, and consequences; a qualitative research study regarding the student and/or teacher experience of ABL; a quantitative pre-test post-test investigation regarding an increase or change in the learner's knowledge and/or skills, and a theory-generating research concerning the process of ABL. Rigorous study of ABL is necessary to understand the process of learning which occurs, to investigate if this concept is an effective teaching strategy for present curriculum needs, and to further the development of this unique approach to learning within nursing education.

Conclusion

ABL has the potential to be an innovative learning strategy for educating nurses to practice in today's

challenging health care environment. This concept analysis explored a broad literature, focusing on literature in education, and health care disciplines, generally, and nursing, in particular, in order to identify relevant attributes that define ABL for nursing education. Attributes are defined at a level of abstraction that permits use in education and research to support knowledge development. Rationale for attribute selection and explanation of each case construction were provided to support the analysis. Antecedents and consequences were extracted from the literature to further situate understanding of the concept. Interest in ABL as a pedagogical method in nursing is supported in the literature. Furthermore, the understanding of ABL proposed in this analysis can facilitate investigation regarding the phenomenon, including the effectiveness of this pedagogical method.

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Chapter 3: Arts-based Pedagogy with Undergraduate Nursing Students:

A Comprehensive Systematic Review Protocol

Prelude

Chapters 3 and 4 contain the JBI systematic review protocol and report. A JBI systematic review was conducted to synthesize the best available qualitative and quantitative evidence on the experiences and effectiveness of ABP for undergraduate nursing students. The specific review questions were: “Is arts-based pedagogy more effective than non-arts based pedagogy for enhancing learning outcomes in undergraduate nursing students?” and “What are nursing students' experiences of arts-based pedagogy in undergraduate nursing education?” The findings of this JBI systematic review advance understandings of the unique ways in which the arts foster learning and of the impacts of ABP in nursing education. In the thesis conclusion, these review findings will be integrated with the findings from the concept analysis (theoretical inquiry) and the CGT research study (theory-building research) to develop a deeper understanding of ABP.

The review was conducted in parallel with the primary research study; however, the final synthesis was not conducted until after the preliminary GT was developed and discussed with the student's research supervisor. Thus, the review produced in-depth knowledge of the research literature on ABP, which supported the need for theoretical development about ABP as no GT studies were found. However, it did not exert an undue influence on the development of the categories of the GT, as the student engaged in reflexivity throughout the research process and the systematic review synthesis was not conducted until after the emergence of the conceptual categories for the primary CGT research study.

Chapter 3 contains the JBI systematic review report entitled, “The Effectiveness and Experience of Arts-Based Pedagogy Among Undergraduate Nursing Students: A Comprehensive

Systematic Review Protocol”, and Chapter 4 contains the review report entitled, “The Effectiveness and Experience of Arts-Based Pedagogy Among Undergraduate Nursing Students: A Mixed Methods Systematic Review”. The change in terminology from ‘comprehensive review’ to ‘mixed-methods review’ was a result of the change in terminology used by JBI over the timeframe of the review. This prelude introduces both manuscripts (Chapters 3 and 4), and the executive summary in Chapter 4 functions as an abstract for this systematic review work. The review team consisted of the student; her advisor and committee members; and the nursing liaison librarian. The student led the review team with supervision from her advisor. The student wrote the review protocol draft and revised it after receiving critical feedback from the review team; conducted the literature review with the assistance of the librarian; screened, reviewed, and appraised articles with her advisor and committee members; conducted the meta-synthesis with her advisor; conducted the quantitative narrative synthesis with a committee member; refined the meta-synthesis and quantitative narrative synthesis with her advisor and committee members; and wrote the review report draft and revised it after critical feedback from the review team. The review protocol and report are published in *The Joanna Briggs Institute Database of Systematic Reviews and Implementation Reports* and are used with permission from the publisher granted on March 21, 2016 and August 25, 2016. Regarding the systematic review report, the version that was submitted to and accepted by JBI is included in this thesis. The JBI formatting and referencing approaches were retained for both manuscripts in order to enable the same clarity of presentation that is found in the published articles. The citations are as follows:

Rieger, K. L., Chernomas, W. M., McMillan, D. E., Morin, F., & Demczuk, L. (2015). The effectiveness and experience of arts-based pedagogy among undergraduate nursing students: A comprehensive systematic review protocol. *The Joanna Briggs Institute Database of Systematic Reviews and Implementation Reports*, 13(2), 101-124.

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The effectiveness and experience of arts-based pedagogy among undergraduate nursing students: a comprehensive systematic review protocol

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Review question/objective

The objective of this review is to synthesize the best available evidence on the effectiveness and experiences of arts-based pedagogy for nursing students in undergraduate nursing education.

The specific review questions are:

Is arts-based pedagogy more effective than non-arts based pedagogy for enhancing competencies and learning behaviors in undergraduate nursing students?

What are nursing students' experiences of arts-based pedagogy in undergraduate nursing education?

Background

Well-educated nurses are key to the health of populations, and teaching strategies are needed which prepare nurses to be critical thinkers, creative problem solvers and effective communicators.^{1,2} Educators are tasked with developing approaches to effectively teach critical content for nursing, however, some argue that the traditional lecture is inadequate to teach many of these complex concepts.^{3,4} There is a call for a change towards student-centered and concept-based curricula in order to prepare future nurses to be critical and creative thinkers who are capable of meeting the present healthcare demands.^{1,2,5}

Teaching strategies which emphasize learning processes, focus on students, and incorporate active learning are needed. In recent years, there has also been a growing interest in broadening pedagogical practices in order to develop nurses who embrace both the art and science of nursing.^{6,7} While scientific knowledge is important to inform effective nursing practice, the interpersonal and caring aspects of the nurse-client relationship also require knowledge about the human aspects of health and illness to guide practice.^{8,9} Thus, some educators have forged an alliance between the arts and essential nursing subjects in order to both address current curriculum needs,^{2,5,10} and develop learner competencies essential to excellent healthcare.²

A number of key organizations including the World Health Organization, the National League for Nursing, and the Lancet Commission, are recommending health care education reform,^{1,11-14} and some scholars view the arts as having pedagogical potential to promote humanistic healthcare.^{1,10} Although the founder of modern nursing, Florence Nightingale, viewed nursing as a holistic endeavor,¹⁵ positivism as the predominant philosophy of science in the twentieth century, and the focus on technology in healthcare, has eroded the value placed on the art of nursing.¹⁵⁻¹⁸ However, some nursing scholars posit that nursing education cannot just rely on the sciences, but that pluralistic pedagogical approaches are needed which also draw from the arts and humanities to develop well-rounded professionals who are sensitive to the human experiences of health and illness.^{6,8,19} The arts can develop certain habits of the mind that are vital to healthcare,^{20,21} and can be a source of illumination for nursing students.¹⁹ A clinical textbook can provide information about signs and symptoms, but an artistic piece can embody how the symptoms feel to the patient and express difficult emotions.¹⁸ Hence, a well-rounded education is essential for nursing practice which frequently demands practitioners to navigate emotionally and ethically complex clinical situations for which there are no straightforward textbook answers.⁸ This perspective is congruent with Carper's seminal work,²² in which she presented four diverse, yet integrated, ways of knowing that form the epistemological basis of the nursing profession: empirics, ethics, aesthetics and personal.^{16,17,23} Carper's ways of knowing have evolved over time, and nursing scholars have proposed additional ways of knowing such as unknowing,²⁴ emancipatory,²⁵ and socio-political knowing.²⁶ Arts-based pedagogy (ABP) also holds significant potential to address these expanded conceptualizations of Carper's original work.

Arts-based pedagogy (ABP) is a teaching methodology in which an art form is integrated with another subject matter in order to impact student learning.²⁷⁻²⁹ ABP results in arts-based learning (ABL),¹⁰ which is when a student learns about a subject through either creating original art, responding to other's art, or performing art. Using ABP in nursing education encompasses an arts integration approach,³⁰⁻³² in contrast to teaching art as a distinct subject, as students learn about nursing subjects through either creating art or responding to another's art.¹⁰ Arts-integration is defined as "an approach to teaching in which students construct and demonstrate understanding through an art form. Students engage in a creative process which connects an art form and another subject area..."^{33(p.1)}

Learning in, with and through the arts, is a widely accepted pedagogical strategy in the discipline of education,^{31,32} and there are several educational theoretical perspectives which provide support for this approach. The underlying philosophy for ABP can be found in the writings of John Dewey,^{34,35} an American philosopher, who posited that education should focus on individual growth, the social aspects of learning and active learning experiences.^{34,36} He also argued that school subjects should not be taught in isolation and that the arts should be integrated into the common experience.^{35,37,38} More recently constructivist theory has provided a theoretical basis for ABP.³⁹ Constructivist educators assert that

meaning is constructed through engagement with the world, experiential learning activities, and social interactions.^{21,40} If knowledge is viewed as socially constructed, then inventive ways to engage students, enhance participation, promote dialogue, and facilitate reflection are valued,^{41,42} and ABP addresses these constructivist learning objectives. Further, Gardner's Theory of Multiple Intelligences⁴³ is widely used to support ABP.²¹ According to this perspective, there are numerous intelligences which humans use to learn, but in academia there is a focus on the verbal and logical forms. Through the use of artistic mediums, additional aspects of intelligence are engaged as the arts use diverse ways of communicating.²¹ Moreover, Davis posits that there are five unique features of the arts,^{44,45} and ten specific learning outcomes which occur because of these unique features that make the arts powerful pedagogically. These features include that the arts produce a tangible product resulting in imagination and agency, focus on emotion resulting in expression and empathy, privilege ambiguity resulting in interpretation and respect, embrace a process orientation resulting in inquiry and reflection and facilitate connection resulting in engagement and responsibility.^{44,45} Many of these outcomes are also important in nursing education.

Indeed, there are numerous reported outcomes of ABP in nursing education. Several nursing educators have published their ABP initiatives and discussed notable impacts on students' learning and learners' behavior towards learning.^{2,8,10,46-56} Furthermore, researchers have found that integrating the arts into nursing education engaged learners,⁴⁷ developed new ways of thinking,^{19,47,57} increased self-awareness,^{47,57} integrated thinking and feeling,^{57,58} fostered student empathy,^{47,52} enhanced cultural awareness,^{47,50} fostered transformational learning,^{57,59} and increased observational skills.⁵³ In nursing education, the arts have been integrated with a broad array of nursing topics. One nursing educator developed an assignment in which undergraduate students created an artistic expression about a clinical experience with a client.² This educator reports that the assignment fostered students' awareness of the humanistic aspects of nursing care and developed students' empathy for both clients and classmates. Other educators infused a psychosocial nursing course with art, literature, music, and film, in order to enhance nursing students' learning about mental illness.⁴⁷ A qualitative investigation of the students' experiences revealed that integrating the arts into the course increased students' understanding and engagement, and fostered empathy, self-understanding, and cultural awareness. Thus, nursing educators assert that the arts can facilitate reflection, engage today's multi-literate healthcare students and promote meaningful student learning in nursing education.

Scholars also report on their experiences of resistance to arts integration in nursing education.^{1,2,19,47} They write about how some are dismayed by this seemingly unlikely amalgamation of disparate disciplines and question the impact of ABP on nursing students' learning.⁹ There are several reported reasons for this hesitancy to embrace ABP, such as: the explosion of scientific knowledge and the pressure to incorporate this type of knowledge into the curriculum,^{2,8,60} the dominance of the scientific model within nursing education,⁹ the need to prepare students for registration exams,² lack of educational preparation to teach with the arts,² nursing students' focus on learning nursing skills,^{8,61} and lack of student interest.⁴⁷

Thus, it is imperative to consider both the student experiences of ABP and the effectiveness of ABP with undergraduate nursing students in order to inform this discourse. There is an emerging body of research about ABP in nursing education, however, this work represents a diverse group of primary studies which have not been systematically examined. In order to confirm that no other systematic reviews have been published about ABP or ABL in nursing education, a preliminary literature search was conducted. The following electronic databases were searched and no current or planned review was found about this

topic: Joanna Briggs Library of Systematic Reviews and Implementation Reports, Cochrane Database of Systematic Reviews, PROSPERO International Register of Systematic Reviews, CINAHL, ERIC, PubMed and Scopus. The grey literature was also searched, however no systematic review about ABP or ABL in nursing education was found in the grey literature. This lack of scholarly work is consistent with the general lack of robust research for nursing education,⁶²⁻⁶⁴ despite the fact that evidence is needed to inform nursing education practice and current curriculum reform.^{63,65,66} This proposed systematic review could provide a comprehensive review of the current research evidence about the experiences and effectiveness of ABP in order to facilitate evidence-informed teaching practice, support curriculum reform and inform future research. The purpose of this comprehensive systematic review is to synthesize the best available evidence on the effectiveness and experiences of arts-based pedagogy for undergraduate nursing students in nursing education.

Inclusion criteria

Types of participants

The quantitative component of this review will consider studies that include undergraduate nursing students who are in education programs leading to registered nursing or registered psychiatric nursing, regardless of their year of study in the nursing program.

The qualitative component of this review will consider studies that include undergraduate nursing students who are in education programs leading to registered nursing or registered psychiatric nursing, regardless of their year of study in the nursing program.

The textual component of this review will consider publications that report an educator's or expert's opinion regarding the impact (including experiences) of ABP with undergraduate nursing students who are in education programs leading to registered nursing or registered psychiatric nursing.

Types of intervention(s)/phenomena of interest

The quantitative component of the review will consider studies that evaluate arts-based pedagogy in undergraduate nursing education.

The qualitative component of this review will consider studies that investigate undergraduate nursing students' experiences of arts-based pedagogy.

The textual component of this review will consider publications that describe the impact (including experiences) of arts-based pedagogy with undergraduate nursing students.

Arts-based pedagogy will be defined as a teaching methodology in which an art form is integrated with another subject matter in order to impact student learning.²⁷⁻²⁹ Therefore, undergraduate nursing students must engage in artistic processes in which they actively participate by either responding to works of art, creating works of art, and/or performing artistic works, and this process must connect a nursing subject with the art form. The “arts” will refer to activities in the creative arts as opposed to the broad study of human activity. The arts activities may include, but will not be limited to, art forms such as murals, poetry, sculpture, dance, theatre, drama, drawings, masks, music, stories, quilts and film. The nursing subject, which is integrated with the art form, will not be specified or limited in this exploratory review.

Types of outcomes

This review will look at the impact of ABP on competencies and learning behaviors in undergraduate nursing students. Competencies are defined as the “ability to meet complex demands, by drawing on and mobilising psychosocial resources (including skills and attitudes) in a particular context”,^{67(p.4)} and involve a “mobilisation of cognitive and practical skills, creative abilities and other psychosocial resources such as attitudes, motivation and values”.^{67(p.5)} Within professional nursing, it is acknowledged that competencies are “the integrated knowledge, skills, abilities, and judgment required to practice nursing safely and ethically”.^{68(p14)} Furthermore, learning behaviors are academic enablers that make learning possible,⁶⁹ such as student participation, concentration, engagement, focus and listening.

These outcomes (competencies and learning behaviors) could also be conceptualized as representing various domains of learning. Educational theorists posit that learning can be viewed as having three broad domains: cognitive, affective and psychomotor.⁷⁰⁻⁷⁵ The cognitive domain encapsulates the development of knowledge and understanding,^{70,71,73-75} and could include outcomes such as improvement in knowledge about a particular subject. The affective domain encompasses the learners’ emotions, attitudes, motivations, and values,^{72,74,75} and could include outcomes such as empathy and engagement with learning. The psychomotor domain represents the development of physical and motor skills,⁷⁴⁻⁷⁶ and could include outcomes such as the development of clinical and assessment skills. ABP may impact nursing students’ in a number of learning domains,⁷⁰ and might facilitate the development of one domain more so than others.

Thus, the quantitative portion of this review will consider studies that include outcomes which may include, but will not be limited to, the impact of arts-based pedagogy on students’ competencies and learning behaviors in the following areas:

- alteration in level of empathy
- improvement in observational skills
- students’ engagement with the learning experience
- increased motivation to learn
- decreased anxiety
- satisfaction or evaluation ratings of their learning experience
- altered attitude towards nursing care/practice
- demonstrated improvement in knowledge of the subject matter

As this project is an exploratory review, a better understanding of the outcomes to be measured will come with a more extensive review of the literature.

Types of studies

The quantitative component of the review will consider both experimental and epidemiological study designs including randomized controlled trials, non-randomized controlled trials, quasi-experimental, before and after studies, prospective and retrospective cohort studies, case control studies and analytical

cross sectional studies for inclusion.

The quantitative component of the review will also consider descriptive epidemiological study designs including case series, individual case reports and descriptive cross sectional studies for inclusion.

The qualitative component of the review will consider studies that focus on qualitative data including, but not limited to, designs such as phenomenology, grounded theory, ethnography, action research and feminist research.

In the absence of research studies, other text such as opinion papers and reports will be considered. If the literature search retrieves textual papers, they will be shifted over to the textual component of the review.

The textual component of the review will consider expert opinion, discussion papers, position papers and other text.

Search strategy

The search strategy aims to find both published and unpublished studies. A three-step search strategy will be utilized in this review. An initial limited search of CINAHL, MEDLINE, and the Arts and Humanities Citation Index will be undertaken followed by analysis of the text words contained in the title and abstract, and of the index terms used to describe article.

A second search using all identified keywords and index terms will then be undertaken across all included databases.

Thirdly, the reference list of all identified reports and articles will be searched for additional studies. Studies published from 1994 to March 2014 will be considered for inclusion in this review. This date was selected as a number of early studies about this topic were noted within this timeframe. The review will only include studies published in English. However, in order to provide the broader picture of all available literature on this topic and notable international trends, we will tally (but not translate) the non-English literature.

The databases to be searched include:

CINAHL

MEDLINE

ERIC

PsycINFO

Academic Search Complete

Arts and Humanities Citation Index

Art Full Text

Scopus

Proquest Dissertations and Theses: A&I

The search for unpublished studies will include:

Conference proceedings, dissertations, relevant websites and grey literature.

Initial search terms to be used will be:

Terms related to the arts, including: art, arts, arts-based, visual art, creative arts

Terms related to teaching and learning, including: pedagogy, education, learning, instruction, teaching, inquiry, curriculum, course

Terms related to undergraduate nursing students, including: nursing students, undergraduate nursing, baccalaureate nurses.

These terms will be searched in all listed databases.

Assessment of methodological quality

Quantitative papers selected for retrieval will be assessed by two independent reviewers for methodological validity prior to inclusion in the review using standardized critical appraisal instruments from the Joanna Briggs Institute Meta-Analysis of Statistics Assessment and Review Instrument (JBI-MASARI) (Appendix I). Any disagreements that arise between the reviewers will be resolved through discussion or with a third reviewer.

Qualitative papers selected for retrieval will be assessed by two independent reviewers for methodological validity prior to inclusion in the review using standardized critical appraisal instruments from the Joanna Briggs Institute Qualitative Assessment and Review Instrument (JBI-QARI) (Appendix I). Any disagreements that arise between the reviewers will be resolved through discussion or with a third reviewer.

Textual papers selected for retrieval will be assessed by two independent reviewers for authenticity prior to inclusion in the review using standardized critical appraisal instruments from the Joanna Briggs Institute Narrative, Opinion and Text Assessment and Review Instrument (JBI-NOTARI) (Appendix I). Any disagreements that arise between the reviewers will be resolved through discussion or with a third reviewer.

Data collection

Quantitative data will be extracted from papers included in the review using the standardized data extraction tool from JBI-MASARI (Appendix II). The data extracted will include specific details about the interventions, populations, study methods and outcomes of significance to the review question and specific objectives.

Qualitative data will be extracted from papers included in the review using the standardized data extraction tool from JBI-QARI (Appendix II). The data extracted will include specific details about the interventions, populations, study methods and outcomes of significance to the review question and specific objectives.

Textual data will be extracted from papers included in the review using the standardized data extraction tool from JBI-NOTARI (Appendix II). The data extracted will include specific details about the

interventions, populations, study methods and outcomes of significance to the review question and specific objectives.

Data synthesis

Quantitative papers will, where possible, be pooled in statistical meta-analysis using JBI-MAStARI. All results will be subject to double data entry. Effect sizes expressed as odds ratio (for categorical data) and weighted mean differences (for continuous data) and their 95% confidence intervals will be calculated for analysis. Heterogeneity will be assessed statistically using the standard Chi-square and also explored using subgroup analyses based on the different quantitative study designs included in this review. Where statistical pooling is not possible the findings will be presented in narrative form including tables and figures to aid in data presentation where appropriate.

Qualitative research findings will, where possible, be pooled using JBI-QARI. This will involve the aggregation or synthesis of findings to generate a set of statements that represent that aggregation, through assembling the findings (Level 1 findings) rated according to their quality and categorizing these findings on the basis of similarity in meaning (Level 2 findings). These categories are then subjected to a meta-synthesis in order to produce a single comprehensive set of synthesized findings (Level 3 findings) that can be used as a basis for evidence-based practice. Where textual pooling is not possible the findings will be presented in narrative form.

Textual papers will, where possible, be pooled using JBI-NOTARI. This will involve the aggregation or synthesis of conclusions to generate a set of statements that represent that aggregation, through assembling and categorizing these conclusions on the basis of similarity in meaning. These categories are then subjected to a meta-synthesis in order to produce a single comprehensive set of synthesized findings that can be used as a basis for evidence-based practice. Where textual pooling is not possible the conclusions will be presented in narrative form.

In the discussion section of the planned review, the results from the quantitative, qualitative, and textual analysis will be examined together in a narrative format.

Conflicts of interest

There are no conflicts of interest to declare.

Acknowledgements

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Appendix I: Appraisal instruments

MAStARI appraisal instrument

JBI Critical Appraisal Checklist for Randomised Control / Pseudo-randomised Trial

Reviewer _____ Date _____

Author _____ Year _____ Record Number _____

	Yes	No	Unclear	Not Applicable
1. Was the assignment to treatment groups truly random?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were participants blinded to treatment allocation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was allocation to treatment groups concealed from the allocator?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were the outcomes of people who withdrew described and included in the analysis?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were those assessing outcomes blind to the treatment allocation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Were the control and treatment groups comparable at entry?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were groups treated identically other than for the named interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were outcomes measured in the same way for all groups?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Were outcomes measured in a reliable way?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Was appropriate statistical analysis used?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall appraisal: Include ☐ Exclude ☐ Seek further info. ☐

Comments (including reason for exclusion)

JBI Critical Appraisal Checklist for Descriptive / Case Series

Reviewer Date

Author Year Record Number

	Yes	No	Unclear	Not Applicable
1. Was study based on a random or pseudo-random sample?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were the criteria for inclusion in the sample clearly defined?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Were confounding factors identified and strategies to deal with them stated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were outcomes assessed using objective criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. If comparisons are being made, was there sufficient descriptions of the groups?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Was follow up carried out over a sufficient time period?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were the outcomes of people who withdrew described and included in the analysis?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were outcomes measured in a reliable way?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Was appropriate statistical analysis used?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall appraisal: Include ☐ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

JBI Critical Appraisal Checklist for Comparable Cohort/ Case Control

Reviewer _____ Date _____

Author _____ Year _____ Record Number _____

	Yes	No	Unclear	Not Applicable
1. Is sample representative of patients in the population as a whole?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are the patients at a similar point in the course of their condition/illness?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Has bias been minimised in relation to selection of cases and of controls?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are confounding factors identified and strategies to deal with them stated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are outcomes assessed using objective criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Was follow up carried out over a sufficient time period?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were the outcomes of people who withdrew described and included in the analysis?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were outcomes measured in a reliable way?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Was appropriate statistical analysis used?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall appraisal: Include ☐ Exclude ☐ Seek further info. ☐

Comments (Including reason for exclusion)

QARI appraisal instrument

**JBI QARI Critical Appraisal Checklist for Interpretive
& Critical Research**

Reviewer Date

Author Year Record Number

	Yes	No	Unclear	Not Applicable
1. Is there congruity between the stated philosophical perspective and the research methodology?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is there congruity between the research methodology and the research question or objectives?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is there congruity between the research methodology and the methods used to collect data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is there congruity between the research methodology and the representation and analysis of data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is there congruity between the research methodology and the interpretation of results?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is there a statement locating the researcher culturally or theoretically?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Is the influence of the researcher on the research, and vice-versa, addressed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are participants, and their voices, adequately represented?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall appraisal: ☐ Include ☐ Exclude ☐ Seek further info. ☐

Comments (Including reason for exclusion)

NOTARI appraisal instrument

**JBI Critical Appraisal Checklist for Narrative,
Expert opinion & text**

Reviewer Date

Author Year Record Number

	Yes	No	Unclear	Not Applicable
1. Is the source of the opinion clearly identified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Does the source of the opinion have standing in the field of expertise?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are the interests of patients/clients the central focus of the opinion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is the opinion's basis in logic/ experience clearly argued?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is the argument developed analytical?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is there reference to the extant literature/evidence and any incongruency with it logically defended?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Is the opinion supported by peers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall appraisal: Include ☐ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

Appendix II: Data extraction instruments

AStARI data extraction instrument

JBI Data Extraction Form for Experimental / Observational Studies

Reviewer Date

Author Year

Journal Record Number

Study Method

RCT ☐ Quasi-RCT ☐ Longitudinal ☐

Retrospective ☐ Observational ☐ Other ☐

Participants

Setting

Population

Sample size

Group A _____ Group B _____

Interventions

Intervention A

Intervention B

Authors Conclusions:

Reviewers Conclusions:

Study results**Dichotomous data**

Outcome	Intervention () number / total number	Intervention () number / total number

Continuous data

Outcome	Intervention () number / total number	Intervention () number / total number

QARI data extraction instrument

**JBI QARI Data Extraction Form for Interpretive
& Critical Research**

Reviewer Date

Author Year

Journal Record Number

Study Description

Methodology

Method

Phenomena of interest

Setting

Geographical

Cultural

Participants

Data analysis

Authors Conclusions

Comments

Complete

Yes ☐No ☐

Findings	Illustration from Publication (page number)	Evidence		
		Unequivocal	Credible	Unsupported

Extraction of findings complete Yes ☐ No ☐

NOTARI data extraction instrument

JBI Data Extraction for Narrative, Expert opinion & text

Reviewer Date

Author Year Record Number

Study Description

Type of Text:

Those Represented:

Stated Allegiance/ Position:

Setting

Geographical

Cultural

Logic of Argument

Data analysis

Authors Conclusions

Reviewers Comments

Data Extraction Complete

Yes ☐No ☐

Conclusions	Illustration from Publication (page number)	Evidence		
		Unequivocal	Credible	Unsupported

Include

Yes ☐

No ☐

The effectiveness and experience of arts-based pedagogy among undergraduate nursing students: A mixed methods systematic review

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Executive summary

Background

In order to develop well-rounded professional nurses, educators need diverse pedagogical approaches. There is growing interest in arts-based pedagogy as the arts can facilitate reflection, create meaning, and engage healthcare students. However, the emerging body of research about arts-based pedagogy needs to be systematically examined.

Objectives

To synthesize the best available evidence on the effectiveness of arts-based pedagogy in enhancing competencies and learning behaviours in undergraduate nursing education and nursing students' experiences with art-based pedagogy.

Inclusion criteria***Types of participants***

Participants were undergraduate nursing students.

Types of intervention(s)/phenomena of interest

The qualitative component considered studies investigating nursing students' experiences of arts-based pedagogy and the quantitative component considered studies evaluating the effectiveness of arts-based pedagogy in undergraduate nursing education.

Types of studies

The qualitative component considered qualitative studies including designs such as phenomenology, grounded theory, ethnography, action research, and feminist research. The quantitative component considered studies that examined the effectiveness of arts-based pedagogy including designs such as randomized controlled trials, non-randomized controlled trials, quasi-experimental, before and after studies, prospective and retrospective cohort studies, case control studies, analytical cross sectional studies, case series, individual case reports, and descriptive cross sectional studies.

Types of outcomes

The following quantitative outcomes of arts-based pedagogy were assessed: knowledge acquisition, level of empathy, attitudes towards others, emotional states, reflective practice, self-transcendence, cognitive/ethical maturity, learning behaviours, and students' perspectives of arts-based pedagogy.

Search strategy

An extensive three-step search strategy was conducted for primary research studies published between January 1, 1994 and April 7, 2015. The strategy included searching CINAHL, MEDLINE, ERIC, PsycINFO, Academic Search Complete, Arts and Humanities Citation Index, Art Full Text, Scopus, Proquest Dissertations and Theses: A&I, and the grey literature. Only studies published in English were included.

Methodological quality

Two reviewers assessed all studies for methodological quality using appropriate critical appraisal checklists from the Joanna Briggs Institute Qualitative Assessment and Review Instrument (JBI-QARI) or the Meta-Analysis of Statistics Assessment and Review Instrument (JBI-MAStARI).

Data extraction

Data were extracted from included articles using the standardized data extraction tool from JBI-QARI or JBI-MAStARI.

Data synthesis

Qualitative studies were pooled through a meta-synthesis. Data from the quantitative studies were combined using a narrative synthesis as a meta-analysis was not possible. The researchers used a segregated mixed methods approach to integrate the qualitative and quantitative components.

Results

Twenty-one qualitative studies of high methodological quality were included. The two synthesized findings revealed that art forms can create meaning and inspire learning in undergraduate nursing education and that arts-based pedagogy can develop important learner outcomes/competencies for professional nursing. These synthesized findings received a moderate ConQual rating. Fifteen experimental/quasi-experimental studies of moderate methodological quality were included. The narrative synthesis suggests that arts-based pedagogy improved nursing students' knowledge acquisition, level of empathy, attitude towards others, emotional states, level of reflective practice, learning behaviours, and aspects of cognitive/ethical maturity. In the five cross-sectional studies, the majority of students had a positive perspective of arts-based pedagogy. When the qualitative and quantitative findings were interpreted as a whole, arts-based pedagogy appeared to facilitate learning in the cognitive and affective domains, and may be especially useful in addressing the affective domain.

Conclusions

Nurse educators should consider using arts-based pedagogy as students found this approach offered a meaningful way of learning and resulted in the development of important competencies for professional nursing. The quantitative studies provide a very low level of evidence that arts-based pedagogy improved students' knowledge acquisition, level of empathy, attitude towards others, emotional states, level of reflective practice, learning behaviours, and aspects of cognitive/ethical maturity. Although the quantitative findings can inform future research, the evidence is not robust in demonstrating improved outcomes.

Keywords

arts; arts-based; pedagogy; teaching; learning nursing students; undergraduate

Table 1: Summary of meta-synthesis of qualitative findings

Systematic review title: The effectiveness and experience of arts-based pedagogy among undergraduate nursing students: A mixed methods systematic review Population: Undergraduate nursing students Phenomena of interest: Students' experiences of arts-based pedagogy Context: Undergraduate nursing programs leading to registered nursing or registered psychiatric nursing					
Synthesized finding	Type of research	Dependability	Credibility	ConQual score ¹	Comments
Art forms can create meaning and inspire learning in undergraduate nursing education.	Qualitative	High	Downgrade one level*	Moderate	*Downgraded one level due to credibility of primary studies
Important learner outcomes/competencies for professional nursing are developed through arts-based pedagogy.	Qualitative	High	Downgrade one level*	Moderate	*Downgraded one level due to credibility of primary studies

Table 2: Summary of narrative synthesis of quantitative findings

Arts-based pedagogy compared to non-arts based pedagogy in undergraduate nursing students				
Population: Undergraduate nursing students Setting: Undergraduate nursing programs leading to registered nursing or registered psychiatric nursing Intervention: Arts-based pedagogy Comparison: Non arts-based pedagogy				
Outcomes	No. of Participants (Significant Studies)	No. of Participants (Non-significant Studies)	Quality of the Evidence	Comments (Informed by GRADE)
Knowledge Acquisition	283 (1 RCT; 1 QE)	126 (1 QE)	Very Low*	*Downgraded three levels due to risk of bias, inconsistency, and imprecision
Level of Empathy	193 (1 RCT; 2 QEs)	73 (1 QE)	Very Low*	*Downgraded three levels due to risk of bias, inconsistency, and imprecision
Attitudes towards Others	239 (2 QEs)	22 (1 QE)	Very Low*	*Downgraded three levels due to risk of bias, inconsistency, and imprecision
Emotional States	111 (2 QEs)		Very Low*	*Downgraded two levels due to risk of bias and imprecision
Reflective Practice	24 (1 QE)		Low*	*Downgraded one level due to risk of bias
Self-transcendence		216 (2 QEs)	Very Low*	*Downgraded two levels due to risk of bias and imprecision
Cognitive and Ethical Maturity	115 (1 QE)		Very Low*	*Downgraded two levels due to risk of bias and imprecision
Learning Behaviours	168 (1 RCT; 1 QE)		Very Low*	*Downgraded three levels due to risk of bias, inconsistency, and imprecision

RCT = randomized controlled trial; QE = quasi-experiment

Introduction

Background

Well-educated nurses are key to the health of populations, and teaching strategies are needed which prepare nurses to be critical thinkers, creative problem solvers and effective communicators.^{2, 3} Educators are tasked with developing approaches to effectively teach critical content for nursing, however, some argue that the traditional lecture is inadequate to teach many of these complex concepts.^{4, 5} There is a call for a change towards student-centered and concept-based curricula in order to prepare future nurses to be critical and creative thinkers who are capable of meeting the present healthcare demands.^{2, 3, 6} Teaching strategies which emphasize learning processes, focus on students, and incorporate active learning are needed. In recent years, there has also been a growing interest in broadening pedagogical practices in order to develop nurses who embrace both the art and science of nursing.^{7, 8} While scientific knowledge is important to inform effective nursing practice, the interpersonal and caring aspects of the nurse-client relationship also require knowledge about the human aspects of health and illness to guide practice.^{9, 10} Thus, some educators have forged an alliance between the arts and essential nursing subjects in order to both address current curriculum needs,^{2, 6, 11} and develop learner competencies essential to excellent healthcare.²

A number of key organizations including the World Health Organization, the National League for Nursing, and the Lancet Commission, are recommending health care education reform, and some scholars view the arts as having pedagogical potential to promote humanistic healthcare.^{2, 11-15} Although the founder of modern nursing, Florence Nightingale, viewed nursing as a holistic endeavour,¹⁶ positivism as the predominant philosophy of science in the twentieth century, and the focus on technology in healthcare, has eroded the value placed on the art of nursing.¹⁶⁻¹⁹ However, some nursing scholars posit that nursing education cannot just rely on the sciences, but that pluralistic pedagogical approaches are needed which also draw from the arts and humanities to develop well-rounded professionals who are sensitive to the human experiences of health and illness.^{7, 9, 20} The arts can develop certain habits of the mind that are vital to healthcare,^{21, 22} and can be a source of illumination for nursing students.²⁰ A clinical textbook can provide information about signs and symptoms, but an artistic piece can embody how the symptoms feel to the patient and express difficult emotions.¹⁹ Hence, a well-rounded education is essential for nursing practice which frequently demands practitioners to navigate emotionally and ethically complex clinical situations for which there are no straightforward textbook answers.⁹ This perspective is congruent with Carper's seminal work,²³ in which she presented four diverse, yet integrated, ways of knowing that form the epistemological basis of the nursing profession: empirics, ethics, aesthetics and personal.^{17, 18, 24} Carper's ways of knowing have evolved over time, and nursing scholars have proposed additional ways of knowing such as unknowing,²⁵ emancipatory,²⁶ and socio-political knowing.²⁷ Arts-based pedagogy [ABP] also holds significant potential to address these expanded conceptualizations of Carper's original work.

Arts-based pedagogy is a teaching methodology in which an art form is integrated with another subject matter in order to impact student learning.²⁸⁻³⁰ Arts-based pedagogy results in arts-based learning (ABL),¹¹ which is when a student learns about a subject through arts processes including creating, responding, or performing. Using ABP in nursing education encompasses an arts integration approach,³¹⁻³³ in contrast to teaching the arts as distinct subjects, as students learn about nursing subjects through either creating art, responding to another's art, or performing artistic works.¹¹ Arts-integration is defined as "an approach to teaching in which students construct and demonstrate understanding through an art form. Students engage in a creative process which

connects an art form and another subject area...".^{34(p.1)}

Learning in, with and through the arts, is a widely accepted pedagogical strategy in the discipline of education,^{32, 33} and there are several educational theoretical perspectives which provide support for this approach. The underlying philosophy for ABP can be found in the writings of John Dewey,^{35, 36} an American philosopher, who posited that education should focus on individual growth, the social aspects of learning and active learning experiences.^{36, 37} He also argued that school subjects should not be taught in isolation and that the arts should be integrated into the common experience.^{35, 38, 39} More recently constructivist theory has provided a theoretical basis for ABP.⁴⁰ Constructivist educators assert that meaning is constructed through engagement with the world, experiential learning activities, and social interactions.^{22, 41} If knowledge is viewed as socially constructed, then inventive ways to engage students, enhance participation, promote dialogue, and facilitate reflection are valued,^{42, 43} and ABP addresses these constructivist learning objectives. Further, Gardner's Theory of Multiple Intelligences⁴⁴ is widely used to support ABP.²² According to this perspective, there are numerous intelligences which humans use to learn, but in academia there is a focus on the verbal and logical forms. Through the use of artistic mediums, additional aspects of intelligence are engaged as the arts use diverse ways of communicating.²² Moreover, Davis posits that there are five unique features of the arts, and ten specific learning outcomes which occur because of these unique features that make the arts powerful pedagogically.^{45, 46} These features include that the arts produce a tangible product resulting in imagination and agency, focus on emotion resulting in expression and empathy, privilege ambiguity resulting in interpretation and respect, embrace a process orientation resulting in inquiry and reflection and facilitate connection resulting in engagement and responsibility.^{45, 46} Many of these outcomes are also important in nursing education.

Indeed, there are numerous reported outcomes of ABP in nursing education. Several nurse educators have published their ABP initiatives and discussed notable impacts on students' learning and learners' behaviour towards learning.^{2, 9, 11, 47-57} Furthermore, researchers have found that integrating the arts into nursing education engaged learners,⁴⁸ developed new ways of thinking,^{20, 48, 58} increased self-awareness,^{48, 58} integrated thinking and feeling,^{58, 59} fostered student empathy,^{48, 53} enhanced cultural awareness,^{48, 51} fostered transformational learning,^{58, 60} and increased observational skills.⁵⁴ In nursing education, the arts have been integrated with a broad array of nursing topics. One nursing educator developed an assignment in which undergraduate students created an artistic expression about a clinical experience with a client.² This educator reports that the assignment fostered students' awareness of the humanistic aspects of nursing care and developed students' empathy for both clients and classmates. Other educators infused a psychosocial nursing course with art, literature, music, and film, in order to enhance nursing students' learning about mental illness.⁴⁸ A qualitative investigation of the students' experiences revealed that integrating the arts into the course increased students' understanding and engagement, and fostered empathy, self-understanding, and cultural awareness. Thus, nurse educators assert that the arts can facilitate reflection, engage today's multi-literate healthcare students and promote meaningful student learning in nursing education.

Scholars also report on their experiences of resistance to arts integration in nursing education.^{2, 3, 20, 48} They write about how some are dismayed by this seemingly unlikely amalgamation of disparate disciplines and question the impact of ABP on nursing students' learning.¹⁰ There are several reported reasons for this hesitancy to embrace ABP, such as: the explosion of scientific knowledge and the pressure to incorporate this type of knowledge into the curriculum,^{2, 9, 61} the dominance of the scientific model within nursing education,¹⁰ the need to prepare students for registration exams,² lack of educational preparation to teach with the arts,² nursing students' focus

on learning nursing skills,^{9, 62} and lack of student interest.⁴⁸

Thus, it is imperative to consider both the student experiences of ABP and the effectiveness of ABP for enhancing competencies and learning behaviours in undergraduate nursing students in order to inform this discourse. There is an emerging body of research about ABP in nursing education; however, this work represents a diverse group of primary studies that have not been systematically examined. In order to confirm that no other systematic reviews have been published about ABP or ABL in nursing education, a preliminary literature search was conducted. The following electronic databases were searched and no current or planned review was found about this topic: Joanna Briggs Library Database of Systematic Reviews and Implementation Reports, Cochrane Database of Systematic Reviews, PROSPERO International Register of Systematic Reviews, CINAHL, ERIC, PubMed and Scopus. The grey literature was also searched with Google, however no systematic review about ABP or ABL in nursing education was found in the grey literature. This lack of scholarly work is consistent with the general lack of robust research for nursing education,⁶³⁻⁶⁵ despite the fact that evidence is needed to inform nursing education practice and current curriculum reform.^{63, 66, 67} This systematic review provides a comprehensive review of the current research evidence about the experiences and effectiveness of ABP in order to facilitate evidence-informed teaching practice, support curriculum reform and inform future research. The objectives, inclusion criteria, and methods of analysis for this review were selected prior to conducting this review, and documented in a published review protocol.⁶⁸

Objectives

The objective of this review was to synthesize the best available evidence on the effectiveness of arts-based pedagogy in enhancing competencies and learning behaviours in undergraduate nursing education and nursing students' experiences with art-based pedagogy.

The specific review questions were:

What are nursing students' experiences of arts-based pedagogy in undergraduate nursing education?

Is arts-based pedagogy more effective than non-arts based pedagogy for enhancing competencies and learning behaviours in undergraduate nursing students?

Inclusion criteria

Types of participants

The qualitative and quantitative components of this review considered studies that included undergraduate nursing students who were in education programs leading to registered nursing or registered psychiatric nursing licensing, regardless of their year of study in the nursing program including: baccalaureate nursing students, associate degree nursing students and diploma nursing students.

However, the authors excluded studies with registered nurse students enrolled in undergraduate nursing programs as they are already registered nurses who are returning to school to obtain their degree; and studies containing graduate nursing students. Furthermore, the authors only included research articles in which all of the participants were nursing students.

Types of intervention(s)/phenomena of interest

The qualitative component of this review considered studies that explored undergraduate nursing students' experiences of ABP. The quantitative component of the review considered studies that investigated the effectiveness of ABP for enhancing competencies and learning behaviours in

undergraduate nursing students. Arts-based pedagogy was defined as a teaching methodology in which an art form is integrated with another subject matter in order to impact student learning.²⁸⁻³⁰ Therefore, undergraduate nursing students must have engaged in artistic processes in which they have actively participated by either responding to works of art, creating works of art, and/or performing artistic works, and this process must have connected a nursing subject with the art form. The “arts” referred to activities in the creative arts as opposed to the broad study of human activity. The arts activities could include, but were not limited to, art forms such as murals, poetry, sculpture, dance, theatre, drama, drawings, masks, music, stories, quilts, and film. The nursing subject, which was integrated with the art form, was not limited in this exploratory review. Of note, we included research articles in which storytelling was an art form and not just a factual retelling of a clinical situation. The authors also excluded all articles involving simulation in nursing education, even if they use an arts-informed approach, as simulation is a distinct pedagogical approach. For the experimental/quasi-experimental studies, the comparator was some form of non-ABP in undergraduate nursing education.

Context (for the qualitative synthesis)

The reviewers considered studies in any context in which a nursing student was in an undergraduate nursing education program leading to registered nursing or registered psychiatric nursing licensing. The research study could take place in any course or year of study within the nursing program. These programs could be located in any country, cultural context, or geographical location; however, only English articles were included. In regard to positionality, all reviewers are involved with teaching in higher education and in the development of professionals, and brought their perspectives as educators to the work on this review. Four of the five reviewers teach or academically support nursing students, and one teaches education students in the Faculty of Education.

Types of studies

The qualitative component of the review considered qualitative studies including, but not limited to, designs such as phenomenology, grounded theory, ethnography, action research, and feminist research. The quantitative component of the review considered both experimental and epidemiological study designs including randomized controlled trials, non-randomized controlled trials, quasi-experimental, before and after studies, prospective and retrospective cohort studies, case control studies, analytical cross sectional studies, case series, individual case reports, and descriptive cross sectional studies for inclusion.

In the absence of research studies, the researchers planned on considering other textual articles such as opinion papers and reports. However, primary qualitative and quantitative research studies were found and included in the review and therefore text and opinion papers were not included.

Types of outcomes

This review examined the impact of ABP on competencies and learning behaviours in undergraduate nursing students. Competencies were defined as the “ability to meet complex demands, by drawing on and mobilizing psychosocial resources (including skills and attitudes) in a particular context”,^{69(p. 4)} and involves a “mobilization of cognitive and practical skills, creative abilities and other psychosocial resources such as attitudes, motivation and values”.^{69(p. 5)} Within professional nursing, it is acknowledged that competencies are “the integrated knowledge, skills, abilities, and judgment required to practice nursing

safely and ethically".^{70(p. 14)} Furthermore, learning behaviours are academic enablers that make learning possible,⁷¹ such as student participation, concentration, engagement, focus, and listening.

These outcomes (competencies and learning behaviours) could also be conceptualized as representing various domains of learning. Educational theorists posit that learning can be viewed as having three broad domains: cognitive, affective, and psychomotor.⁷²⁻⁷⁷ The cognitive domain encapsulates the development of knowledge and understanding,^{72, 73, 75-77} and could include outcomes such as improvement in knowledge about a particular subject. The affective domain encompasses the learners' emotions, attitudes, motivations, and values,^{74, 76, 77} and could include outcomes such as empathy and engagement with learning. The psychomotor domain represents the development of physical and motor skills,⁷⁶⁻⁷⁸ and could include outcomes such as the development of clinical and assessment skills. Arts-based pedagogy may impact nursing students in a number of learning domains,⁷⁹ and might facilitate the development of one domain more so than others.

Thus, in the review protocol⁶⁸ we stated the quantitative portion of the review would consider studies with outcomes which may include, but were not limited to, the impact of ABP on students' competencies and learning behaviours in the following areas:

- alteration in level of empathy
- improvement in observational skills
- students' engagement with the learning experience
- increased motivation to learn
- decreased anxiety
- satisfaction or evaluation ratings of their learning experience
- altered attitude towards nursing care/practice
- demonstrated improvement in knowledge of the subject matter

As this project was an exploratory review, a better understanding of the measured outcomes came with a more extensive review of the literature.

Search strategy

The search strategy was developed to find both published and unpublished studies. A three-step search strategy was utilized in this review. An initial limited search of CINAHL, MEDLINE, and the Arts and Humanities Citation Index was undertaken followed by analysis of the text words contained in the title and abstract, and of the index terms used to describe the article. A second search using all identified keywords and index terms was then undertaken across all included databases. Thirdly, the reference lists of all identified reports and articles were searched for additional studies. Studies published from January 1, 1994 to April 7, 2015 were considered for inclusion in this review. This date range was selected as a number of early studies about this topic were noted within this timeframe when preliminary literature reviews were conducted about this concept for previous work, and no relevant studies were found before 1994. As well, there appeared to be a growing interest regarding the arts in nursing education in the 1990's which resulted in research work starting in the mid-1990's.²⁰ The review only included studies published in English. However, in order to provide the broader picture of all available literature on this

topic and notable international trends, we tallied (but did not translate) the non-English literature.

The databases that were searched included:

CINAHL

MEDLINE

ERIC

PsycINFO

Academic Search Complete

Arts and Humanities Citation Index

Art Full Text

Scopus

Proquest Dissertations and Theses: A&I

The search for unpublished or grey literature included: ProQuest Dissertations & Theses, COS Conference Papers Index, WOS Conference Proceedings Citation Index, Google, and the websites of relevant organizations including Arts Health Network Canada, Ars Medica, Arts and Humanities in Health and Medicine, Arts Council England, and Arts for Health

Initial search terms that were used for the first step of the literature search included:

Terms related to the arts, including: art, arts, arts-based, visual art, creative arts;

Terms related to teaching and learning, including: pedagogy, education, learning, instruction, teaching, inquiry, curriculum, course; and

Terms related to undergraduate nursing students, including: nursing students, undergraduate nursing, baccalaureate nurses.

The detailed second step of the search strategy for CINAHL, which was translated for all other listed databases, can be found in Appendix I. The reference lists of all included articles were hand searched for relevant articles.

Method of the review

Two independent reviewers assessed the title and abstract of the articles identified in the literature search in order to assess which ones met the inclusion criteria. Then, potential articles were retrieved and examined in detail to confirm eligibility for inclusion in the qualitative or quantitative component of the review. Eligible qualitative papers were assessed by two independent reviewers for methodological quality prior to inclusion in the review using the standardized JBI-QARI Instrument (Appendix II) for critical appraisal. To promote inter-rater reliability, the reviewers conducting the appraisals discussed and defined the wording of the JBI-QARI appraisal criteria requiring clarification/interpretation. When needed, JBI was consulted for further clarification. The reviewers determined that five questions on the JBI-QARI quality appraisal tool were essential to methodological quality in this review. Thus, papers were included if they received a rating of 'yes' on JBI-QARI quality appraisal questions two, three, four, eight, and ten. Any

disagreements that arose between the reviewers were resolved through discussion and there was no need for a third reviewer to mediate inclusion decisions. If the paper received an 'unsure' or 'not applicable' on any of the predetermined key criteria, the two reviewers discussed whether to exclude or include the study.

Similarly, quantitative papers were assessed by two independent reviewers for methodological quality prior to inclusion in the review using the standardized JBI-MAStARI instrument (Appendix II) for critical appraisal. To promote inter-rater reliability, the reviewers conducting the appraisals discussed and defined the wording of the JBI-MAStARI appraisal criteria requiring clarification/interpretation. When needed, JBI was consulted for further clarification. The reviewers determined that five questions on the JBI-MAStARI randomized control trial/pseudo-randomized quality appraisal tool, and four questions on the descriptive/case series tool, were essential to methodological quality in this review. Thus, papers were included if they received a rating of 'yes' on JBI-MAStARI randomized control trial/pseudo-randomized quality appraisal questions one, six, eight, nine, and ten. However, if the study was a quasi-experiment, question one was not considered a key criterion for inclusion in the review. If the JBI-MAStARI tool for descriptive/case series was used for the appraisal, then the paper needed to receive a rating of 'yes' on questions two, four, five, and nine to be included. Any disagreements that arose between the reviewers were resolved through discussion and there was no need for a third reviewer to mediate inclusion decisions. If the paper received an 'unsure' or 'not applicable' on any of the predetermined key criteria, the two reviewers discussed whether to exclude or include the study.

Data collection

Qualitative data were extracted from included papers using the standardized data extraction tool from JBI-QARI (Appendix III). The primary reviewer extracted data from the included studies. The data extracted included specific details about the phenomenon of interest, populations, study methods, and outcomes/findings of significance to the review question and specific objectives. Quantitative data was extracted from papers included in the review using the standardized data extraction tool from JBI-MAStARI (Appendix III). The data extracted included specific details about the interventions, populations, study methods, and outcomes of significance to the review question and specific objectives.

Data synthesis

Qualitative research findings were pooled using JBI-QARI. This process involved the aggregation or synthesis of findings to generate a set of statements that represent that aggregation, through assembling the findings, rating them according to their quality with the JBI levels of credibility (see Appendix IV for definitions of levels), and categorizing these findings on the basis of similarity in meaning. These categories were then subjected to a meta-synthesis in order to produce a comprehensive set of synthesized findings that can be used as a basis for evidence-based practice. Author-identified themes in the findings/results section of the research articles, and illustrations supporting the verbatim themes, were extracted as findings. The primary and secondary reviewer reviewed the extracted findings and individually grouped the findings into tentative categories based on similarity of meaning. Next, the authors reviewed the findings and their tentative categories together, and developed a combined list of categories and resulting synthesized findings. Then, the reviewers presented this analysis to two other reviewers for validation. The two additional reviewers examined their analysis, and further refined the

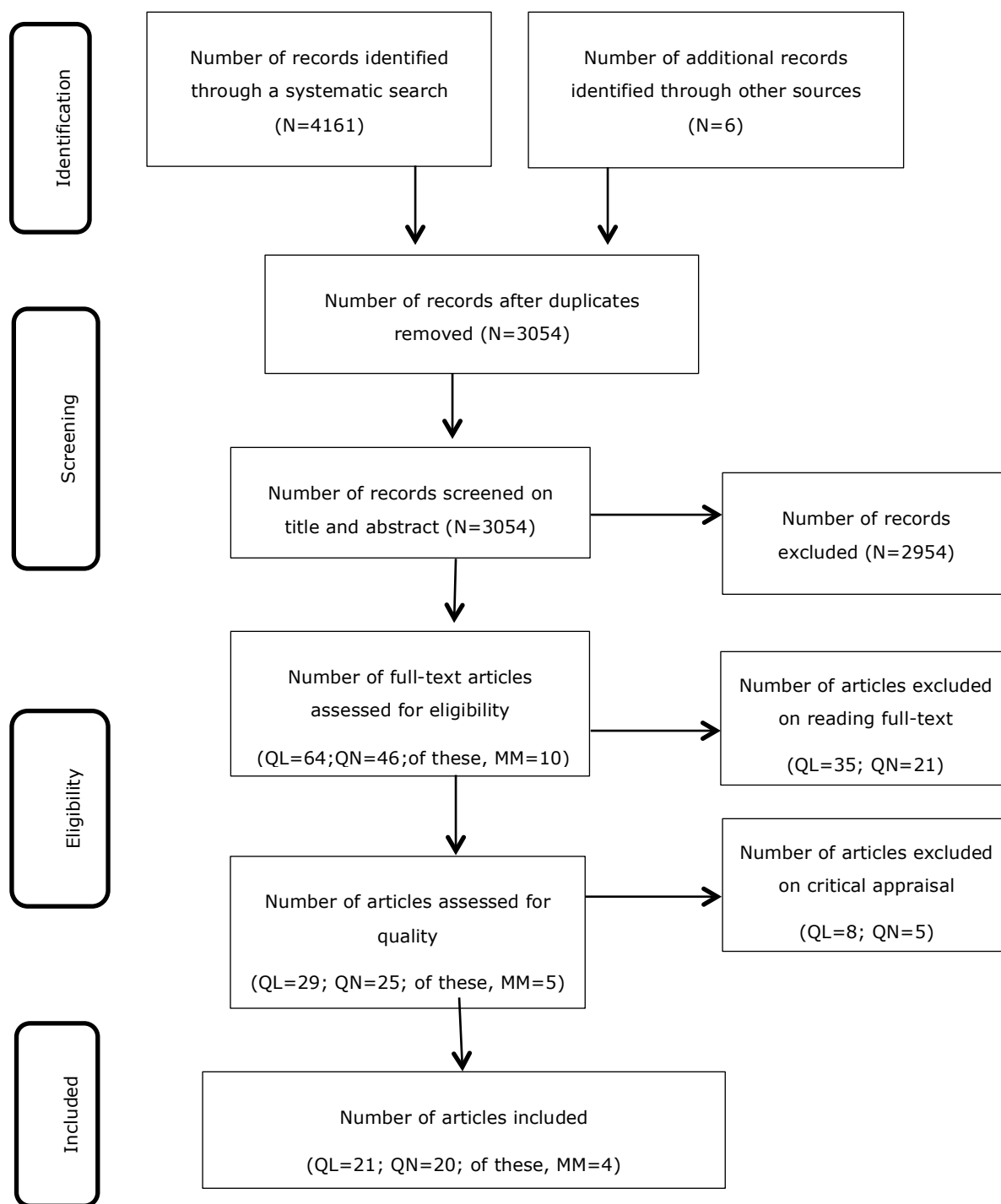
categories and synthesized findings. The synthesized findings were also evaluated with the ConQual approach in order to establish a level of confidence in each synthesized finding.¹

A meta-analysis was not possible due to the heterogeneity of the quantitative studies and the lack of appropriate data for statistical pooling. Thus, the quantitative studies were combined with a narrative synthesis, including tables and figures to aid in data presentation, in regard to the outcomes of ABP. The primary reviewer analyzed and combined the quantitative studies, and presented the narrative synthesis to three other reviewers who examined and further refined the results.

Results

Description of studies

As can be seen in Figure 1, 4161 potentially relevant papers were identified through the literature search of databases on April 7, 2015 (CINAHL = 1160; MEDLINE = 709; ERIC = 163; PsycINFO = 951; Academic Search Complete = 528; Arts and Humanities Citation Index = 11; Art Full Text = 29; Scopus = 552; Proquest Dissertations and Theses: A&I = 58), and an additional six papers through the grey literature and reference list searches. After duplicates were removed, two reviewers examined the titles/abstracts of the 3054 papers for relevance, and 2954 papers were excluded as they did not meet the inclusion criteria. Of these 2954 excluded papers, 64 papers were not in English but they may have been about ABP. Furthermore, the reviewers tallied the textual articles that appeared to be about ABP from the title/abstract screening, and 307 potential textual papers were identified. The full texts of the remaining papers (qualitative [QL] = 64; quantitative [QN] = 46; of these, mixed methods [MM] = 10) were retrieved to verify eligibility for inclusion in the qualitative or quantitative component of the review. After excluding articles that did not meet the inclusion criteria upon detailed examination (QL = 35; QN = 21), two reviewers appraised the remaining papers for methodological quality (QL = 29; QN = 25; of these MM = 5) and excluded eight qualitative papers and five quantitative papers based on quality as they did not meet the predetermined key criteria on the JBI-QARI or JBI-MAStARI checklists (see Appendix V for the list of excluded studies and reasons). After quality appraisal, 21 studies were included in the qualitative component (four of these were mixed methods studies), and 20 were included in the quantitative component (four of these were mixed methods studies) of the review. The search and assessment process is illustrated in Figure 1.



From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). *Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement*. PLoS Med 6(6): e1000097. doi:10.1371/journal.pmed1000097

Figure 1: PRISMA flow diagram of search and study selection process

QL = qualitative; QN = quantitative; MM = mixed methods

This section will provide an overview of the included studies. For a thorough description of each included study, see Appendix VI. The 41 included studies were published or authored between 1995 and 2015. Of these studies, one was published before 2000 (QL = 0; QN = 1), 26 were published between 2000 and 2009 (QL = 13; QN = 13), and 14 were published between 2010 and 2015 (QL = 6; QN = 8). There appears to be a growing and continuing research interest in ABP over time.

Qualitative component

Authors of the 21 included qualitative studies^{8, 9, 48, 51, 52, 58, 59, 80-93} provided data about the undergraduate student experience of ABP in nursing education. Eleven studies were conducted in the United States, three in the United Kingdom, two in Ireland, two in Canada, one in Sweden, one in South Africa, and one in Hong Kong. The qualitative studies explored nursing students' experiences with various ABP approaches which integrated the following art forms: readers' theatre,⁵² drama,⁸ creative arts activities,^{84,91} literature,^{51, 87, 89} photography,⁸⁰ storytelling,^{59, 83, 90} digital storytelling,⁸¹ drawing and collage,⁵⁸ poetry,^{85, 92} mandalas,⁸⁶ visual art,⁸⁸ creative writing,⁹³ and the use of various art forms.^{9, 48, 82}

The studies consisted of a variety of methodologies: seven were descriptive,^{8, 48, 80, 82, 84, 88, 93} five were literary,⁵¹ textual,^{52, 85, 92} or narrative⁵⁹ analysis, two were phenomenological,^{58, 86} one was action research,⁸⁹ one was ethnographic,⁹ and one was phenomenographic.⁸³ Additionally, four studies were mixed methods studies and the qualitative components of the studies were included in the meta-synthesis. Of the mixed methods studies, three were descriptive^{87, 90, 91} and one was narrative analysis.⁸¹ Three of these mixed methods studies were included in both the qualitative and quantitative components of the review.^{87,90,91} In eleven (52.4%) of the aforementioned qualitative studies, the research methodology was not explicitly stated and the reviewers had to infer a research methodology based on the information provided and the research methods used, such as qualitative description,^{8, 80, 82, 87, 88, 91, 93} textual analysis,^{52, 85, 92} or narrative analysis.⁸¹ Twenty of the studies were published papers, and one was a thesis.⁸¹

All participants were undergraduate nursing students. There was a range of sample sizes from under 10 (n = 5), 10-19 (n=1), 20-29 (n=7), and 30 and above (n=8). A variety of data collection methods were used: thirteen studies collected data with written narratives,^{9, 48, 51, 52, 59, 84, 85, 87, 89-93} six with individual interviews,^{8, 58, 80, 83, 86, 91} six with focus groups^{48, 80, 82, 88, 89} or group discussions,⁹ six with observation or field notes,^{9, 48, 80, 86, 89, 91} three with individual art work or creative assignments,^{58, 81, 91} and one study with visual art elicitation.⁹ Of note, seven studies used multiple sources of data collection. The following approaches to data analysis were employed: eight used thematic analysis,^{8, 9, 80, 84, 85, 87-89} seven used content analysis,^{52, 59, 81, 82, 90, 92, 93} three used constant comparison,^{48, 51, 91} two used Heideggerian phenomenological analysis,^{58, 86} one used phenomenographic analysis,⁸³ and one used visual artwork analysis.⁹

Quantitative component

Authors of the 20 included quantitative studies^{53, 55, 87, 90, 91, 94-108} investigated the effectiveness of ABP for enhancing competencies and learning behaviours in undergraduate nursing students (see Appendix VI for a thorough description of each study). In regard to the geographical location of the quantitative studies, twelve were conducted in the United States, two in Sweden, one in the United Kingdom, one in Ireland,

one in Australia, one in Turkey, one in South Africa, and one in Taiwan. Sample sizes ranged from 16 to 267 undergraduate nursing student participants. Various ABP interventions were implemented, and this spectrum of interventions will be discussed in the quantitative narrative synthesis. Of these studies, three were randomized controlled trials,¹⁰⁵⁻¹⁰⁷ eight were nonequivalent control group quasi-experiments,^{55, 91, 95, 97, 98, 101, 104, 108} four were one group pretest-posttest quasi-experiments,^{53, 90, 94, 96} and five were descriptive cross-sectional studies.^{87, 99, 100, 102, 103} Of the aforementioned quantitative studies, four were part of a larger mixed methods design.^{87, 90, 91, 96} Two of the studies were theses,^{96, 108} and the remainder were published studies.

A wide variety of outcomes were measured in the experiments/quasi-experiments: knowledge acquisition;^{90, 107, 108} level of empathy;^{53, 91, 97, 105} attitudes towards elders^{98, 104} and cultural attitudes;⁹⁴ emotions, anxiety, and stress;⁵⁵ burnout, mood dimensions, and total mood disturbance;⁹⁵ self-transcendence;^{98, 104} reflective practice;⁹⁶ cognitive and ethical maturity;¹⁰¹ preferred approach to learning;⁹⁶ and engagement in learning.¹⁰⁶ In the descriptive cross-sectional studies, researchers measured nursing students' opinions and feelings about the ABP initiative,⁹⁹ perspectives/perceptions of the ABP learning activity,^{87, 102, 103} and learning experiences.¹⁰⁰

Description of excluded studies

For both the qualitative and quantitative components of the reviews, all studies excluded after quality appraisals were eliminated because they did not meet one or more of the predetermined quality appraisal key criteria on the appropriate JBI appraisal tool (see Appendix V for the list of excluded studies and reasons). Eight studies were excluded from the qualitative component,^{96, 109-115} with the most common reasons for exclusion being that there was not congruity between the research methodology and the research question or objectives, the methods used to collect data, and/or the representation and analysis of data. Seven of these studies did not clearly identify a methodology, and one was a phenomenological study.¹¹¹ Of the quantitative studies, a one group pretest-posttest quasi-experiment¹¹⁶ and four descriptive cross-sectional studies^{60, 81, 117, 118} were excluded as they did not meet one or more of the key criteria. The one group pretest-posttest study did not clearly demonstrate appropriate statistical analysis. The most common reasons for excluding the descriptive cross-sectional studies were that outcomes were not assessed with objective criteria and the use of appropriate statistical analysis was not demonstrated.

Methodological quality

Qualitative component

Overall, the methodological quality of the included qualitative studies was high according to the JBI-QARI quality appraisal tool (see Table 3). The majority of the studies received a quality appraisal score of between eight and ten on the JBI-QARI appraisal tool (see Appendix II), with only two studies receiving a rating of six out of ten. The reviewers assessed most/all of the included qualitative studies as having congruence between the methodology and the following elements: research question/objectives (question two; 95.2%), methods used to collect data (question three; 100.0%), analysis/representation of data (question four; 100.0%), and interpretation of results (question five; 85.7%). Further, most of the included studies had adequate representation of the participants' voices (question eight; 95.2%) and the conclusions seemed to flow from the analysis/interpretation of data (question ten; 95.2%). The remaining studies had ratings of 'unclear'. Three included studies had a rating of "unclear" on a predetermined key criterion. In regard to question two, one study did not have a clearly written research question/objective.⁵²

For question eight, one study had only one participant illustration per theme,⁵⁹ and for question ten, one mixed method study had minimal discussion about the qualitative findings.⁹⁰

The four questions with the lowest percentage of positive appraisals were questions one, six, seven, and nine. Only 38.1% of the studies demonstrated congruity between the stated philosophical perspective and the research methodology (question one). It was not that there was evidence of non-congruity, rather the reviewers could not clearly identify the philosophical perspective or found that the researchers used general terms, such as “a qualitative study” when referring to the research methodology. In numerous cases, the reviewers had to infer the research methodology as qualitative description or textual/narrative analysis. There is a need for greater clarity of philosophical/methodological approaches in this body of literature. Further, only 52.4% of the studies had a statement locating the researcher(s) culturally or theoretically, and many of the remaining studies had only a brief sentence describing the researcher(s) positionality (question six). In regard to question seven, 57.1% of the studies discussed the influence of the researcher on the research, or vice-versa. This lack of transparent consideration regarding researcher positionality and influence on the research is concerning, especially since many of the researchers were investigating their own students and ABP assignments. Lastly, 80.95% of the studies provided evidence of ethical approval by an appropriate body (question nine). Although the remaining 19.05% of studies did not demonstrate obvious ethical issues, inserting a sentence about ethical approval into a research report is not cumbersome and this deficiency is disconcerting. The reviewers did not assign a rating of ‘not applicable’ to any qualitative assessment criteria.

Table 3: Critical appraisal results for included studies using the JBI-QARI critical appraisal tool

Citation	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Aranda, K., Goeas, S., Davies, S., Radcliffe, M., Christoforou, A., 2015 ⁸⁰	U	Y	Y	Y	U	Y	Y	Y	Y	Y
Bassell, K., 2015 ⁸¹	U	Y	Y	Y	Y	Y	U	Y	Y	Y
Casey, B., 2009 ⁹	Y	Y	Y	Y	Y	Y	U	Y	U	Y
Chan, Z.C.Y., 2014 ⁸²	U	Y	Y	Y	Y	N	Y	Y	Y	Y
Christiansen, A., 2011 ⁸³	U	Y	Y	Y	Y	U	Y	Y	Y	Y
Hunter, L. A., 2008 ⁵⁹	Y	Y	Y	Y	Y	U	Y	U	Y	Y
Hydo, S. K., Marcyjanik, D. L., Zorn, C. R., Hooper, N. M., 2007 ⁸⁴	Y	Y	Y	Y	Y	U	Y	Y	Y	Y
Jack, K., 2012 ⁵⁸	Y	Y	Y	Y	Y	Y	U	Y	Y	Y
Jensen, A. & Curtis, M., 2008 ⁴⁸	U	Y	Y	Y	Y	Y	Y	Y	Y	Y
Kidd, L. I. & Tusaie, K. R., 2004 ⁸⁵	U	Y	Y	Y	Y	Y	Y	Y	N	Y
Mahar, D.J., Iwasiw, C.L., Evans, M.K., 2012 ⁸⁶	Y	Y	Y	Y	U	U	Y	Y	Y	Y
Mathibe, L. J., 2007 ⁸⁷	U	Y	Y	Y	U	N	Y	Y	Y	Y

Mooney, B. & Timmins, F., 2007 ⁸⁸	U	Y	Y	Y	Y	U	U	Y	Y	Y
Newcomb, P., Cagle, C., Walker, C., 2006 ⁵¹	Y	Y	Y	Y	Y	U	U	Y	Y	Y
Pardue, K. T., 2004 ⁵²	U	U	Y	Y	Y	Y	N	Y	N	Y
Pohlman, S., 2013 ⁸⁹	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Shieh, C., 2005 ⁹⁰	Y	Y	Y	Y	Y	Y	N	Y	Y	U
Webster, D., 2010 ⁹¹	U	Y	Y	Y	Y	N	Y	Y	Y	Y
Welch, T. R., & Welch, M., 2008 ⁸	U	Y	Y	Y	Y	Y	Y	Y	Y	Y
Wikström, B., 2003 ⁹³	U	Y	Y	Y	Y	N	N	Y	N	Y
Wright, D. J., 2006 ⁹²	U	Y	Y	Y	Y	Y	N	Y	Y	Y
%	38.1	95.2	100	100	85.7	52.4	57.1	95.2	81.0	95.2

Y= Yes; N= No; U= Unclear; N/A= Not applicable

Quantitative component

The included quantitative studies were of moderate quality and many did not employ a rigorous design that can decrease bias (see Tables 4 and 5). Only three of the studies were randomized controlled trials, and of the twelve quasi-experiments, four lacked a control group. A number of these studies used researcher-developed instruments. Only studies with some evidence of reliability and validity of tools were included, such as use of an established tool,⁹⁵ reported reliability/validity,⁹⁸ or a pilot test within the study;⁹⁹ however, some included studies had limited evidence to support the use of a specific tool.^{87, 90, 94}

All of the experimental/quasi-experimental studies received a quality appraisal score of between four and six, out of a potential score of ten (Table 4) on the JBI-MAStARI quality appraisal questions for randomized control trial/pseudo-randomized trials (see Appendix II). Of note, the reviewers' found that they needed to use the rating of 'not applicable' frequently with certain quantitative appraisal criteria, which reduced the total 'yes' scores for individual studies. Overall, the comparison and control groups were treated identically except for the ABP intervention (question seven; 93.33%), their outcomes were measured in the same manner (question eight; 100.0%) and in a reliable way (question nine; 86.67%), and the appropriate statistical analysis was used to analyze the data (question ten; 93.33%). The remainder of the studies received an 'unsure' rating on these questions. For 'unsure' ratings on key criteria questions nine and ten, there was some evidence that the outcomes were measured in a reliable way^{90, 94} and that the appropriate statistical analysis was used,⁹⁷ but it was not compelling evidence.

None of the experimental/quasi-experimental studies blinded participants to treatment allocation (question two; 0.0%) or described/included participants who withdrew in the analysis (question four; 0.0%). Further, less than half of the studies employed randomization (question one; 40.0%). Only one study blinded allocators (question three; 6.7%), and two studies blinded those assessing outcomes (question five; 13.3%), to treatment allocation. The absence of these characteristics in an experiment/quasi-experiment introduces the study findings to bias. Just over half of the studies demonstrated clear evidence for the

control and treatment groups being comparable at entry (question six; 60.0%), and the remainder were rated as 'unsure'. This ambiguity is concerning as meaningful comparisons between groups are dependent on an assumption of equivalence, and this question was one of the key inclusion criteria for inclusion in the review. For all included studies, the reviewers discussed the assignment of 'unsure' for key criteria six and ensured that there was some evidence for meaningful comparisons even though a definitive 'yes' could not be assigned. The reviewers frequently assigned 'not applicable' to questions one through four on the randomized control/quasi-randomized trial appraisal tool. For the one group pretest-posttest quasi-experiments, questions one, two, and three were 'not applicable' as the participants were not assigned to groups. Additionally, if the groups occurred naturally in a two-group quasi-experiment, question three was 'not applicable' as there was no allocation to a group by a research team member. For a number of studies there were no withdrawals; thus, question four was 'not applicable'.^{53, 55, 90, 97, 106, 108} Of note, for a one-group pretest-posttest quasi-experiment the reviewers consulted JBI, and the appraisal tool for a randomized control/pseudo-randomized trial was used. The pre-test was used as the comparison group and the participants were theoretically viewed as their own controls.

All of the descriptive cross-sectional studies received a quality appraisal score of between three and six, out of a potential score of nine (see Table 5) on the JBI-MAStARI descriptive/case series quality appraisal tool (see Appendix II), except for one study that received a score of two.⁸⁷ Similarly to the experiments/quasi-experiments, the rating of 'not applicable' was used frequently with certain appraisal criteria, which reduced the total 'yes' scores for individual studies. The included studies clearly identified inclusion criteria (question two; 100.0%), and used appropriate statistical analysis (question nine; 100.0%). Most studies assessed outcomes with objective criteria (question four; 80.0%); however, in one study there was minimal information about the measurement tools.⁸⁷

However, none of the studies used a random sample (question one; 0.0%), and only one study identified strategies to deal with confounding variables (question three; 20.0%) and provided a description of how the outcomes were measured in regard to the process (question eight; 20.0%). As many researchers did not make comparisons, few studies provided a sufficient description of the groups (question five; 20.0%). The omission of these characteristics in the study designs/reports raises concerns regarding bias. For these cross-sectional studies, questions six and seven were 'not applicable' as data was collected at one point in time. Additionally for studies with one group, question five was 'not applicable' as there were no comparisons made between groups.

Table 4: Critical appraisal results for included studies using the JBI-MAStARI Critical Appraisal Checklist (experimental/quasi-experimental studies)

Citation	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Anderson, K. L., 2004 ⁹⁴	N/A	N/A	N/A	U	N	Y	Y	Y	U	Y
Bittman, B. B., et al., 2004 ⁹⁵	N	N	U	N	Y	U	Y	Y	Y	Y
Bradshaw, Vicki, 2012 ⁹⁶	N/A	N/A	N/A	U	U	Y	Y	Y	Y	Y
Briggs, C.L., Fox, L., Abell, C.H., 2012 ⁹⁷	Y	N	N	N/A	Y	Y	Y	Y	Y	U
Chen, S. & Walsh, S. M., 2009 ⁹⁸	Y	N	U	N	U	Y	Y	Y	Y	Y

Evans, B. C. & Bendel, R., 2004 ¹⁰¹	N	N	N/A	U	U	Y	U	Y	Y	Y
Özcan, N.K., Bilgin, H., Eracar, N., 2011 ⁵³	N/A	N/A	N/A	N/A	U	Y	Y	Y	Y	Y
Pardee, C.J., 2007 ¹⁰⁸	N	U	N	N/A	N	Y	Y	Y	Y	Y
Shieh, C., 2005 ⁹⁰	N/A	N/A	N/A	N/A	U	Y	Y	Y	U	Y
Walsh, S. M., Chang, C. Y., Schmidt, L. A., Yoepp, J. H., 2005 ⁵⁵	Y	N	N	N/A	U	U	Y	Y	Y	Y
Walsh, S. M., Chen, S., Hacker, M., Broschard, D., 2008 ¹⁰⁴	N	N	N	N	U	Y	Y	Y	Y	Y
Wikström, B., 2001 ¹⁰⁷	Y	U	U	U	U	U	Y	Y	Y	Y
Wikström, B., 2003 ¹⁰⁶	Y	N	U	N/A	U	U	Y	Y	Y	Y
Wilt, D. L., Evans, G. W., Muenchen, R., Guegold, G., 1995 ¹⁰⁵	Y	U	Y	U	U	U	Y	Y	Y	Y
Webster, D., 2010 ⁹¹	N	N	N	U	U	U	Y	Y	Y	Y
%	54.6	0.0	10.0	0.0	13.3	60.0	93.3	100	86.7	93.3

Y= Yes; N= No; U= Unclear; N/A= Not applicable

Table 5: Critical appraisal results for included studies using the JBI-MAStARI Critical Appraisal Checklist (descriptive/case series studies)

Descriptive / Case Series Studies

Citation	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
Deeny, P., Johnson, A., Boore, J., Leyden, C., McCaughan, E., 2001 ⁹⁹	U	Y	Y	Y	Y	N/A	N/A	Y	Y
Emmanuel, E., Collins, D., Carey, M., 2010 ¹⁰⁰	N	Y	N	Y	N/A	N/A	N/A	U	Y
Fenton, G., 2014 ¹⁰²	N	Y	N	Y	N/A	N/A	N/A	U	Y
Mathibe, L. J., 2007 ⁸⁷	N	Y	U	U	N/A	N/A	N/A	U	Y
Masters, J. C., 2005 ¹⁰³	N	Y	N	Y	N/A	N/A	N/A	U	Y
%	0.0	100	20.0	80.0	100	N/A	N/A	20.0	100

Y= Yes; N= No; U= Unclear; N/A= Not applicable

In summary, 29 qualitative studies were assessed for methodological quality and 21 of these were included in the review. These 21 studies met the inclusion criteria, and after quality appraisal they were deemed methodologically rigorous with regard to the assessment criteria, and particularly to the identified key criteria, to be included in the review. Although these studies were appraised as being of high quality, there were some concerns that need to be kept in mind in regard to their findings. The studies were

primarily qualitative description or textual/narrative/literary analysis, and only six of the research studies employed in-depth individual interviews. Also, in a number of studies there was a lack of clear identification of philosophical perspective, research methodology, location of the researcher, influence of the researcher, or ethical approval. These issues should be considered when interpreting the findings. However, the 21 included qualitative studies still offered rich descriptions of undergraduate nursing students' experiences with ABP for the qualitative meta-synthesis.

In regard to the quantitative work, 25 studies were assessed for methodological quality and 20 of these studies met the inclusion criteria and were deemed methodologically rigorous enough to be included in the review. These 20 quantitative studies all investigated the effectiveness of ABP in undergraduate nursing education; however, there were a number of significant issues related to their quality. For the experiments/quasi-experiments, these issues included: a lack of rigorous randomized controlled experiments to provide evidence for causation; only a few studies blinded allocators, or those assessing outcomes, to treatment allocation; some studies did not provide convincing evidence for the equivalence of groups or did not have a comparison group; and none of the studies blinded participants to treatment allocation. In the descriptive cross-sectional studies, key concerns included that none of the studies used a random sample, and only one study identified strategies to deal with confounding variables and provided a description of how the outcomes were measured in regard to the process. These significant issues could likely result in bias and should be considered when interpreting the quantitative findings. Further, it was not possible to conduct a meta-analysis with the quantitative findings due to heterogeneity of the studies.

Findings of the review

Results of meta-synthesis of qualitative research findings

The 21 qualitative studies all investigated students' experiences with ABP using a qualitative approach, and all participants were undergraduate nursing students. A total of 75 findings were extracted from the included studies (see Appendix VII for a table of findings and illustrations) and rated according to the JBI levels of credibility (see Appendix IV). Of the 75 findings, 50 (66.7%) received a rating of 'unequivocal' (U), 25 (33.3%) received a rating of 'credible' (C), and none received a rating of 'unsupported' (Un). The findings were combined into ten categories, which were then aggregated into two synthesized and directed findings. The synthesized findings were each evaluated using the ConQual approach in order to establish a level of confidence in these findings for policy-makers, administrators, practitioners, and researchers (see Table 1).¹ For both synthesized findings, the majority of individual studies supporting the meta-synthesis met the ConQual criteria for dependability on the JBI-QARI critical appraisal tool; thus, dependability was rated as high. It should be noted that only 52.4% of the included studies had a statement locating the researcher(s) culturally or theoretically, and only 57.1% of the studies discussed the influence of the researcher on the research. Nonetheless, the majority (85.7%) had either a statement locating the researcher(s) culturally or theoretically, or discussed the influence of the researcher on the research, or both. Thus, they received a "yes" on at least four of the five ConQual identified quality appraisal questions, and the ConQual rating for dependability was not downgraded.¹ However, both synthesized findings were supported with a mix of unequivocal and equivocal (credible) findings resulting in the downgrading of the synthesized findings by one level for credibility. This analysis resulted in a ConQual overall score of moderate in regard to the level of confidence in the synthesized findings.¹ This meta-synthesis is presented below by describing each synthesized finding and its categories, and listing

the findings and illustrations which support each category (see Tables 6 and 7).

Findings	Categories	Synthesized finding
A factual story (C)	Enabling connection with practice (situated learning)	Art forms can create meaning and inspire learning in undergraduate nursing education. The arts, as a way of knowing and expressing, can stimulate creativity, engage learners, elicit interest, make learning personal, create meaning, connect theory with practice through situating concepts in a story, foster interaction, and make difficult learning accessible for undergraduate nursing students.
A simple way of acquiring and retaining knowledge (U)		
A way of knowing (C)		
More in-depth learning (U)		
An inspiring way of grasping and maintaining concentration during the lecture (U)	Enhancing learner engagement	
An interesting hook (U)		
Bringing learning to a personal level (C)		
Happiness (C)		
Heightened connection as a community of learners (U)	Interactive process	
The interface between students' thoughts and teacher responses provided a platform of connectivity (U)		
Art and creativity (U)	The arts as a form of communication and expression	
Creativity, collaboration and connection (U)		
Drama as a teaching method (U)		
Lack of audio-visual aids during story time (C)		
Novel, meaningful (creative) teaching strategy (U)		
Patient digital stories as a learning resource (U)		

Table 6: Results of meta-synthesis of qualitative research findings one: Art forms can create meaning and inspire learning in undergraduate nursing education.

The arts, as a way of knowing and expressing, can stimulate creativity, engage learners, elicit interest, make learning personal, create meaning, connect theory with practice through situating concepts in a story, foster interaction, and make difficult learning accessible for undergraduate nursing students. This synthesized finding was derived from the following four categories and the supportive findings/illustrations underpinning each category: 1) Enabling connection with practice (situated learning), 2) Enhancing learner engagement, 3) Interactive process, and 4) The arts as a form of communication and expression.

Category 1.1: Enabling connection with practice (situated learning)

The arts provided the nursing students with a means to connect content/concepts with practice. The arts can situate concepts in a context, through story, drama, or other art forms, which can give meaning and relevance to more abstract or difficult content. This contextualization makes learning, which may have been previously challenging, possible. Students found that the arts provided a bridge between theory and practice and offered a new way of acquiring difficult knowledge.

Finding 1: A factual story (C)

"To me it was very helpful and good to use the novel from a real life story. I personally like stories; real ones" (p. 253)⁸⁷

Finding 2: A simple way of acquiring and retaining knowledge (U)

"I was not being bombarded with strange and gigantic words, it makes cancer and cancer drugs easy comprehensible" (p. 253)⁸⁷

Finding 3: A way of knowing (C)

"I enjoyed it. I felt as if we learned about each process of the diseases we had stories about." (p. 7)⁹⁰

Finding 4: More in-depth learning (U)

"We were able to discuss significant clinical data relevant to the case that helps us understand the whole picture of the story." (p. 7)⁹⁰

Category 1.2: Enhancing learner engagement

The arts have power to capture and hold nursing students' attention. Students reported that using an art form engaged them in their learning. They described ABP as fun and interesting, and described how it inspired them to learn about the content. The arts engaged students through bringing learning to a personal level or through helping learners to visualize the content.

Finding 1: An inspiring way of grasping and maintaining concentration during the lecture (U)

"It is something interesting, it keeps us awake and concentrating. Information was easy to visualise" (p. 253)⁸⁷

Finding 2: An interesting hook (U)

"It was an interesting way to start the class and introduce the topic of the day. It really got me hooked into thinking about the topic and quickly got me involved." (p. 4)⁴⁸

Finding 3: Bringing learning to a personal level (C)

"It seems I'm the real nurse in the story that has to take care of everything." (p. 7)⁹⁰

Finding 4: Happiness (C)

"The painting . . . made me think of all the lovely summer days I spent with my grandmother" (p. 45)⁹³

Category 1.3: Interactive process

Students reported that the arts elicited interaction with others on some level. Discussions with teachers and/or other students about artwork became a valuable part of the learning process. The artwork provided something meaningful for people to talk about, and stimulated important connections.

Finding 1: Heightened connection as a community of learners (U)

"It was valuable because of the groups' discussion after the reading. The sharing of the different perspectives made this learning experience valuable. The opportunity to discuss the issues [presented in the play] and hear everyone's opinion. The most valuable aspect was the discussion afterward and having everyone pay attention. This creates a wonderful group interaction and discussion." (p. 61)⁵¹

Finding 2: The interface between students' thoughts and teacher responses provided a platform of connectivity (U)

"Student: The visual that Gordon creates about nurses is one of incompetence, and heartless actions. She portrayed health care workers in a poor light to make herself look as if she was everything the nurse was not. ...Gordon's acts, while glorious, are not feasible for any hospital organization that abides by its confidentiality.... Gordon did go beyond her scope of practice for several weeks, but she didn't realize that this is what nurses do every day, not just for a few weeks. It's a way of life. Teacher: My sense is that there is often something important to learn from each and every story, with Suzanne Gordon's being no exception. She pointed out, I think, both the good and bad— meaning examples of expert care giving but then examples where she questioned the emotional attunement of some of the staff. This raises an interesting question: Why were some nurses concerned about Suzanne's emotional well-being after Ella's death? I love stories that raise questions and make us think." (p. 288)⁸⁹

Category 1.4: The arts as a form of communication and expression

In the students' ABP experiences, the arts offered a creative and meaningful way of communication and expression. Participants found that the arts had unique attributes which made learning accessible. The arts integrated the cognitive and emotional aspects of a topic, and helped students to identify with others' experiences. They opened a creative space for thinking about things in a new way and for personal expression. However, some students wished for more audiovisual aids.

Finding 1: Art and creativity (U)

"Poems, symbols, dance and song all express the world as we see it and one way or another, make things beautiful and more clear." (p. 7)⁸⁴

Finding 2: Creativity, collaboration and connection (U)

"Maybe the end photos were not so important. But I do think the pausing and the taking of the photos definitely was important, it was kind of like 'pause and retrieve'. So when you take that image then you are seeing a perspective or a snap-shot of another person's perspective. I think it is easy to kind of plod along in life and not actually think about these things (P3)." (p. 311)⁸⁰

Finding 3: Drama as a teaching method (U)

"For another, it was 'a much more useful tool to help students, or anyone really, to evaluate themselves and their emotional reactions to situations in a much more personal way. It is not the same thing as reading a book . . . in gaining self-understanding and self-awareness. I think that more than a lot of other experiences reading a book or a lecture, prepares us for not only just . . . like a nursing career, but as human beings, I think. That greater self-awareness and introspection I found for me personally has changed a lot of thought processes in my mind. Let's put it that way. Even in the little bits that I did explain to you it made me really very . . . I don't want to say self-aware, but it helped me to re-evaluate again my life and how I want to interact with others based on emotions similar in the play to my life as well. I found it really beneficial, actually, and the other students that I had discussions with as well.'" (p. 266)⁸

Finding 4: Lack of audio-visual aids during story time (C)

"I think I would get more out of a presentation on the subject because I am more of a visual and auditory learner." (p. 8)⁹⁰

Finding 5: Novel, meaningful (creative) teaching strategy (U)

"This was a nice variety/change to our everyday learning. This was outside the box—got us to think. This was a very interesting way to incorporate active learning. A fun, interesting alternative to a traditional lecture. It is a different way than the normal textbook and lecture style of learning. Integrating thinking with something fun!" (p. 61)⁵¹

Finding 6: Patient digital stories as a learning resource (U)

"(Participant 2). "If you were just reading the words it wouldn't be as powerful. When it's a person's voice, there's much stronger emotions. You're hearing the patient's tale and voice and the feelings in the voice and you can understand it more than just reading a book." (p. 291)⁸³

Findings	Categories	Synthesized finding
A snapshot of spirituality through others' impressions of art (C)	Developing relationality	Important learner outcomes/competencies for professional nursing are developed through arts-based pedagogy.
Building relationships (C)		
Cultural identification (U)		
Developing empathy (U)		
Developing the art of interpretation (U)		
Empathy (C)		
Empathy for lived experiences of clients (U)		The arts provide a way of knowing for nursing

Esthetic knowing (U)		<p>students that affect a broad range of learning outcomes/competencies which are significant for the development of professional nurses.</p> <p>These outcomes/competencies involve both a process and a product. For example, students may learn the skill of reflection and this process may result in other important outcomes, such as increased self-awareness.</p>
Exploration of empathy skills (U)		
Gaining understanding through creative expression (U)		
Increasing cultural awareness (U)		
Individual perception of current life status (C)		
Normalization of mental illness and the client with mental illness (U)		
Recognizing spiritual dimensions of everyday life (C)		
Spirituality transcends traditional religions (U)		
Spirituality-enhancing the nurses' role (U)		
Teamwork (C)		
The American dreamer (C)		
The reluctant immigrant (U)		
A deeper level of understanding (U)	Facilitating in-depth cognition	<p>Students can develop relational and reflective capacities through ABP. Arts-based experiences help nursing students to learn about themselves, others, and the profession of nursing. Arts-based pedagogy can also foster both cognitive and affective learning that can be transformative.</p>
ACES framework themes (C)		
Developing a deeper awareness of the meaning of spirituality (U)		
Divergence from original expectations (C)		
Empirical knowing (C)		
Forgiveness (U)		
Helping critical thinking (C)		

"Ella" clarified difficult-to-teach concepts (U)		
Artistry in the sciences/nursing (C)	Illuminating professional foundations	
Awareness (U)		
Boundaries and horizons in the profession (C)		
Concern for person-centered care (C)		
Definitions of artistry (U)		
Ethical knowing (U)		
Holism in nursing (U)		
Poems of professional growth (C)		
Poems of values (C)		
Prescription for nursing (U)		
"I didn't feel like I should have been there" (U)	Learning about self	
"I wasn't really I wasn't angry at all" (U)		
Boundaries and horizons within self (U)		
Connection, challenge and conflict (C)		
Developing self-understanding (U)		
Digital story as an emotional experience (U)		
Fears about personal safety and personal competence (U)		
Personal knowing (U)		
Poems of feelings (C)		

Student reflections revealed inner, often hidden landscapes (U)		
The student as wounded healer (C)		
“...they shouldn’t be doing the job” (U)		
Digital story as a reflective experience (U)	Reflecting on, with or through the arts	
Opportunity for reflection (U)		
Poems of description (U)		
Scratching surfaces: Inquiring and experiencing through the art-making processes (U)		
“Ella” prompted clarification of the past and/or triggered future projections (U)		
Challenge and conflict (C)	Supporting metamorphosis/transformation	
Changing perceptions (U)		
Digital story as an opportunity to gain new insights (U)		
Having expectations (U)		
Metamorphosis (U)		

Table 7: Results of meta-synthesis of qualitative research findings two: Important learner outcomes/competencies for professional nursing are developed through arts-based pedagogy

The arts provide a way of knowing for nursing students that affect a broad range of learning outcomes/competencies which are significant for the development of professional nurses. These outcomes/competencies involved both processes and products. For example, students may learn the skill of reflection and this process may result in other important outcomes, such as increased self-awareness. Students can develop relational and reflective capacities through ABP. Arts-based experiences help nursing students to learn about themselves, others, and the profession of nursing. Arts-based pedagogy can also foster both cognitive and affective learning that can be transformative. This synthesized finding was derived from the following six categories and the supportive findings/illustrations underpinning each category: 1) Developing relationality, 2) Facilitating in-depth cognition, 3) Illuminating professional

foundations, 4) Reflecting on, with or through the arts, 5) Learning about self, and 6) Supporting metamorphosis/transformation.

Category 2.1: Developing relationality

Arts-based pedagogy developed students' relational skills such as empathy, cultural competence, ability to collaborate, awareness of multiple perspectives, and understanding of differences and of a person's unique context. Students also discussed how artistic modes enabled them to see the whole person and normalized mental illness. Arts-based pedagogy fostered competencies that could promote students' relationships with clients, peers and teachers in their learning community, and others in their profession.

Finding 1: A snapshot of spirituality through others' impressions of art (C)

"Everyone has their own opinion on a painting. One person saw hope in a painting that I thought was horrible, something like the Opening of the Sixth Seal with all the thunder and lightning. I saw people falling off and dying. It was good to see everyone else's different ideas." (p. 281)⁸⁸

Finding 2: Building relationships (C)

"I think about [the client] as a person, not like this crazy person, but a real person with real feelings and real problems." (p. 92)⁹¹

Finding 3: Cultural identification (U)

"But I think in terms of being aware that your patients or clients could have these issues, which is highly likely in today's society too. I don't know in Canada - because there are a lot of immigrants and we are relatively safe here from torture, but in other countries, it's huge. So, if you are dealing with individuals who are immigrants from other countries, or oftentimes they are here because they are escaping from wars and they escaping from things from the other countries - just being able to be thinking that, "Yeah, this client - I don't know that he has, but it is possible that he has been a victim, or she has been a victim of torture and sexual assault also."" (p. 266)⁸

Finding 4: Developing empathy (U)

"Students described feeling more confident understanding their clients. "I have a better idea of what is going on in the head of someone with a mental illness"; "I can't believe what schizophrenics have to endure"; "it gave me more understanding of what schizophrenics must go through just to react 'normally' to their environment"." (p. 6)⁴⁸

Finding 5: Developing the art of interpretation (U)

"You sort of look at someone from a different perspective and see why are they acting that way? What did they feel at that moment? What was going on? Like the way you look at a painting; why is it so dark and gloomy? - Lisa" (p. 77)⁹

Finding 6: Empathy (C)

"Everyone asked, 'What would I do in that situation? How would I feel? How would I react?' Each interviewee identified with one character in particular (primarily the young woman, her husband and the torture victim, but not the girl's mother, her father or the jailer/torturer), but which one seemed to depend on personal experience." (p. 266)⁸

Finding 7: Empathy for lived experiences of clients (U)

"One student described the alienation from health care staff experienced by a client she cared for in her poem, and lamented: "Have they walked in my shoes? Have they lived my life . . . Do they see me crying? Down on my knees . . . thinking isn't there someone out there who cares about me?" (p. 408)⁸⁵

Finding 8: Esthetic knowing (U)

"I think my mom's story will definitely affect how I personally practice as a nurse. It gave me an inside look of how the patient is feeling. I feel like I will be more understanding of how vulnerable they feel. I think I will be able to connect with them on a closer level because I have her experience to use as a comparison. I will try to be mindful of how they are feeling, not just mindful of how I am doing at the technical aspects of my job." (p. 10)⁵⁹

Finding 9: Exploration of empathy skills (U)

"[This] really helped us to remember what our patients are going through. The story made me think about patient feelings and really trying to listen to their experience. I can use the concepts in this story in my practice by becoming a more aware healthcare professional and truly think[ing] about patient feelings." (p. 61)⁵¹

Finding 10: Gaining understanding through creative expression (U)

"The projects really made me think about what it is like for the clients and the importance of getting to know people before judging them." (p. 92)⁹¹

Finding 11: Increasing cultural awareness (U)

"I think this integration brought a perspective of how values differ, through culture and over time. Also, it helped my understanding of the judgment that is placed on suicide victims especially when honor is at stake. Culturally, it is important to know what we are dealing with in clinical settings. Also, the way we treat people with mental illness has changed, but still needs a lot more improvement." (p. 6)⁴⁸

Finding 12: Individual perception of current life status (C)

"These attributes can be seen in statements such as, "Due to his occupation, we got to travel a lot. I've been all around the world," and "You see this pic, this is our happiest family photo. Yup, oh I really loved that car. She was a real beauty." Images used to support these statements included those shown in Figure 4-42 and Figure 4-43." (p. 83)⁸¹

Finding 13: Normalization of mental illness and the client with mental illness (U)

"One poem entitled "The Life of a Paranoid Schizophrenic" [sic] protests "the glares, snares, and obvious stares . . . the questions, suggestions, and misinterpreted impressions . . . forced relaxation, sedation, and routine medication" and concludes "you're the one who's challenged (mentally) and I'm the one who's free."" (p. 408)⁸⁵

Finding 14: Recognizing spiritual dimensions of everyday life (C)

"I picked a sculpture called the Homeless Wanderer. I thought it was very sad and poignant. Someone really alone in society and left out in the cold. When I was thinking about nursing I think we deal with those kinds of people. They are the ones who need our help the most. That's why I picked that one." (p. 281)⁸⁸

Finding 15: Spirituality transcends traditional religions (U)

"Yes it also helped me to understand that you can help someone spiritually without it necessarily having to be religious . . ." (p. 282)⁸⁸

Finding 16: Spirituality-enhancing the nurses' role (U)

"I think I would not have had a clue what to do and brushed over it if it hadn't have been for the series of lectures which has broadened the mind to think that this is an aspect of nursing that you have to deal with and it has to be done." (p. 282)⁸⁸

Finding 17: Teamwork (C)

"I also know I won't be making the journey alone through the semesters of school" (p. 8)⁸⁴

Finding 18: The American dreamer (C)

"The way Esperanza speaks of how it is done in "that" country reveals that she is trying to break away from her heritage. She is wanting to adopt the new way of thinking and rituals of America which I feel is common among cultures new to America. The younger generation feels that they need to "fit in" with the American culture rather than stick to their roots. (student 11)" (p. 9)⁵¹

Finding 19: The reluctant immigrant (U)

"We always assume that everyone wants to be in our country, but some just come with their families and really want to go back home. We always say how they should learn our language if they want to live here, but that may be the only piece of their heritage they have left. (student 1)" (p. 6)⁵¹

Category 2.2: Facilitating in-depth cognition

Learning in the cognitive domain also occurred through the arts, and nursing students reported that ABP involved intense thinking and helped them gain empirical knowledge. The ABP learning experience facilitated a more in-depth understanding of the content, clarified complex concepts, and fostered critical thinking.

Finding 1: A deeper level of understanding (U)

"I thought this teaching strategy was unique and it made me think more outside the box. The painting made me view non-verbal communication differently." (p. 4)⁴⁸

Finding 2: ACES framework themes (C)

"The author of digital story two described his patient's fluid status concerns by the following statement, "I also have type 2 diabetes, hypertension, chronic kidney disease and coronary artery atherosclerosis." "(p. 78)⁸¹

Finding 3: Developing a deeper awareness of the meaning of spirituality (U)

"I think for me my personal understanding of what spirituality would have been before the set of lectures and the trip to the art gallery was probably very narrow. I would have instantly thought get the chaplain if you were in a hospital situation. Whereas now I am a lot more open to ideas, a lot more understanding that spirituality is not necessarily just one thing but that its basically peoples' personal feelings, whether its bad times or good times." (p. 282)⁸⁸

Finding 4: Divergence from original expectations (C)

"It was a lot of thinking...not like an evaluation cause normally when you evaluate yourself you have a check list...and then you look back...[this was] like going from the inside out, not the outside in...it felt like that...it was an eye-opening process. (Sheila)." (p. 5)⁸⁶

Finding 5: Empirical knowing (C)

"From birth he had a port wine stain all over his body, making him look very different than most babies. Having a child with so many physical and mental challenges was a huge wake up call for my parents. Everything they had planned in their life changed the moment he was born." (p. 7)⁵⁹

Finding 6: Forgiveness (U)

"The whole play was about their journey through to find forgiveness, or give forgiveness, and that journey seemed to me to be the important part - the girl worked through her inner demons and came to terms with what had happened to her, and integrated it into, rather than. . . . Well, she had blocked it out before, and it became a part of her and it was painful part, but now she could move on and go past it." (p. 265)⁸

Finding 7: Helping critical thinking (C)

"It helps to make you think. Information given is helpful to understand about different topics." (p. 8)⁹⁰

Finding 8: "Ella" clarified difficult-to-teach concepts (U)

"I think it is important for people entering the medical field to read and hear stories such as this one. This story does a great job at illustrating the positive as well as the negative things about some healthcare providers.... Through the story of Suzanne's relationship with Ella, people are able to understand the importance of understanding and accepting patients as individuals." (p. 288)⁸⁹

Category 2.3: Illuminating professional foundations

Arts-based pedagogy illuminated numerous aspects of professional nursing such as the characteristics of a nurse, ethics, advocating for a client, values, holism in nursing care, person-centered care, philosophy of nursing, and artistry within nursing. Students discussed how their learning through ABP was applicable to nursing practice, and influenced their views about the profession of nursing, their own development as a professional, and professional nursing care.

Finding 1: Artistry in the sciences/nursing (C)

"When we provide mental care to our seriously ill patients, especially those who suffer from terminal cancer, we can give them comfort through artistic activities. We may not necessarily have to sing songs to them, but we can draw a picture to show our consideration for them (P1)." (p. 926)⁸²

Finding 2: Awareness (U)

"Writing about an aesthetic memory was effective in increasing my focus upon aesthetic aspects of nursing care that could not be taken for granted" (p. 45)⁹³

Finding 3: Boundaries and horizons in the profession (C)

"A good way to put all the characteristics of nurse in one picture (brave, compassionate, someone to look up to)" (p. 9)⁸⁴

Finding 4: Concern for person-centered care (C)

"The notion of "treating the whole patient," "focusing on the patient as a whole person," and the importance of an "individualized holistic approach" were comments frequently expressed in the evaluation of this learning experience." (p. 60)⁵¹

Finding 5: Definitions of artistry (U)

"Artistry is related to our daily life. For instance, singing a song in a clinical context can relieve the stress of medical staff and patients. When we need to communicate with patients, we have to find a suitable way of expressing ourselves. This is the art of communication (P7)." (p. 926)⁸²

Finding 6: Ethical knowing (U)

"I've learned in my classes this year that nurses are the advocates for patients. They should be on the patient's side and try to do what is in the best interest for that patient. They should take the time to listen to what the patient says. I would never want anyone to go through the anxiety I felt when I thought no one believed me." (p. 7)⁵⁹

Finding 7: Holism in nursing (U)

"For another student, an abiding thought from the experience of the play was that the incorporation of experiences into the self is really a big theme for nurses because we are the sum of our experiences and it's a major experience that has been life-shattering and if we try to isolate it and push it away from ourselves we are almost denying a part of ourselves and that can result in great health problems." (p. 267)⁸

Finding 8: Poems of professional growth (C)

"Home Care" Home care nursing is a special need...It also takes a special breed. Preparation and safety is the key. I don't think home care is for me." (p. 460)⁹²

Finding 9: Poems of values (C)

"Let Me Be a Nurse" Being a student nurse requires dedication, With years of studying and preparation. I pray for guidance and humbly ask, That I will do well with this chosen task. Preventing illness and promoting wellness. Will be our most memorable experiences. When illness strikes or pain demands, And a life is placed within my hands, Give me compassion, knowledge and skill To do the things that comfort and heal. Suffering makes patients' fears grow worse And they seek reassurance from their nurse. Help me see things from their point of view, And always to know what is best to do. May I have a part, in some small way, In restoring good health to someone today. Let my work be all that I want it to be I ask the Great Healer to work through me." (p. 460)⁹²

Finding 10: Prescription for nursing (U)

"Often in the story it talks about people striving for something they cannot be and in nursing we have to realize not every patient will be able to go back to normal. So we need to treat them and get them to a place where they are comfortable and without pain. (student 16)" (p. 11)⁵¹

Category 2.4: Learning about self

Arts-based pedagogy helped nursing students to learn about and express themselves through artistic modes. Through ABP experiences, participants developed self-awareness of their own perspectives, judgments, fears, and values. They reflected on previous clinical and life experiences, and of how these were affecting their nursing care. A strong pattern in this category was that ABP fostered affective learning; students found the learning experience to be emotional, and they were able to develop a deeper understanding of their own emotions.

Finding 1: “I didn’t feel like I should have been there” (U)

“That was because that’s how I felt like, even though I know I should have been there, otherwise the attention would have been away from this woman, I didn’t feel like I should have been there” (p. 813)⁵⁸

Finding 2: “I wasn’t really angry....I wasn’t angry at all” (U)

“...looking at the colours and the pictures and things, I think maybe I’ve, what’s the word, sort of pushed it up, (the experience) in my head to be something bigger than it was, over emphasised it or something, so maybe I should have just let it chill out a bit, been more confident” (p. 814)⁵⁸

Finding 3: Boundaries and horizons within self (U)

“Pushing Limits was expressed by students in the following ways: “For one, I would never have the guts to get up in front of a class of 40 people”; “stepping out of comfort zones and a need to branch out.” (p. 8)⁸⁴

Finding 4: Connection, challenge and conflict (C)

“I had no idea what my values were or how strongly I felt (P4).” (p. 310)⁸⁰

Finding 5: Developing self-understanding (U)

“It made me a little more aware of my presence around others. I can be quite an outgoing person, and should be conscious of the way I act around those who may not be quite as open” (p. 5)⁴⁸

Finding 6: Digital story as an emotional experience (U)

(Participant 5) “I felt sad and I felt angry. Angry that they had to go through all that and they really didn’t need to and if somebody had just listened to them it would have made their journey so much easier. It really upsets me because I always think what if it was my family and if it was me in that situation.” (p. 291)⁸³

Finding 7: Fears about personal safety and personal competence (U)

“I can give him medications or build a wall on the beach’s shore, but I can’t stop the waves in the ocean.” (p. 408)⁸⁵

Finding 8: Personal knowing (U)

“While we were all in the hospital with my mom on the oncology unit I was so grateful for the care that was given to us by the nursing staff. Something as simple as sitting in the room with us instead of at the nurse’s station made all the difference. I hope I can be that helpful in my nursing career. The nurses went above and beyond to make us feel better and I will never forget what they did for us. I think that this will

really shape my nursing career by really focusing on the whole picture and not just the surface with the patient." (p. 9)⁵⁹

Finding 9: Poems of feelings (C)

"“A Nurse’s Touch” Into my home the nurse makes her way, She takes the time to talk and to pray. Taking my hand she makes me feel safe, And all of my worries have lifted away. Her caring, loving and gentle touch, Shows me that nursing loves so much.” (p. 459)⁹²

Finding 10: Student reflections revealed inner, often hidden landscapes (U)

"I would love to give all my patients a back rub when in pain, but it is more important for me to check over my three pages of medicine orders to make sure I am giving the correct dosages. This is the catch twenty-two of nursing.... Suzanne mentions that some health caregivers draw a line in the sand, to separate themselves from their patients. This relationship allows me to properly care for.... my other patients. However, I am also a person with feelings and emotions. I respond to human suffering, too. So, this predicament leaves me somewhere toward the middle. I have to be a nurse that is caring and compassionate, and does not lose sight of the reality that I am not a friend or a family member. I am nurse with a job to do. Nursing is a job that you can only understand from the inside.... I know that nursing school cannot teach me how to care. I must explore and discover this myself, through time and experience with *patients like Ella* [italics added]." (p. 286)⁸⁹

Finding 11: The student as wounded healer (C)

"Another student acknowledged simply that her mental health rotation was “Too Close to Home.” (p. 409)

⁸⁵

Finding 12: “...they shouldn’t be doing the job” (U)

"I’m angry, yes angry, that they shouldn’t be doing the job.... it was left to the students to see what the patients wanted. I never saw a qualified member of staff answer a buzzer" (p. 814)⁵⁸

Category 2.5: Reflecting on, with or through the arts

Nursing students learned to reflect on, with, or through artistic modes, and this reflection fostered other important learning that is represented by other categories in this synthesized finding. Arts-based pedagogy provided them with an opportunity to reflect on practice and on other personal experiences. Various levels of reflection were elicited through artistic modes, from description to deeper levels of reflection.

Finding 1: Digital story as a reflective experience (U)

"(Participant 5) “The patient story encourages me to reflect on practice which I don’t think sometimes when you are on a ward you’ve not got time to do. Things happen and people will tell you things but then you’re on to the next task, you don’t recognise what has been said, but in the classroom you have time to be able to reflect. The patient story helps you to do that.” “ (p. 291-2)⁸³

Finding 2: Opportunity for reflection (U)

"The issues in the story made me think about experiences that I have had in the past and ways that I want to interact with my patients in the future. I was left thinking how I could change or improve my ways. I have

thought a lot about this story. [This was] a good opportunity to self-reflect. This was an opportunity for inner self-analysis." (p. 61)⁵¹

Finding 3: Poems of description (U)

"“The Home Visit” Standing on the doorstep, safely behind Pat, I searched for the doorknob, and wiped my feet on the mat. A voice from within hollered, “Come on in!” When I walked through the door, the visit would begin. Inside was a mess, clutter on all sides. It was hard to believe this was where someone resides. And then I saw her, lying in the bed. The smell so foul, thoughts of running away filled my head. And then it hit me like a ton of bricks... I don’t clean these messes and do nasty jobs for kicks! I do it because I have a calling To care for the ill and catch those who are falling.” (p. 459)⁹²

Finding 4: Scratching surfaces: Inquiring and experiencing through the art-making processes (U)

"The piece was made by covering the paper in lots of colours. It was then covered with a black oil pastel. The pastel was then scratched off with a needle leaving the colour. The piece represents the darkness and black cloud that falls on people when they encounter mental illness. Recovering from mental illness is a slow process and, unlike a physical illness, the improvements are difficult to see on a daily basis. The colour in the piece is in very narrow lines created by the needle. However although it is in narrow lines it is very powerful. The small day to day things in nursing can too be very powerful. The colour coming through the black is a representation of the work of the mental health nurse. By supporting, listening to and being there for people, the nurse can bring out the person's true colours. Through mental health nursing hope and beauty can emerge from the darkness. –Helen" (p. 74)⁹

Finding 5: “Ella” prompted clarification of the past and/or triggered future projections (U)

"I remember last year as a tech I took care of a man who was... very sick. The nurse was busy with other patients and I was able to sit and talk with his wife. I felt great going home that night, like a warm feeling of right. The next day he sadly passed on.... She cried and held my hand, telling me how she was alone. I touched her arm and told her that we were there for him and he did not die alone.... That day I shed a tear and wondered why because it had been years since I had cried. I realize, after thinking about Ella, that the tears I shed were for me. It allowed me to take his death into my heart to help his wife that day. That night she left me with a huge hug that seemed to never end. She told me that I was going to be a wonderful nurse.... I wanted to break down, but I stood there like a robot, emotionless. The story showed me that we need to recognize our patients as humans, to not put that barrier around them for our emotional safety and sanity as nurses." (p. 287)⁸⁹

Category 2.6: Supporting metamorphosis/transformation

Nursing students' views and perspectives were transformed through the ABP learning experiences. The experience challenged their assumptions and values, provided new insights into patient experiences, changed their expectations, and resulted in a metamorphosis of personal change.

Finding 1: Challenge and conflict (C)

"Your values and your beliefs are kind of some ways intimate. And to be able to open up and share it, that is kind of dodgy ground for me, because I don’t know what the others are going to think and do about it or feel (P2)." (p. 310)⁸⁰

Finding 2: Changing perceptions (U)

"A lot of the assumptions I had about [psychiatric] nursing and [psychiatric] patients have been changed through this clinical." (p. 92)⁹¹

Finding 3: Digital story as an opportunity to gain new insights (U)

"(Participant 11). 'I think it just makes you aware that these are real people, with real lives that you're dealing with and maybe you look at people now and you look at the whole picture not just "that person" in front of you. It really does bring it home to you how your behaviour can have a big effect on someone else.'" (p. 292)⁸³

Finding 4: Having expectations (U)

"This was a good experience. I never realized I had placed a stigma on [people with mental illness] but after realizing how nervous I was getting about having to talk to my client and thought about why I was nervous, I realized it was for unfounded reasons." (p. 92)⁹¹

Finding 5: Metamorphosis (U)

"In these poems, the student wrote about personal change. Their experiences with clients and the mental health course led to positive growth, regardless of their starting point. Two poems were written in brief verse, one describing a transition from a "dark room" to "light" (Poem 2). The second affirming that qualities of strength, courage, and faith are in all human beings (Poem 3).... In "I'll Always Remember You" (Poem 4), the student expresses gratitude for having known the client, writing that the benefits she received in the relationship were "wisdom" and "A glimpse of God I saw, beautiful.'" (p. 409-410)⁸⁵

Results of narrative synthesis of quantitative research findings

A meta-analysis was not possible due to the heterogeneity of the 20 included quantitative studies and the lack of appropriate data for statistical pooling. Heterogeneity was evident in the research designs (methodological heterogeneity) and measured outcomes (clinical heterogeneity). See Appendix VI for a full description of the quantitative studies. Thus, the types of ABP interventions used in the studies were analyzed and the quantitative studies were combined with a narrative synthesis in regard to the measured outcomes.

All included quantitative studies measured the effectiveness of ABP with undergraduate nursing students, as defined in our protocol. However as noted in the protocol, if an art form was integrated with another subject matter in order to impact student learning, the art form and nursing subject were not limited in this exploratory review. Thus, there was a wide variety of ABP interventions (see Table 8). Included studies investigated various ABP interventions integrating the following art forms: storytelling,^{90, 96, 101} visual art dialogues,^{106, 107} expressive arts and psychodrama,⁵³ creative arts activities,^{55, 91} entertainment films,^{97, 103, 105} creative-bonding interventions,^{98, 104} literature,^{87, 94} recreational music making,⁹⁵ original songs,¹⁰⁸ drama,⁹⁹ wearable masks,¹⁰⁰ and digital learning objects (stories).¹⁰²

Numerous outcomes were measured in the quantitative studies and many of the experimental/quasi-experimental studies had some significant findings (see Table 8). The measured outcomes were grouped into the following categories based on conceptual similarities: knowledge acquisition, level of empathy,

attitudes towards others, emotional states, reflective practice, self-transcendence, cognitive and ethical maturity, and learning behaviours. The descriptive cross-sectional studies all measured some aspect of the nursing students' perspectives of ABP.

Table 8: Measured outcomes and art forms used in ABP interventions

Experiments/Quasi-experiments		
Measured Outcome	Significant Findings: Art Form	Non-significant Findings: Art Form
Knowledge Acquisition	Storytelling ⁹⁰	Original songs as mnemonic devices ¹⁰⁸
	Visual art dialogues ¹⁰⁷	
Level of Empathy	Viewing the feature film "Wit" ⁹⁷	Creative reflective teaching strategies ⁹¹
	Expressive art and psychodrama ⁵⁴	
	Viewing an entertainment film ¹⁰⁵	
Attitudes towards Others	Reading a work of literary journalism (limited findings) ⁹⁴	Creative-bonding intervention ¹⁰⁴
	Creative-bonding intervention ⁹⁸	
Emotional States	Recreational music making ⁹⁵	
	Creative arts activities ⁵⁵	
Reflective Practice	Stories ⁹⁶	
Self-transcendence		Creative-bonding intervention ⁹⁸
		Creative-bonding intervention ¹⁰⁴
Cognitive and Ethical Maturity	Narrative pedagogy using art forms (limited findings) ¹⁰¹	
Learning Behaviours	Stories ⁹⁶	
	Visual art dialogues ¹⁰⁶	
Descriptive Cross-sectional Studies (no inferential statistics)		
Perspectives of ABP	A drama about death and dying ⁹⁹	
	Designing a wearable mask ¹⁰⁰	
	Digital learning object (stories) ¹⁰²	
	Viewing films ¹⁰³	
	Reading an autobiography ⁸⁷	

Knowledge acquisition

Three studies looked at the impact of ABP on the knowledge acquisition of undergraduate nursing students,^{90, 107, 108} but there was methodological heterogeneity between the studies. Two studies had significant findings,^{90, 107} and one study had non-significant findings.¹⁰⁸ In a one group pretest-posttest quasi-experiment, the researcher tested the effectiveness of storytelling on undergraduate associate

degree nursing students' perceived knowledge acquisition in an obstetric and pediatric clinical course.⁹⁰ Using an investigator developed tool, the researcher found that the nursing students demonstrated a statistically significant increase in perception of knowledge acquisition in five content areas: physiological alteration, psychosocial alteration, nursing intervention, legal/ethical/cultural issues, and community resources. Limitations of this study included the lack of a control group and use of a researcher developed tool with no psychometric testing. As well, the knowledge questionnaire measured the student perspective and was not an objective measure of knowledge acquisition.

In a randomized controlled experiment in Sweden, Wikström¹⁰⁷ investigated if first year nursing students participating in visual art dialogues had improved knowledge about nursing care compared to a control group who participated in a group dialogue alone. The researcher used a unique tool, The Wheel Questionnaire, to map and measure the students' learning about good nursing care. Students in the intervention group demonstrated significantly more motivation, structure, and emotional investment in their learning about good nursing care.

Pardee¹⁰⁸ used a nonequivalent control group posttest only quasi-experiment in a nursing pharmacology course to investigate if original songs as mnemonic devices increased students' knowledge of pharmaceutical content compared to the control group, who participated in standard education. No significant differences were found between groups in regard to knowledge of pharmaceutical content as measured by multiple-choice tests. The dose of ABP may have been an issue in this study, and it would have been interesting to have some indication of the students' perspective of this unusual arts-based strategy in nursing education.

Level of empathy

Four studies measured the effectiveness of ABP on nursing students' empathy levels,^{53, 91, 97, 105} however, they used different research designs and some lacked appropriate data for statistical pooling so a meta-analysis was not possible. Three studies had some significant findings,^{53, 97, 105} and one study had non-significant findings.⁹¹ Wilt and colleagues¹⁰⁵ used a randomized controlled experiment to compare empathy levels between three different treatment groups that participated in various educational interventions about mental health themes (a film/guidance group, a role play guidance group, and a film/discussion group) and a control group. Empathy was measured with the Layton Empathy Test. The film/guidance group demonstrated a significant increase in empathy after the second treatment. However, this difference was not maintained on the final post-test which demonstrated no group differences.

In a nonequivalent control group pretest-posttest quasi-experiment, another group of researchers also investigated the effectiveness of viewing a feature film about a patient's experience with cancer on nursing students' empathy as measured by the Jefferson Scale of Empathy.⁹⁷ Statistically significant differences were found within the experimental group (pre to post intervention), and between the experimental group and the control group, who had a presentation on the topic of "career opportunities in nursing". Furthermore, the experimental group's empathy scores were maintained at seven weeks post-intervention.

In a pretest-posttest one group quasi-experiment, researchers tested the effectiveness of expressive art and psychodrama on nursing students' empathy levels as measured by the Scale of Empathic Skill.⁵³ The arts-based activities were intended to foster awareness of the participants' intrinsic needs, relational

styles, and role diversity. Nursing students who participated in varied expressive arts activities demonstrated a statistically significant increase in empathy scores. This analysis consisted of a within group analysis, and a limitation of this study was that there was no control group.

In contrast, another researcher tested if nursing students who participated in a creative reflective psychiatric clinical experience had increased empathy scores compared to a control group, who participated in a conventional 14-week clinical experience.⁹¹ Empathy was measured with the Interpersonal Reactivity Index (IRI) in this nonequivalent control group pretest-posttest quasi-experiment. No significant differences were found between groups, but trends were noted. There may be a number of limitations in this study which affected the ability of the researchers to detect a difference. First, the dose of the ABP intervention may not have been intense enough compared to the control group's treatment. Second, as the author notes, a more specific tool measuring empathy in mental health should be used in future research.

Attitudes towards others

A number of researchers have considered the effects of ABP on nursing students' attitudes towards others; however, findings were equivocal. This group of studies lacked appropriate data for statistical pooling so a meta-analysis was not possible. Two studies measured the impact of ABP on nursing students' attitudes towards elders,^{98, 104} and another study measured the impact on nursing students' cultural attitudes.⁹⁴ Interestingly, Chen and Walsh⁹⁸ found that nursing students who participated in a creative-bonding intervention with elders had significantly higher scores on attitudes towards elders than the control group, but Walsh et al.¹⁰⁴ did not find a significant difference between groups with the same type of intervention. Both studies employed a nonequivalent control group pretest-posttest quasi-experiment design and measured students' attitudes towards elders with the Revised Kogan's Attitudes Toward Old People Scale. However, the study with significant results was conducted with 194 nursing student participants in Taiwan,⁹⁸ and the study with non-significant findings was conducted with 22 nursing student participants in the United States (Walsh, 2008).¹⁰⁴

Anderson⁹⁴ used a one group pretest-posttest quasi-experiment to determine if reading and reflecting on a work of literary journalism impacted nursing students' cultural attitudes, as measured by the Assessing Your Personal Responses to Transcultural Health Care Situations and a cultural values questionnaire. The researcher found statistically significant within group differences on one item from each tool: "People are the same. I don't behave any differently toward people from a cultural background that differs from mine" on the Assessing Your Personal Responses to Transcultural Health Care Situations questionnaire, and "rating the appropriateness of direct eye contact" on the cultural values questionnaire.

Emotional states

Two studies, using different research designs, investigated the impact of ABP on various aspects of nursing students' emotional states, and both researchers found significant findings. Walsh et al.⁵⁵ studied the effect of an ABP intervention on nursing students' emotions, anxiety, and stress, and Bittman et al.⁹⁵ measured nursing students' burnout, mood dimensions, and total mood disturbance. Walsh et al.⁵⁵ used a pretest-posttest two group quasi-experimental design to measure if the experimental group, who participated in creative arts activities, had decreased stress and anxiety and improved emotional states, compared to the attention control group. Stress was measured with The Mini-Profile of Mental States,

anxiety was measured with the Beck Anxiety Inventory, and emotions were measured with the Affects Balance Scale. Although there was a significant reduction in stress and anxiety, and improved positive emotions, in the intervention group, the student participants were involved in the research study design and analysis which may have biased the results.

In a controlled prospective crossover quasi-experiment, Bittman and colleagues⁹⁵ tested if recreational music making could positively impact nursing students' burnout, mood dimensions, and total mood disturbance. Burnout was measured with the Maslach Burnout Inventory and mood dimensions were measured with the Profile of Mood States. After the intervention, researchers found significant improvement for certain domains: emotional exhaustion, tension/anxiety, depression/dejection, anger/hostility, fatigue/inertia, confusion/bewilderment, and total mood disturbance. Although the study appears to have had a control group, the control group also received the intervention and all participants were analyzed together in regard to intervention effect on outcomes using a paired t-test for within group comparisons. The comparisons between groups were only conducted to control for history by looking at distress trends before and after the intervention.

Reflective practice

Only one study was found that looked at the outcome of reflection. A one-group pretest-posttest quasi-experiment was used to evaluate the impact of using stories on nursing students' reflective practice as measured by the Reflective Questionnaire.⁹⁶ After the use of stories, the sub-scale scores for habitual action demonstrated a statistically significant decrease, and the sub-scale scores for reflection demonstrated a statistically significant increase. Two individual questions demonstrated statistically significant changes: "In this course we do things so many times I started doing them without thinking" and "I often re-appraise my experience so I can learn from it and improve it for my next performance".

Self-transcendence

Two studies that were mentioned earlier in regard to attitudes, also tested if participating in a creative-bonding intervention with elders increased nursing students' self-transcendence, as measured by the Self-transcendence Scale.^{98, 104} These studies lacked appropriate data for statistical pooling so a meta-analysis was not possible. In these nonequivalent control group pretest-posttest quasi-experiments, no significant differences were found between the intervention group members, who participated in a creative-bonding intervention, and the control group members, who participated in a friendly visit.

Cognitive and ethical maturity

In one nonequivalent control group quasi-experiment, the researchers examined the impact of narrative pedagogy on nursing students' cognitive and ethical maturity.¹⁰¹ Cognitive and ethical maturity were measured by the California Critical Thinking Disposition Inventory (CCTDI) and the Measure of Intellectual Development (MID). Most findings were non-significant. There were no significant differences between the intervention and control groups on the CCTDI or the MID scores, with or without adjustment for age which was a significant covariate. However in regard to the within group comparisons for the intervention group, two of the CCTDI subscales demonstrated a statistically significant change: truth-seeking and systematicity.

Learning behaviours

Two researchers investigated the impact of ABP on learning behaviours, which are academic enablers that make learning possible,⁷¹ such as one's preferred approach to learning⁹⁶ and engagement in learning.¹⁰⁶ Bradshaw⁹⁶ measured the impact of stories on nursing students' preferred approach to learning as measured by the Revised Two Factor Study Process Questionnaire (R-SPQ-2F) in a one group pretest-posttest quasi-experiment. The sum scores for deep and surface learning on the questionnaire did not demonstrate a statistically significant increase. However, 50% of the individual students' scores changed significantly, and there were two questions on the deep approach to learning scale that did demonstrate a statistically significant difference. These items were: "I find that at times studying gives me a feeling of deep personal satisfaction" and "I spend free time finding out more about interesting topics, which have been discussed in different classes".

In a randomized controlled experiment, Wikström¹⁰⁶ tested if participating in visual art dialogues significantly increased nursing students' engagement in learning about empathy, compared to a control group. The researcher used a unique tool, The Wheel Questionnaire, to map and measure the students' structure, motivation, and degree of emotional investment in learning about empathy. Students in the intervention group demonstrated significantly more structure and emotional investment in their learning about empathy compared to the control group who participated in group dialogues alone. No differences were found in regards to motivation between groups. The author concludes that "Students in the visual art group were more engaged in learning about empathy"^{106(p. 49)}.

Students' perspectives of ABP

In five descriptive cross-sectional studies, researchers measured nursing students' opinions and feelings about the ABP initiative,⁹⁹ perspectives/perceptions of the ABP learning activity,^{87, 102, 103} and learning experiences.¹⁰⁰ Overall, nursing students' had positive perspectives of ABP initiatives. However, no inferential statistics were employed; thus, no conclusions can be drawn about the statistical significance of these findings. Deeny and colleagues⁹⁹ evaluated nursing students' opinions and feelings regarding a drama about death and dying with a researcher developed tool. Overall, the student response to the drama was very positive: 84% of one group, and 80% of the other, believed that the drama "helped them to learn about death and dying, and gain insight into the patients' perspective" (p. 106), and 80% of students responded positively to the statement that "the drama made me think about my own attitudes to death and dying" (p. 109).

In another descriptive cross-sectional study, researchers evaluated nursing students' learning experiences of designing a wearable mask about therapeutic communication skills.¹⁰⁰ Students' learning experiences were measured with multiple sources of data. The students' artistic masks were varied in content and design, and the students' aggregate scores on the assignment demonstrated that more than 80% of students achieved a passing grade or higher. Using the Briggs's SOLO taxonomy (1995), the researchers found that 32% of students were uni-structural in that they made simple connections, 9% were relational in that they made connections within the content and beyond, and 30% were abstract in that they were able to generalize and transfer content to another area. In regard to the student evaluations, the majority of students rated the assignment as an effective learning strategy (70%), and found it engaging on a personal level (82%). On the negative side, 8% found that the assignment did not engage them in

learning, and 10% were ambivalent. Overall, the results seem to indicate that students were engaged with this assignment and could relate it to nursing. It also promoted deeper learning for some students.

Fenton¹⁰² assessed students' perspectives of digital learning object learning activity (storytelling/digital storytelling) with the Digital Learning Object questionnaire. Many nursing students found that the use of a digital learning object was interesting and motivating to watch (82.5%), easy to navigate (82.5%), accessible (90%), reusable (82.5%), and clear with the appropriate level of detail (80%). They also reported that it helped them to gain insight into a young person's experience of being a patient (87.5%) and into the patient's experience of healthcare (82.5%).

Masters¹⁰³ assessed nursing students' perceptions of viewing films in a psychiatric mental health class with a researcher developed tool. Nursing students' evaluation of watching pertinent films revealed that they found it to be a valuable learning experience which added to class content and improved their understanding of mental health.

Lastly, Mathibe⁸⁷ evaluated nursing students' perceptions of reading and reflecting on an autobiography to learn about pharmacology. Students' self-reports, as measured by a researcher developed tool, indicated that this approach helped to situate their learning about pharmacology in a real-life story. They reported that this approach stimulated interest in learning about content (80%) and resulted in an increased knowledge of pharmacology (84%). They also indicated that it was a valuable use of time (76%), interactive (72%), and an exciting way to learn (68%). When compared to the use of autobiography, many students indicated that didactic methods were a less popular teaching approach (64.8%). Taken together, these five descriptive cross-sectional studies suggest that most nursing students have a positive perspective of ABP as an effective learning strategy, and found that ABP approaches helped them to learn important content/concepts, gain insight into patient experiences, think about their own attitudes and views, and engage them in learning.

Level of Confidence in the Narrative Synthesis of Quantitative Findings

The evidence informing the outcomes of the experimental/quasi-experimental studies was assessed to determine a level of confidence for each outcome in the narrative synthesis. Through a three step process, a level of confidence was assigned to the evidence informing each of the following outcomes: knowledge acquisition, level of empathy, attitudes towards others, emotional states, reflective practice, self-transcendence, cognitive and ethical maturity, and learning behaviours (see Table 2). This assessment was informed by the GRADE approach (see Appendix VIII), although a meta-analysis was not conducted so the GRADE assessment was adapted for this narrative synthesis. First, the group of studies informing each outcome was given an a priori ranking of 'high' for randomized controlled trials, "moderate" for quasi-experiments, or "low" for observational studies. The addition of the "moderate" ranking is an adaption that was informed by the JBI Levels of Evidence (see Appendix IX). This a priori ranking was based on the research designs of the majority of studies, and if there was an equal number between two study designs, the outcome was ranked at the lower level. Second, the group of studies informing each outcome was downgraded or upgraded based upon adapted GRADE criteria. None of the studies met any of the upgrading criteria. However, the following downgrading criteria impacted their ratings. Risk of bias was determined by the score on the first five items of the JBI-MAStARI critical appraisal tool. If a study received three or fewer "yes" ratings, it was considered to have risk of bias, and if the majority of studies supporting an outcome had a risk of bias, the ranking was downgraded one level.

Inconsistency, or heterogeneity of findings, was determined by any evidence of equivocal findings within an outcome. Thus, if the group of studies had equivocal findings about an outcome, it was downgraded by one level. Imprecision was determined by assessing if a study reported confidence intervals, and if one or more studies informing an outcome did not provide this information, or the confidence intervals were concerning, it was downgraded a level. No outcomes were downgraded for indirectness of evidence or for publication bias. Third, a final grade for the level of evidence was given, and all quantitative outcomes in this narrative synthesis received a ranking of “very low”, except for “reflective practice” which received a “low” ranking. Of note, there was only one study which supported the outcome of “reflective practice”. As none of the descriptive cross-sectional studies used inferential statistics, this analysis was not conducted with this group of studies which provided information about students’ perspectives of ABP.

Discussion

Changing educational philosophies, and calls for nursing education curriculum reform, are increasing nurse educators’ interest in ABP. However, educational innovations, such as ABP, need to be empirically evaluated in order to guide practice. In this mixed methods systematic review, both qualitative and quantitative research evidence were reviewed in order to inform nursing education practice and future research. The aim of this review was to ultimately synthesize the findings from the qualitative and quantitative studies to determine the effectiveness and experience of ABP among undergraduate nursing students. Although the qualitative and quantitative syntheses were conducted independently, they will now be integrated in this discussion section with a narrative synthesis.^{119, 120} This approach is consistent with a segregated approach to mixed methods research reviews which “maintains the conventional binary distinction between qualitative and quantitative research”.^{119 (p. 6)} Thus, the qualitative and quantitative findings will not be assimilated but will rather be configured into a coherent whole in this discussion.^{119, 120} First, the qualitative meta-synthesis and quantitative narrative synthesis will be discussed separately, and then the two components will be integrated in a narrative synthesis which will involve interpreting the findings with an educational theory, comparing and contrasting the qualitative and quantitative results, and placing the review findings in the context of other research.

Discussion of qualitative findings

The question guiding the qualitative component of the review was “What are nursing students' experiences of arts-based pedagogy in undergraduate nursing education?” Most of the 21 included qualitative studies were of high quality, and collectively they provided a relatively large and rich body of research evidence to answer the research question. All of the papers provided valuable findings for the meta-synthesis, despite the differences in methodologies and types of ABP initiatives. Following JBI procedures and using a transparent process, the reviewers extracted 75 findings that were aggregated into ten categories and two synthesized findings, based on similarity of meaning. This meta-synthesis provides Level 1 research evidence about the meaningfulness of ABP approaches according to the JBI Levels of Evidence (see Appendix IX).¹²¹ However after further analysis with the ConQual approach,¹ the level of confidence in each synthesized findings was downgraded one level due to a mix of unequivocal and equivocal (credible) findings which supported the meta-synthesis and affected its credibility. Based on the JBI Levels of Evidence,¹²¹ the ConQual approach,¹ and the considerations highlighted by the FAME (Feasibility, Appropriateness, Meaningfulness and Effectiveness) tool,¹²¹ we believe that these synthesized and directive statements about the experiences of undergraduate nursing students with ABP can guide educational practice and research. However, further qualitative research is needed to increase the credibility of this body of work.

The first synthesized finding - art forms can create meaning and inspire learning in undergraduate nursing education - was derived from four categories and revealed that the arts, as a way of knowing and expressing, can stimulate creativity, engage learners, elicit interest, make learning personal, create meaning, connect theory with practice through situating concepts in a story, foster interaction, and make difficult learning accessible for undergraduate nursing students. The second synthesized finding - important learner outcomes/competencies for professional nursing are developed through arts-based pedagogy- was derived from six categories and indicates that ABP can produce a broad spectrum of learning outcomes and/or competencies in nursing students which are significant for the development of professional nurses. Arts-based pedagogy experiences can develop relationality, facilitate in-depth cognition, illuminate professional foundations, elicit reflection on, with or through the arts, foster learning about self, and support metamorphosis and/or transformation with nursing students. Interestingly, the two synthesized findings echo discourses in the philosophy of arts education¹²² in that ABP involves both a process and a product. The integration of the arts appears to alter the students' learning processes (synthesized finding one) and develop important learning products (synthesized finding two) in nursing education.

Although the included studies were generally of high quality, there were a few issues identified in regard to quality with this body of literature. First, in regard to methodology, the studies consisted primarily of descriptive qualitative (n = 10, 47.6%) or textual/narrative/literary analysis (n = 6, 28.6%) work, based on how the authors of the studies defined their research. There were only two phenomenological studies, one ethnographic study, and no grounded theory studies. Second, the reviewers had to infer the methodology for eleven (52.4%) of the included studies, as it was not explicitly stated. Additionally, numerous researchers did not clearly describe their philosophical perspective. Third, only six of the research studies employed in-depth individual interviews which can be insightful in regard to the participant perspective and may have impacted the credibility ratings of

the extracted findings. Fourth, only 52.4% of the included studies had a statement locating the researcher(s) culturally or theoretically, and only 57.1% of the studies discussed the influence of the researcher on the research. This lack of discussion of the position or influence of the researcher can raise concerns regarding trustworthiness in this body of work. However, 85.7% had either a statement locating the researcher(s) culturally or theoretically, or discussed the influence of the researcher on the research, or both. Thus, the ConQual rating for dependability was not downgraded.¹ Lastly, 19.05% of studies did not have a sentence about ethical approval in the research report which is a serious deficiency as students are a vulnerable population.

Discussion of quantitative findings

The following question guided the quantitative component of the review: is arts-based pedagogy more effective than non-arts based pedagogy for enhancing competencies and learning behaviours in undergraduate nursing students? Three randomized controlled trials, twelve quasi-experiments, and five descriptive cross-sectional studies were found about the effectiveness of ABP. The quantitative studies were assessed as having an overall moderate level of quality, but a meta-analysis was not possible due to heterogeneity of studies and lack of appropriate data for statistical pooling. The reviewers used a narrative synthesis to analyze this diverse group of included studies.

Of the experiments/quasi-experiments, twelve had some level of statistically significant findings and three had no significant findings, in regard to a broad array of measured outcomes. Measured outcomes from the experiments/quasi-experiments were grouped together and analyzed with a narrative synthesis based on conceptual similarities into the following categories: knowledge acquisition, level of empathy, attitudes towards others, emotional states, reflective practice, self-transcendence, cognitive and ethical maturity, and learning behaviours. Although several of the findings were equivocal, this group of studies provides Level 1.c (randomized controlled trials), Level 2.c (quasi-experimental prospectively controlled study), and/or Level 2.d (quasi-experimental pretest-posttest or historic/retrospective) research evidence for the effectiveness of ABP with the following outcomes according to the JBI Levels of Evidence (see Appendix IX)¹²¹: knowledge acquisition (Levels 1.c and 2.d), increased level of empathy (Levels 1.c and 2.c), improved attitude towards others (Level 2.d), improved emotional status in a variety of outcomes (Levels 2.c and 2.d), enhancement of reflective practice (Level 2.d), and development of learning behaviours (Level 1.c). Of note, some of the quasi-experimental studies had one group only and the researchers conducted within group comparisons, and some only had statistically significant findings in a portion of the measured outcomes (see Appendix VI for study details). Furthermore, the synthesized findings of the outcomes from the experiments/quasi-experiments were assessed with an adapted GRADE approach (see Appendix VIII). All outcomes received a ranking of “very low” in regard to the level of confidence in the evidence, except for “reflective practice” which received a “low” ranking. Although the quantitative findings are somewhat mixed and there are concerns with the quality of evidence, they suggest that ABP may be more effective than non-ABP for certain outcomes. The five descriptive cross-sectional studies were all measuring aspects of the nursing students’ perspective of the ABP initiatives. The majority of students had a positive perspective of ABP. Thus, these observational descriptive studies provide Level 4.b (cross-sectional descriptive studies) research evidence for the effectiveness of ABP with nursing students according to the JBI Levels of Evidence.¹²¹

There are a number of significant issues related to quality of the quantitative studies that could result in bias and should be considered when applying these findings. First, there was a lack of rigorous randomized controlled experiments to provide evidence for causation, thus, bringing into question if it was the ABP intervention that caused the change in the dependent variable (outcome) or if it was a confounding variable. Thus, generalizability from this analysis is limited due to the inability to provide strong evidence for causation. Descriptive cross-sectional findings are especially vulnerable to the impact of confounding variables as there are often alternate explanations for the results. Although experimental research is needed, randomized controlled trials are difficult in educational research because of pragmatic and ethical reasons.¹²³

Second, there were issues with the comparison/control groups: 40% of the experimental/quasi-experimental studies did not provide convincing evidence for the equivalence of groups. Without equivalent groups, the internal validity of the study can be threatened by selection bias.¹²³ Furthermore, four of the quasi-experimental studies did not have a comparison group, which can result in a history or maturation bias. Third, none of the studies blinded participants to treatment allocation, and only a few studies blinded allocators, or those assessing outcomes, to treatment allocation. The lack of these design characteristics can lead to an expectation, performance, or detection bias. Fourth, all participants were recruited through convenience sampling with no researchers employing random selection, which can prevent sampling bias.¹²³ Fifth, in some studies there may have been issues with the dose of ABP. For example, Webster⁹¹ did not find a significant difference between groups in regard to empathy, but the intervention was a complex intervention and the dose of ABP may not have been intense enough to cause a significant change. Sixth, there were numerous issues with measurement. There was no consistency or standardization of measurement of the diverse outcomes, and a number of researchers used researcher developed tools. This diversity can result in researchers not building on previous work and a lack of depth regarding evidence about a particular outcome. Further, many researchers used self-report methods for collecting data, and this data collection method can lack accuracy and elicit a social desirability bias.¹²³ Seventh, there were several researchers that presented their data in a format that could not support a meta-analysis.

Integration of qualitative and quantitative components

Review findings in light of the domains of learning

These qualitative and quantitative findings could also be interpreted within the three broad domains of learning proposed by educational theorists: cognitive, affective, and psychomotor (see Table 9).^{72-75, 77, 124} The cognitive domain encapsulates the development of knowledge and understanding; the affective domain encompasses the learners' emotions, attitudes, and motivations; and the psychomotor domain represents the development of physical and motor skills. The three domains of learning were used to deductively code the findings of the two syntheses: the categories from the qualitative meta-synthesis (see Tables 6 and 7) and the measured outcomes identified in the quantitative narrative synthesis that had statistically significant findings (see Table 8). All of the quantitative studies in this particular analysis had some level of significant findings, but some of these also had non-significant findings. As can be seen in Table 9, the findings were distributed between the cognitive and affective domains of learning. Of note, some findings such as "the arts as a form of communication", "reflection on, with, or through the arts", and "reflective practice" were categorized into two domains. The affective domain contained the most findings, and the psychomotor domain

had no findings. From this analysis, ABP appears to facilitate learning/development in the cognitive and affective domains, and may be especially useful in addressing the affective domain of learning with undergraduate nursing students. Effective pedagogical practices often address learning in more than one domain.⁷⁹ The potential of ABP to address the affective domain is important, as development in this area is key for professional nursing practice,⁵⁸ yet, this type of learning is often not well addressed by traditional pedagogical practices. The accumulation of information alone is inadequate for developing many critical professional nursing competencies, but when affective learning occurs alongside cognitive learning these multifaceted key competencies may be fostered.⁷⁹

Table 9: Review findings categorized by the domains of learning

Domain	Qualitative Findings	Quantitative Findings
Cognitive Domain	Enabling connection with practice	Knowledge acquisition
	The arts as a form of communication and expression	Reflective practice
	Facilitates in-depth cognition	Cognitive maturity (limited significant findings)
	Illuminating professional foundations	
	Reflection on, with, or through the arts	
Affective Domain	Enhances learner engagement	Level of empathy
	Interactive process	Attitudes towards others
	The arts as a form of communication and expression	Emotions
	Developing relationality	Reflective practice
	Illuminating professional foundations	Learning behaviours
	Learning about self	
	Reflection on, with, or through the arts	
	Supporting metamorphosis/ transformation	

Psychomotor Domain		
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Quantitative outcomes in light of the qualitative findings

Interestingly, many of the statistically significant quantitative outcomes were echoed in the results of the qualitative meta-synthesis. Quantitative researchers found some significant improvements in knowledge acquisition^{90, 107} with ABP interventions, and nursing students also experienced ABP as enabling “connection with practice (situated learning)” and “facilitating in-depth cognition” in the qualitative studies. A number of quantitative researchers found increased levels of empathy after ABP interventions,^{53, 97, 105} and development of empathy was a frequent finding that supported the qualitative category of “developing relationality”. The qualitative category of “developing relationality” is also congruent with the quantitative outcome of improved attitudes towards others.^{94, 98} Quantitative researchers also found positive changes in students’ emotional states after engaging in ABP,^{55, 95} and affective learning was a strong pattern in the qualitative category of “learning about self”. Reflective practice was a learning outcome found in both the quantitative research⁹⁶ and in the qualitative meta-synthesis category “reflecting on, with, and through the arts”. Quantitative researchers also examined the effect of ABP on learning behaviours such as engagement in learning,¹⁰⁶ and the qualitative studies revealed that ABP “enhances learner engagement”.

Thus, the qualitative and quantitative findings yielded similar findings about some of the same aspects of ABP. These concepts that are reiterated in both the quantitative and qualitative literature deserve special attention in future research studies in order to build on this body of work. Of note, reflection is a concept that could be investigated further quantitatively. There was only one quantitative study which measured reflection, although it seems to be an important part of the ABP learning experience according to the qualitative findings. Furthermore, there are additional variables that could be quantitatively investigated based on the qualitative synthesis, such as communication skills, peer and teacher-student relationships, learning environments, self-awareness, and transformative learning.

Positive qualitative findings in light of the equivocal quantitative findings

The qualitative findings, categories, and meta-synthesis were overwhelmingly positive about the student experience of ABP. In fact, there was only one negative finding extracted from the included qualitative studies: that of “Lack of audio-visual aids during story time”. What is interesting in this body of literature is that in a number of studies, the authors described negative student reactions in the discussion sections; yet, these perspectives were not clearly evident in the qualitative themes. Furthermore, when one looks at the five quantitative descriptive cross-sectional studies reporting nursing students’ perspectives of ABP,^{87, 99, 100, 102, 103} students were generally positive but there were also a percentage of students who did not positively evaluate the ABP initiatives. For example, Emmanuel¹⁰⁰ found that 8% of students reported that the experience did not engage them in learning, and 10% were ambivalent. Other researchers also found that 16-20% of students reported that the ABP initiative did not help them to learn.⁹⁹ The negative student experience described in the discussion section of some qualitative studies and in the findings of a number of the descriptive cross-sectional quantitative studies, are not well-represented in the qualitative themes, and thus, in the extracted findings and resulting meta-synthesis. A possible explanation for this might be that the qualitative study designs used did not aim to explain the variation of the student experience, as a

grounded theory study would. The included qualitative studies consisted primarily of descriptive studies (n=10, 47.6%) or textual/narrative/literary analysis (n=6, 28.6%), and no grounded theory studies were found. Our meta-synthesis may describe the learning experiences with ABP when it is a positive experience for students, and not be taking into account the negative student experiences. Of the five descriptive cross-sectional studies, two examined differences between groups but found no statistically significant associations between socio-demographic factors and negative responses to evaluation statements.^{87,99}

Results in light of other arts and health literature reviews

Although no other systematic reviews were found about ABP in nursing education, a number of literature reviews have been written about some aspect of using a specific art form in nursing education: cinenurducation,¹²⁵ film,¹²⁶ and the visual arts.¹²⁷ These authors make a number of assertions that are congruent with our review findings about ABP: that cinenurducation fosters experiential and reflective learning,¹²⁵ that film can be used for reflective activities,¹²⁶ and that the visual arts can illuminate important nursing concepts.¹²⁷

Perry and colleagues¹²⁸ conducted a literature review of 15 studies investigating the efficacy of arts-based interventions in medical education. Interestingly, they found that the strongest evidence base was for fostering clinical observation skills with the visual arts, but found little evidence to support the effect of ABP on altering medical students' attitudes. None of our included quantitative studies specifically examined the outcome of observation skills, and this may be an important area of future research in nursing education. Similar to our review, they found that many of the reviewed studies had poor methodological descriptions and identified a need for increased rigour in research about ABP. In a different literature review of 39 articles examining the role of the arts in medical education, thematic analysis of the literature revealed that similarly to our qualitative synthesized finding one, the arts offered a distinct learning approach in medical education which was new and creative.¹²⁹ They also found that the arts developed important competencies for professional development such as reflection, empathy, and communities of practice, which is comparable to our qualitative synthesized finding two.

Researchers have also conducted reviews about arts-based research, which is "the systematic use of the artistic process, the actual making of artistic expressions in all different forms of the arts, as a primary way of understanding and examining experience by both researchers and the people that they involve in their studies".^{130(p. 29)} In a literature review of 71 studies about arts-based research, the authors found that the arts enhanced engagement for audience members and participants.¹³¹ This finding resonates with our qualitative category, "Enhancing learner engagement". Fraser and Sayah¹³² conducted a systematic review of thirty studies of arts-based methods in health research, and similarly to our review, found that a wide variety of art forms were utilized but that qualitative researchers did not provide thorough philosophical or methodological descriptions in their studies, and also that the replication of studies about specific arts-based approaches was lacking. Another review highlighted that the integration of the arts into health, including healthcare education, is the most developed in the United States and England.¹³³ This assertion resonates with the findings of our review in which forty-one (55.1%) of the studies were conducted in the United States, four (9.8%) in the United Kingdom, and thirteen (31.7%) in all other countries combined.

Limitations of the review

There are several limitations of this review. First, although we conducted a thorough literature search under the guidance of a librarian, there is a possibility of missed research studies. The focus on the emerging concept of ABP increases this possibility, as there is a lack of consistent indexing in this area and the reviewers' had to use multiple keywords to find relevant literature. Further, some articles were difficult or impossible to access. Second, in this exploratory review, a wide spectrum of studies about ABP, encompassing many different art forms, were reviewed. Although this inclusion decision was a good first step in understanding this body of work about ABP, not all findings may be applicable to all ABP initiatives. In future reviews, reviewers could look more specifically at the findings about a specific type of ABP initiative. Third, the reviewers decided to include papers in which all participants were undergraduate nursing students. While this maintained the focus on the nursing student perspective, this decision may have privileged simple study designs that did not employ theoretical sampling with diverse participants, or sub-group analysis between different groups. Fourth, the reviewers tallied but did not include non-English articles. The absence of studies about ABP in other languages could have impacted the findings of this review. Fifth, the reviewers found that they needed to use 'not applicable' frequently during the quantitative quality appraisals. This calls into question the appropriateness of the quality appraisal tools for some of the weaker designs such as a one-group pretest-posttest quasi-experiment or a descriptive cross-sectional design. Sixth, the reviewers also used 'unsure' or 'not applicable' on some of the predetermined key criteria, and then two reviewers discussed whether to exclude or include the study. This decision introduced another level of subjectivity into the review process. Seventh, the majority of studies took place in the United States (55.1%). The reviewers aimed to review research from diverse countries, but either most of the work was conducted in the United States or the English language restriction produced this predominance. It cannot be assumed that the findings of this review are transferable or generalizable to all countries and readers should be aware of any differences in settings. Lastly, a meta-analysis was not possible due to the significant heterogeneity and lack of appropriate data in the included quantitative studies. Thus, the quantitative studies were presented with a narrative synthesis which does not provide the same level of evidence as a meta-analysis.

Conclusion

The reviewers aimed to synthesize the best available evidence on the effectiveness and experiences of ABP for nursing students in undergraduate nursing education. A rigorous literature review and quality appraisal process was conducted, and 41 studies were included in the review. The 21 qualitative studies were of high methodological quality and provided evidence of the meaningfulness of ABP for undergraduate nursing students. Although there were some specific concerns with this body of literature, the meta-synthesis of these studies can provide a moderate level of evidence to guide nursing education practice and future research about ABP. The 20 quantitative studies were of low quality and this body of literature had numerous methodological issues; thus, there is not compelling evidence that arts-based pedagogy is more effective than non-arts based pedagogy for enhancing competencies and learning behaviours in undergraduate nursing students. However, there are encouraging preliminary findings about the effectiveness of ABP that can inform educational practice and future research in nursing education.

Implications for practice

The findings of this review can guide (qualitative meta-synthesis) and inform (quantitative narrative synthesis) nursing education practice. Based on the JBI Levels of Evidence,¹²¹ the ConQual approach,¹ and the considerations highlighted by the FAME (Feasibility, Appropriateness, Meaningfulness and Effectiveness) scale,¹²¹ we believe that the qualitative synthesized findings about the experiences of undergraduate nursing students with ABP can guide educational practice and research. The implications based on the quantitative component of this review are limited due to the varied quality of the included quantitative studies and the inability to conduct a meta-analysis. The following implications are based on the qualitative and/or quantitative findings of this review, and are assigned a grade according to the JBI Grades of Recommendation¹³⁴ (see Appendix X for definitions of grades):

- Nurse educators should consider ABP initiatives when planning theory and/or clinical courses as ABP offers a meaningful and engaging way of learning for undergraduate nursing students (Grade A based on a level one JBI Level of Evidence and a moderate ConQual rating for qualitative synthesized finding one).
- There are a wide spectrum of ABP strategies to choose from, as evidenced in the breadth of work reviewed here. ABP was used in both theory and clinical courses, and in numerous substantive areas including mental health/illness, foundations of professional nursing, nursing humanities, interpersonal communication, maternal-child, community, medical-surgical, pharmacology, and long-term care. This review can serve as a resource for nurse educators in regard to ABP initiatives (Grade A based on a level one JBI Level of Evidence and a moderate ConQual rating for qualitative synthesized findings one and two, and Grade B based on a very low level of confidence in the evidence for the quantitative narrative synthesis).
- The arts can be used to promote situated learning for nursing students, as ABP situates concepts in a story which gives them relevance and meaning (Grade A based on a level one JBI Level of Evidence and a moderate ConQual rating for qualitative synthesized finding one).
- Arts-based pedagogy can be used to enhance interaction and social learning in nursing education as it elicits interaction between students and their learning community (Grade A based on a level one JBI Level of Evidence and a moderate ConQual rating for qualitative synthesized finding one).
- Arts-based pedagogy approaches can make difficult learning more accessible for some students, and should be considered when teaching complex or abstract content (Grade A based on a level one JBI Level of Evidence and a moderate ConQual rating for qualitative synthesized finding one).
- Learning through ABP is about process and product. Nurse educators can use ABP to make the students' learning process more situated, engaging, creative, interactive, and meaningful and to produce important products (outcomes/competencies) for the development of professional nurses. Thus, ABP teaches students how to think in addition to teaching about important concepts, moving teaching/learning away from the linear transfer of content (Grade A based on a level one JBI Level of Evidence and a moderate ConQual rating for qualitative synthesized findings one and two).
- Arts-based pedagogy initiatives should be used to develop students' relational skills such as empathy, cultural competence, ability to collaborate, awareness of multiple perspectives, and

understanding of a person's unique context (Grade A based on a level one JBI Level of Evidence and a moderate ConQual rating for qualitative synthesized finding two).

- Nurse educators should consider using ABP to address both the cognitive and affective domains of learning, as ABP initiatives could promote in-depth cognition and affective learning (Grade A based on a level one JBI Level of Evidence and a moderate ConQual rating for qualitative synthesized findings one and two, and Grade B based on a very low level of confidence in the evidence for the quantitative narrative synthesis).
- Arts-based pedagogy can illuminate key aspects of professional nursing for nursing students, and should be used for teaching foundational concepts such as the characteristics of a nurse, ethics, advocating for a client, values, holism in nursing care, person-centered care, philosophy of nursing, and artistry within nursing (Grade A based on a level one JBI Level of Evidence and a moderate ConQual rating for qualitative synthesized finding two).
- Arts-based pedagogy can be used to develop reflective capacities in nursing students through reflection on, or creation of, artwork (Grade A based on a level one JBI Level of Evidence and a moderate ConQual rating for qualitative synthesized finding two).
- Arts-based pedagogy can help nursing students to learn about themselves, and reflect on their own perspectives, judgments, fears, values, previous clinical and life experiences, and emotional life (Grade A based on a level one JBI Level of Evidence and a moderate ConQual rating for qualitative synthesized finding two).
- Nursing students' views and perspectives can be transformed through the ABP learning experiences, and thus, nurse educators should consider ABP experiences to challenge students' assumptions and values, provide new insights into patient experiences, change students' expectations of practice, and foster personal change (Grade A based on a level one JBI Level of Evidence and a moderate ConQual rating for qualitative synthesized finding two).
- Nurse educators might want to consider implementing ABP interventions with undergraduate nursing students for improving the following outcomes: promoting knowledge acquisition, increasing level of empathy, improving attitude towards others, improving emotional states in a variety of outcomes, enhancing reflective practice, and fostering learning behaviors (Grade B based on a very low level of confidence in the evidence for the quantitative narrative synthesis on all outcomes except for reflective practice which was ranked as having a low level of confidence).
- Arts-based pedagogy may be an acceptable and/or desirable teaching strategy for most undergraduate nursing students. Many nursing students may view ABP as an effective pedagogical approach (Grade B based on a very low level of confidence in the evidence for the quantitative narrative synthesis).

Implications for research

As identified in this review, there are significant gaps in both the qualitative and quantitative research knowledge about ABP. Future research is needed to address these gaps in nursing education, and could include:

- A qualitative systematic review about ABP that takes other perspectives into account such as nurse educators, includes other types of students such as graduate students or other healthcare students, or focuses on specific ABP strategies that appear to be effective.

- Diversification of qualitative methodological approaches to further understand students' experiences with ABP.
- Continued qualitative exploration of both students' and faculty's perspectives of new and innovative ABP approaches in a variety of settings.
- A grounded theory study which elucidates the variation of the student experience, and provides a theoretical explanation for both positive and negative ABP experiences.
- There is a need for qualitative researchers to use in-depth interviews alongside other data collection methods in order to elicit the participant perspective of ABP.
- Increased philosophical and methodological transparency with future qualitative studies.
- Research that investigates the ideal dose of ABP in a nursing program in regard to number, type, and context of assignments is needed.
- Rigorous experimental/quasi-experimental studies that investigate the impact of ABP on outcomes identified in the quantitative and qualitative findings of this review, and that measure them with reliable and valid instruments.
- Quantitative research exploring the socio-demographic, academic, and contextual factors associated with a positive or negative experience of ABP is needed.
- Replicable experimental studies that use consistent measurement tools and that can be subjected to a meta-analysis.
- In all future quantitative studies about ABP, researchers should report comprehensive and appropriate data that would enable the meta-analysis of quantitative studies about ABP in order provide strong evidence about its effectiveness.
- The development and psychometric testing of measurement tools to test the effectiveness of ABP and measure students' satisfaction with ABP.
- Longitudinal quantitative studies which test the long-term effectiveness of ABP.
- Comparison of different ABP interventions in regard to specific outcomes and student experiences, to determine what ABP strategies may be most effective for improving specific outcomes.
- Qualitative and quantitative research about ABP in diverse countries, to understand the impacts of ABP on different cultural groups and to increase the transferability or generalizability of this body of work.

Conflict of interest

There are no conflicts of interest to declare.

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Appendix I: Search strategy

Database:

CINAHL(Ebsco)

Search ran: April 7, 2015

Search	Query
#1	(MH Creativeness) OR (MH Art) OR (MH Poetry) OR (MH Handicrafts) OR (MH Nursing as an Art) OR (MH Performing Arts) OR (MH Liberal Arts) OR (MH Music) OR (MH Literature) OR (MH Drama) OR (MH Storytelling) OR (MH Photography) OR (MH Esthetics) OR (MH Motion Pictures) OR (MH Museums) OR (MH Psychodrama) OR (MH Dancing) OR "art-based" OR arts OR "art-making" OR artwork OR "art work" OR artist* OR "creative expression" OR creativity OR "creative writing" OR poetry OR poem* OR sculpture* OR photograph* OR "photo essay" OR movie* OR (film N3 making) OR videography OR drama OR psychodrama OR theatre OR painting* OR illustration OR dance OR choreograph* OR novels OR music* OR "instrument play*" OR song* OR aesthetics OR esthetics OR humanities OR "narrative pedagogy"
#2	(MH Curriculum+) (course content, course evaluation, curriculum development, integrated curriculum) OR (MH Teaching Methods) OR (MH Learning Methods) OR (MH Learning) OR (MH Teaching) OR (MH Education, Non-Traditional) OR (MH Experiential Learning) OR (MH Teaching Materials) OR (MH Education) OR (MH Education, Clinical) OR (MH Learning Environment) OR (MH Outcomes of Education) OR (MH Health Education) OR (MH Nursing Knowledge) OR (MH Nursing Skills) OR (MH Learning Environment, Clinical) OR (MH Teaching Methods, Clinical) OR (MH Education, research) OR education* OR educating OR learning OR instruction OR teach* OR curriculum OR course* OR curricula OR pedagog* OR assignment OR classroom
#3	(MH Education, Nursing, Baccalaureate) OR (MH Students, Nursing, Baccalaureate) OR (MH Students, Nursing) OR (MH Students, Undergraduate) AND nurs* OR (MH Education, Nursing) OR (MH Faculty, Nursing) OR (MH Student Experiences) OR (MH Schools, Nursing) OR "nurs* student*" OR "student nurs*" OR "baccalaureate nurs*" OR "undergraduate nurs*" OR "nurs* education" OR "nurs* training" OR "nurs* curriculum" OR "nurs* program*" OR "nurs* school*" OR "nurs* faculty"
#4	#1 AND #2 AND #3
Limit to January 1, 1994 to April 7, 2015	

Note. MH indicates a CINAHL heading. If a term does not have MH in front of it, then it is a keyword.

Appendix II: Appraisal instruments

QARI appraisal instrument

JBI QARI Critical Appraisal Checklist for Interpretive & Critical Research

Reviewer _____ Date _____

Author _____ Year _____ Record Number _____

	Yes	No	Unclear	Not Applicable
1. Is there congruity between the stated philosophical perspective and the research methodology?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is there congruity between the research methodology and the research question or objectives?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is there congruity between the research methodology and the methods used to collect data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is there congruity between the research methodology and the representation and analysis of data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is there congruity between the research methodology and the interpretation of results?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is there a statement locating the researcher culturally or theoretically?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Is the influence of the researcher on the research, and vice-versa, addressed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are participants, and their voices, adequately represented?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall appraisal: ☐ Include ☐ Exclude ☐ Seek further info. ☐

Comments (Including reason for exclusion)

MAStARI appraisal instrument

JBI Critical Appraisal Checklist for Randomised Control / Pseudo-randomised Trial

Reviewer Date

Author Year Record Number

	Yes	No	Unclear	Not Applicable
1. Was the assignment to treatment groups truly random?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were participants blinded to treatment allocation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was allocation to treatment groups concealed from the allocator?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were the outcomes of people who withdrew described and included in the analysis?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were those assessing outcomes blind to the treatment allocation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Were the control and treatment groups comparable at entry?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were groups treated identically other than for the named interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were outcomes measured in the same way for all groups?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Were outcomes measured in a reliable way?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Was appropriate statistical analysis used?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall appraisal: Include ☐ Exclude ☐ Seek further info. ☐

Comments (Including reason for exclusion)

JBI Critical Appraisal Checklist for Descriptive / Case Series

Reviewer Date

Author Year Record Number

	Yes	No	Unclear	Not Applicable
1. Was study based on a random or pseudo-random sample?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were the criteria for inclusion in the sample clearly defined?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Were confounding factors identified and strategies to deal with them stated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were outcomes assessed using objective criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. If comparisons are being made, was there sufficient descriptions of the groups?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Was follow up carried out over a sufficient time period?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were the outcomes of people who withdrew described and included in the analysis?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were outcomes measured in a reliable way?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Was appropriate statistical analysis used?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall appraisal: Include ☐ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

Appendix III: Data extraction instruments

QARI data extraction instrument

JBI QARI Data Extraction Form for Interpretive & Critical Research

Reviewer Date

Author Year

Journal Record Number

Study Description

Methodology

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Method

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.....

Phenomena of interest

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Setting

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Geographical

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Cultural

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Participants

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Data analysis

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Authors Conclusions

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Comments

.....

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Complete

Yes ☐

No ☐

Findings	Illustration from Publication (page number)	Evidence		
		Unequivocal	Credible	Unsupported

Extraction of findings complete Yes ☐ No ☐

MAStARI data extraction instrument**JBI Data Extraction Form for
Experimental / Observational Studies**

Reviewer Date

Author Year

Journal Record Number

Study MethodRCT ☐ Quasi-RCT ☐ Longitudinal ☐Retrospective ☐ Observational ☐ Other ☐**Participants**

Setting

Population

Sample size

Group A Group B

Interventions

Intervention A

Intervention B

Authors Conclusions:

.....
.....
.....

Reviewers Conclusions:

.....
.....
.....

Study results**Dichotomous data**

Outcome	Intervention () number / total number	Intervention () number / total number

Continuous data

Outcome	Intervention () number / total number	Intervention () number / total number

Appendix IV: JBI Levels of Credibility and Definitions

Unequivocal (U): findings accompanied by an illustration that is beyond reasonable doubt and therefore not open to challenge.

Credible (C): findings accompanied by an illustration lacking clear association with it and therefore open to challenge.

Unsupported (Un): findings not supported by data.

(JBI, 2014, p. 40)

Appendix V: Excluded studies

Qualitative Component

1) Barron, C., Lambert, V., Conlon, J., Harrington, T., "The Child's World": a creative and visual trigger to stimulate student enquiry in a problem based learning module¹⁰⁹

Reason for exclusion: Did not meet key criteria 2, 3, 4, and 10 on the JBI-QARI critical appraisal tool.

2) Bradshaw, V., The Effect of Teaching with Stories on Associate Degree Nursing Students' Approach to Learning and Reflective Practice⁹⁶

Reason for exclusion: Did not meet key criteria 4 on the JBI-QARI critical appraisal tool.

3) Chan, Z.C.Y., Exploring creativity and critical thinking in traditional and innovative problem-based learning groups¹¹⁰

Reason for exclusion: Did not meet key criteria 4 on the JBI-QARI critical appraisal tool.

4) Davidson, M. R., A phenomenological evaluation: Using storytelling as a primary teaching method¹¹¹

Reason for exclusion: Did not meet key criteria 3 and 4 on the JBI-QARI critical appraisal tool.

5) Martins Machado, D., Bernarda Donato G., Leila, G. M. P., Maria R., Learning Mental Health Through Videography Production: An Experimental Report¹¹²

Reason for exclusion: Did not meet key criteria 2, 3, and 4, and 8 on the JBI-QARI critical appraisal tool.

6) McCabe, C., Neill, F., Granville, G., Grace, S., Evaluation of an art in health care elective module -- A nurse education initiative¹¹³

Reason for exclusion: Did not meet key criteria 2 and 3 on the JBI-QARI critical appraisal tool.

7) Wilkström, B. and Svidén, G., Student nurses in dialogues with hypothetical patients regarding paintings¹¹⁵

Reason for exclusion: Did not meet key criteria 2 and 4 on the JBI-QARI critical appraisal tool.

8) Winland-Brown, J. E., Can caring for critically ill patients be taught by reading a novel?¹¹⁴

Reason for exclusion: Did not meet key criteria 2, 3, and 4 on the JBI-QARI critical appraisal tool.

Quantitative Component

1) Adamski, M., Parsons, V., Hooper, C., Internalizing the Concept of CARING: An Examination of Student Perceptions When Nurses Share Their Stories¹¹⁶

Reason for exclusion: Did not meet key criteria 10 on the JBI-MAStARI randomized control trial/pseudo-randomized appraisal tool.

2) Bassell, K., Digital story analysis utilizing the advancing care excellence for seniors framework⁸¹

Reason for exclusion: Did not meet key criteria four and five on the JBI-MAStARI descriptive/case-study appraisal tool.

3) Michael, S. and Candela, L., Using aesthetic knowing to teach diversity of the chronic illness experience to nursing students⁶⁰

Reason for exclusion: Did not meet key criteria 4 and 9 on the JBI-MAStARI descriptive/case-study appraisal tool.

- 4) Price, D. M., Strodtman, L., Brough, E., Lonn, S., Luo, A., Digital storytelling: an innovative technological approach to nursing education¹¹⁷

Reason for exclusion: Did not meet key criteria 4 and 9 on the JBI-MAStARI descriptive/case-study appraisal tool.

- 5) Wikström, B. and Svidén, G., Facial expressions in paintings as perceived by the student nurse¹¹⁸

Reason for exclusion: Did not meet key criteria 4 and 9 on the JBI-MAStARI descriptive/case-study appraisal tool.

Appendix VI: Table of included study characteristics

Included Studies: Qualitative

Study	Methodology and Methods	Setting and Participants	Phenomenon	Conclusions	Notes
Aranda, K., Goeas, S., Davies, S., Radcliffe, M., Christoforou, A., 2015 ⁸⁰	Descriptive Data collection: individual interviews; focus groups; observation Data analysis: thematic analysis	Values based practice module in a 3-year pre-registration mental health nursing program in the United Kingdom. Pre-registration mental health nursing students (n=6). Three nursing students were born in Britain, and three were recent immigrants.	Photography to explore one's own culture and values	The authors write that photography "makes visible complex, collaborative forms of learning and previously unidentified, unarticulated ideas about culture and values" and that this "critical pedagogic method helps develop critical, politicized understandings of culture and values" (p. 306). They conclude, "From this study photography appears to promote critical engagement with complex concepts central to contemporary mental health care" (p. 313).	Photography is a unique way of knowing in nursing education that can elucidate important and complex concepts.
Bassell, K., 2015 ⁸¹	Narrative analysis Data collection: digital stories Data analysis: content analysis	Clinical course (long-term care setting) in an Associate Degree Nursing program at a public state college in the South-eastern United States. First semester nursing students (n=6).	Digital storytelling for learning required knowledge about care of geriatric patients	The author concludes that "The qualitative research further strengthened this finding by establishing the presence of the ACES knowledge domains and defining characteristics embedded in the digital stories. The additional thematic analysis of the digital stories demonstrated reflective processing by the student in understanding the life stage of their patient in the aging continuum. I believe the use of digital storytelling in nursing education has the potential to engage the student in forming a deeper understanding of the varied population and needs of the patients they care for" (p. 125).	These findings are specific to learning about care of geriatric patients, but demonstrate that an in-depth understanding of content can be developed through this ABP approach.

Study	Methodology and Methods	Setting and Participants	Phenomenon	Conclusions	Notes
Casey, B., 2009 ⁹	<p>Ethnography</p> <p>Data collection: creative writing; visual art elicitation; field notes; group discussion</p> <p>Data analysis: thematic analysis and visual analysis of artwork</p>	<p>Nursing humanities option module in an undergraduate nursing program at a university in Dublin, Ireland. Second year undergraduate nursing students (n=20).</p>	<p>Arts-based inquiry as a means of inquiry and knowledge development</p>	<p>The author concludes, "The benefits of these approaches in fostering inquiry and critical thinking, essential attributes in contemporary nursing contexts, has been highlighted through analysis and subsequent discussion of student artwork and art-making processes. The challenges encountered in using this approach are also made visible, however it is hoped that the vibrancy and potency of arts-based inquiry as a means of nurturing critical thinking and aesthetic knowing across nursing curricula, will resonate with the reader to much greater and encouraging effect" (p. 79).</p>	<p>These findings are insightful for understanding how the process of ABP fosters learning in undergraduate nursing education.</p>
Chan, Z.C.Y., 2014 ⁸²	<p>Descriptive</p> <p>Data collection: focus groups</p> <p>Data analysis: content analysis</p>	<p>A problem based learning group in an undergraduate nursing program at Hong Kong Polytechnic University, Hong Kong. Year one undergraduate nursing students (n=17).</p>	<p>The arts as a teaching strategy to enhance the artistry of nursing</p>	<p>The author concludes, "The results indicate that through these activities, some students could link the arts to their daily lives and clinical practice. They considered artistry as having a broader meaning. While some participants did not agree that artistry and nursing care should be related, their narratives in fact reflected that they attached importance and interest to the arts" (p. 928).</p>	<p>The author used two focus groups to explore the difference in views of artistry/nursing before and after an ABP initiative.</p>
Christiansen, A., 2011 ⁸³	<p>Phenomenography</p> <p>Data collection: individual interviews</p> <p>Data analysis: phenomenographic analysis</p>	<p>Pre-registration nursing program at a university in the United Kingdom. Third year undergraduate nursing students (n=20); ages 22 to 41 years.</p>	<p>Ways of learning with patient digital stories</p>	<p>The author concludes, "At their most effective patient digital stories are powerful learning tools that offer students an opportunity to transcend their own personal frame of reference and engage with the reality of others. Through a process of meaning making, emotional engagement and reflection students can generate new insights that have the potential to transform their developing sense of professional identity. However</p>	<p>Through the use of phenomenographic analysis, the findings demonstrate a variation in the type of learning that nursing students experience with digital stories.</p>

Study	Methodology and Methods	Setting and Participants	Phenomenon	Conclusions	Notes
				students can vary in how and what they learn and through an identification of the critical aspects of this variation valuable insights are generated into the teaching and learning principles likely to promote transformation learning and enhanced patient centred practice" (p. 293).	
Hunter, L. A., 2008 ⁵⁹	Narrative analysis Data collection: Written narratives (stories) Data analysis: content analysis	Maternal-newborn course in an undergraduate baccalaureate nursing program at a public university in New England, United States. Undergraduate nursing students (n=25).	Storytelling and the understanding/integration of the art and science of nursing practice	The author concludes, "Carper's (1978) patterns provided a useful framework for qualitative examination of these stories, especially when considering each narrative described a different personal experience. Consequently, numerous examples of empirical, ethical, esthetic and personal knowledge were found threaded throughout the narratives illuminating the premise that storytelling can facilitate students' integration of both the art and science of nursing practice" (p. 10).	The author uses a deductive framework (theory-based), which illuminates the domains of knowing used when writing narratives in nursing education.
Hydo, S. K., Marcyjanik, D. L., Zorn, C. R., Hooper, N. M., 2007 ⁸⁴	Descriptive Data collection: Written narratives Data analysis: thematic analysis	Introductory nursing course in a Bachelor of Science in Nursing program at a mid-size, comprehensive public university in the Midwestern United States. First year baccalaureate nursing students (n=91); 89.6% female; 86.2% were 25 years or younger; 52.1%	Art as a scaffold for creating a personal expression of nursing	The authors conclude, "The breadth and depth of the themes and sub-themes that emerged provide empirical support for the use of art as a scaffolding teaching strategy in nursing education. Students beginning a BSN program discovered the essence of art and creativity, teamwork, boundaries and horizons within self, and boundaries and horizons in the profession. Certainly, these students were examining what it means for them to be a nurse in intricate ways, affirmed through this process of discovery" (p. 9).	These descriptive findings provide insight into how art can be particularly useful for self-awareness and then sharing that awareness with others.

Study	Methodology and Methods	Setting and Participants	Phenomenon	Conclusions	Notes
		were first generation college students; 95.8% Caucasian.			
Jack, K., 2012 ⁵⁸	Heideggerian phenomenology Data collection: individual interviews; individual artwork Data analysis: Heidegger's hermeneutic circle	A program leading to nursing registration at a university in the United Kingdom. Pre-registration nursing students (n=3).	Artwork and the development of emotional awareness	The author writes, "The use of art enabled the students to think meditatively about their practice and they were able to consider not only their own feelings, but those of others", but notes that "even though all participants were able to see differently, the pursuit of an 'answer' was not the goal during the process" (p. 815).	These findings are informed by Heidegger's philosophy of meditative thinking and challenge educators to make spaces for this type of thinking in nursing education.
Jensen, A. and Curtis, M., 2008 ⁴⁸	Descriptive Data collection: focus group; written narratives; field notes Data analysis: constant comparison	A psychosocial nursing class at a baccalaureate nursing program at a mid-sized university in major metropolitan area; Maryville University, St. Louis, Missouri, United States. Undergraduate junior nursing students (n=23); 21 female and two male students; average age of 23, age range of 20 to 38 years; six students had degrees in other disciplines; one	Integration of the liberal arts into a psychosocial nursing class	The authors conclude, "this descriptive qualitative study found that students do derive meaning from activities which integrate music, art, literature, and film into the nursing classroom. Indeed, the meanings they derive are consistent with desired educational outcomes identified by nursing leaders (AACN, 1998). Students are able to make connections between the humanities and nursing content when they are integrated into classroom environments and they can become more culturally aware, more self-reflective, and more empathetic through integration of humanities with nursing" (p. 7-8).	This descriptive study about a multi-arts initiative provides insight into the meaning that ABP holds for nursing students.

Study	Methodology and Methods	Setting and Participants	Phenomenon	Conclusions	Notes
		student was a member of a minority with English as a second language.			
Kidd, L. I. and Tusaie, K. R., 2004 ⁸⁵	Textual analysis Data collection: written narratives (poems) Data analysis: thematic analysis	A mental health clinical experience in an undergraduate nursing program at a large university in the Northeast United States. Undergraduate nursing students (n=52); over 75% were female; age range from 20 to mid-40s	Writing an original poem to reflect on practice	The authors conclude, "poetry writing served as an excellent teaching/learning tool for nursing students in their first mental health clinical experience. Student poetry revealed what it was like for students to care for a client with mental illness. Poems also demonstrated aesthetic knowledge and empathy gained. Knowledge and empathy were gained as beliefs were discarded or changed. As old beliefs were disconfirmed, their place was taken by new beliefs and new learning. The strategy of poetry writing employed was ultimately beneficial for both students and teachers, as all engaged in a reciprocal process of learning and becoming" (p. 413-414).	This analysis of students' artwork (poems) provides a unique understanding of the meaning of ABP for undergraduate nursing students.
Mahar, D. J., Iwasiw, C. L., Evans, M. K., 2012 ⁸⁶	Hermeneutic phenomenology Data collection: individual interviews; field notes Data analysis: Heideggerian analysis	An undergraduate four year bachelor of nursing program at a research-intensive university in Ontario, Canada. First year undergraduate nursing students (n=6); all female; ranging in age from 18 to 40 years; two had	Creating a personal mandala assignment	The authors conclude, "Regardless of the sequence or the pace they described, participants' experiences of completing the mandala for the assignment resembled those associated with both individuation and socialization: extrarational thought and rational thought. Completing the mandala for the assignment appears to have given participants the opportunity to privately seek what was self-concealed as well as create a narrative of self, based on the course concepts, nursing values and beliefs" (p. 10).	The authors clearly identify one insightful theme, but there may be others in the narrative description of findings that are not clearly identified.

Study	Methodology and Methods	Setting and Participants	Phenomenon	Conclusions	Notes
		degrees/certificates from other disciplines.			
Mathibe, L. J., 2007 ⁸⁷	Descriptive (part of a mixed methods study) Data collection: written narratives Data analysis: thematic analysis	Third year undergraduate nursing students (n=25); 16 females, 3 males, 6 did not indicate gender; median age of 20 years.	Popular autobiography as a teaching tool	Using an autobiography to teach cytotoxic drugs is "a worthwhile and rewarding exercise, from the point of view of student nurses. It is a stimulating, interactive and innovative method, which 'lays foundation well for learning more intense pharmacological principles' " (p. 254).	Although these findings are from a mixed method written evaluation of an assignment, they offer some insight into how ABP can be an engaging and interesting way to learn essential content in nursing education.
Mooney, B. and Timmins, F., 2007 ⁸⁸	Descriptive Data collection: focus groups Data analysis: thematic analysis.	A Bachelor of Science program at a university in the Republic of Ireland. Second year nursing students (n=21).	Learning about spirituality through the medium of art	The authors conclude, "The results indicate that the students enjoyed the experience and began to develop and enhance their skills in recognising spirituality and spiritual needs. They also began to enhance their self-awareness through developing a greater understanding of the views of others and recognising the religious entrenchment of their own views of spirituality. As the latter began to subside, students became open to the universal nature of spirituality, and despite their own discomfort began to make interventions in the area" (p. 283).	The findings reveal five themes regarding learning about the concept of spirituality through art. These findings may provide insight into learning other complex or abstract concepts through ABP.
Newcomb, P., Cagle, C., Walker, C., 2006 ⁵¹	Literary analysis Data collection: written narratives Data analysis: constant comparison	Maternal-child clinical experience in a baccalaureate nursing program at a private, liberal arts university in a large, metropolitan area of the United States. Senior	Reading novels to develop cultural sensitivity and reflective thinking	The authors conclude that "encounters with imaginative literature consciously structured to stimulate reflection can have profound impact on development of social conscience and commitment among professional nursing students" (p. 14-15).	The findings are quite specific to this particular assignment, although they do provide insight into the kinds/domains of learning which can occur with ABP.

Study	Methodology and Methods	Setting and Participants	Phenomenon	Conclusions	Notes
		undergraduate nursing students (n=40); all women; majority of students were Anglo-American and 12% were African-American, Hispanic, or Asian.			
Pardue, K. T., 2004 ⁵²	Textual analysis Data collection: written narratives Data analysis: content analysis	Associate and Bachelor of Science nursing program in the United States. First year nursing students (n=104).	Readers theatre for aesthetic knowing	The author concludes that: "Readers theater provides students with an interactive and creative learning experience. This teaching strategy strengthens the sense of community and engenders extensive dialogue. The qualities of imagination, creativity, and intuition - elements that are essential in the discovery of aesthetic knowing - are stimulated. Readers theater provides students with the opportunity to explore empathetic connections and integrate reflection into their practice" (p. 61).	These findings provide insight into the meaningfulness of reader's theatre with nursing students, specifically into how it can promote connection with others (patients, classmates) and provide an opportunity for reflection.
Pohlman, S., 2013 ⁸⁹	Action research Data collection: written narratives; field notes; focus group Data analysis: thematic analysis	Senior practicum course in a nursing program at a small, private university in the suburbs of a major Midwest City in the US..Senior nursing students (n=70); 63 White, 2 Black, 5 Asian; 63 female, 7 male; age range from 21 to 48 years.	Reading and reflecting on a short story	The author concludes: "requiring students to read and write about Ella engaged them in reflective thinking to varying degrees" (p. 290).	Insightful findings about the use of literature in nursing education.

Study	Methodology and Methods	Setting and Participants	Phenomenon	Conclusions	Notes
Shieh, C., 2005 ⁹⁰	Descriptive (part of a mixed methods study) Data collection: written narratives Data analysis: content analysis	Clinical course in an associate and baccalaureate nursing degree program in the United States. Nursing students (n=25); associate (n=16) and baccalaureate (n=9) degree students; 24 female, one male.	Use of stories in clinical nursing	The author concludes that "story writing, storytelling, and story analysis is an effective teaching strategy. This method could augment or even, to some extent, replace lectures" (p. 10).	The five qualitative themes from this mixed methods study provide insight into why storytelling is an effective teaching method in clinical nursing courses.
Webster, D., 2010 ⁹¹	Descriptive (part of a mixed methods study) Data collection: written narratives; individual interviews; field notes; creative assignments Data analysis: constant comparison	Psychiatric clinical course in a baccalaureate nursing program in the United States. Senior baccalaureate nursing students; 14 participants; primarily Caucasian students.	Creative reflective clinical experience	The author concludes that "The knowledge gained from this study suggests that a creative reflective experience reduces stigma, creates positive change in attitudes toward mental illness, facilitates the development of the nursing student-client relationship, and promotes empathy" (p. 93).	The creative reflection was part of a larger teaching innovation, but it seemed to be a meaningful component of the experience which fostered understanding of self and others.
Welch, T. R. and Welch, M., 2008 ⁸	Descriptive Data collection: individual interviews Data analysis: thematic analysis	Mental health clinical in an undergraduate nursing program in a Faculty of Nursing in at the University of Alberta, Edmonton, Canada. Nursing	Watching a play about people's experiences of abuse and torture	The authors conclude that: "the reports, recollections and reflections of the participants are more than suggestive of the power, persistence and pertinence of the learning experience. It seems clear from the students that the verisimilitude, emotional intensity and proximity of the actors' emotional embodiment approached the reality of clinical experience, indeed total or holistic life	Four to five months after the viewing of a play, nursing students still describe a compelling ABP learning experience about an emotionally difficult topic.

Study	Methodology and Methods	Setting and Participants	Phenomenon	Conclusions	Notes
		students (n=7).		experience more closely than other methods of teaching and learning they had experienced. The theatrical performance was seen, by the students, to have the potential to open up debates, distil experience and engage their cognitive and emotional responses. They also reported that it could engender learning that was transferable to the clinical situation, and indeed personal lives" (p. 268).	
Wikström, B., 2003 ⁹³	Descriptive Data collection: written narratives Data analysis: content analysis	A three year undergraduate nursing program at two university colleges of health sciences in Sweden. Third year undergraduate nursing students (n=291).	Writing about a memory of an aesthetic experience	The author concludes: "The relevance of writing about a memory of an aesthetic experience as learning objectives need to be considered, particularly because it provided a lens through which an alternative model for nursing education was explored that could improve patient care" (p. 48).	A unique and unusual use of the arts in nursing education; demonstrates potential for an enjoyable learning experience which fosters awareness of the importance of aesthetics.
Wright, D. J., 2006 ⁹²	Textual analysis Data collection: written narratives (poems) Data analysis: content analysis	Home health nursing clinical in the United States. Senior nursing students (n=192).	Writing poetry to reflect on clinical experiences in home health nursing	The author concludes: "The goals of gaining insight into the meaning of the clinical experience and documenting the contribution of clinical learning to the affective domain were both met. Through reflection and writing, students were able to consolidate and articulate their learning" (p. 461).	Through writing poems, students were able to reflect meaningfully on their clinical practice.

Included Studies: Quantitative

Study	Methodology	Setting and Participants	Intervention and Outcomes	Findings/ Conclusions	Notes
Anderson, K. L., 2004 ⁹⁴	One group pretest-posttest quasi-experiment	Undergraduate nursing students (n=45) in a first year foundations of professional nursing course in an undergraduate nursing program.	Intervention (independent variable): Undergraduate nursing students reading and reflecting on a work of literary journalism Outcomes (dependent variable): 1. Cultural attitudes as measured by the Assessing Your Personal Responses to Transcultural Health Care Situations and a cultural values questionnaire.	In regards to statistically significant findings, the author writes that "On the questionnaire "Assessing Your Personal Responses to Transcultural Health Care Situations," scores for only one item ("People are the same. I don't behave any differently toward people from a cultural background that differs from mine") showed a statistically significant change ($z = -2.49$, $p = .013$). On the cultural values questionnaire, one item (rating the appropriateness of direct eye contact) had a statistically significant change in score ($z = -2.18$, $p = .029$)" (p. 256). The author concludes that "When students have not yet begun their clinical experiences, literature can provide exemplars from which they can learn powerful lessons in anticipation of working with real clients" (p. 259).	The educator used literary journalism to teach cultural competence, and research findings demonstrated statistically significant within group differences on two items, one from each of the two measurement tools. Although the author does provide the statistical test and its significance, the means and standard deviations of the outcomes are not provided.
Bittman, B. B., Snyder, C., Bruhn, K. T., Liebfreid, F., Stevens, C. K., Westengard, J., Umbach, P. O., 2004 ⁹⁵	Controlled prospective crossover quasi-experiment	Medical surgical nursing course at the Allegany College of Maryland, United States. First year associate degree nursing students (n=75); 11 men and 64 women; ages 18 to 50; mean age of	Intervention: recreational music making Outcomes: 1. Burnout as measured by the Maslach Burnout Inventory 2. Mood dimensions and total mood	The researchers found that "For the RMM intervention (N=75 subjects), the following dimensions: EE ($p=0.01$); T/A ($p=0.00006$); D/D ($p=0.03$); A/H ($p=0.00003$); F/I ($p=0.01$), C/B ($p=0.002$) and TMD ($p=0.0006$) with the exception of PA ($p=0.35$); DP ($p=0.06$) and V/A ($p=0.11$) showed a significant pre-post change ($p<0.05$) (see Figure 1,	The researchers found significant improvement in certain domains: -emotional exhaustion -tension/anxiety -depression/dejection -anger/hostility -fatigue/inertia -confusion/bewilderment -total mood disturbance Also, they found a persistence effect for:

Study	Methodology	Setting and Participants	Intervention and Outcomes	Findings/ Conclusions	Notes
		27.5 years.	disturbance as measured by the Profile of Mood States. 3. Total mood disturbance as measured by summing the POMS dimensions and weighing the V/A dimension negatively.	Table 3). An overall multivariate eustress effect for the data set was determined to be significant ($p < 0.0007$)" (p. 14). The authors write "As demonstrated in the prior section, this crossover, controlled RMM intervention for first year associate degree nursing students revealed statistically significant improvements for multiple parameters associated with burnout, mood states and TMD. Multivariate eustress trends coupled with marked TMD score reductions and the statistically significant control group distress baseline support the underlying hypothesis. These data demonstrate correlations worthy of further consideration" (p. 18).	-emotional exhaustion -tension/anxiety -anger/hostility -fatigue/inertia -confusion/bewilderment -total mood disturbance Although this study appears to have a control group, the control group also received the intervention and all participants were analyzed together in regard to intervention effect on outcomes using a paired t-test for a within group comparisons. The comparisons between groups were conducted to control for history, looking at distress trends before and after the intervention. This study demonstrates that recreational music making can have a significant impact on aspects of nursing students' burnout and mood dimensions, and on their total mood disturbance.
Bradshaw, V., 2012 ⁹⁶	One group pretest-posttest quasi-experiment	Nursing program at a large public post-secondary college in the southwest United States. Nursing students (n=24); overall student demographics for the nursing program: 58.8% white/non-Hispanic,	Intervention: stories Outcomes: 1. Preferred approach to learning as measured by the Study Process Questionnaire (R-SPQ-2F) 2. Reflective practice as	The researcher found that "The stories assignment helped most students in the course decrease their use of routine types of reflection (HA) and increase their use of exploring reflection (R) by the end of the course. A review of pre and post course surveys for each of the reflection scales found that post course use of habitual types of reflection decreased while post course use of understanding,	The sum scores for deep and surface learning on the questionnaire did not demonstrate a statistically significant increase. However, 50% of the individual students' scores changed significantly, and there were two questions on the deep approach to learning scale that did demonstrate a statistically significant difference. These items were: "I find that at times studying

Study	Methodology	Setting and Participants	Intervention and Outcomes	Findings/ Conclusions	Notes
		8.8% Hispanic, 5.9% African American, 5.9% Asian/Pacific Islander, 1.2% American Indian, and 5.9% unspecified; 123 female (72.4%) and 47 male (27.6%) students.	measured by the Reflective Questionnaire	reflection and critical reflection all increased" (p. 55). The author concludes that "stories that include examples of critical reflection may influence students to use more transformational types of reflective learning actions. Approximately fifty percent of the students in the course increased their preference for deep learning by the end of the course" (p. i).	gives me a feeling of deep personal satisfaction" and "I spend free time finding out more about interesting topics, which have been discussed in different classes". Furthermore after the use of stories, the sub-scale scores for habitual action demonstrated a statistically significant decrease, and the sub-scale scores for reflection demonstrated a statistically significant increase. Two individual questions demonstrated statistically significant changes: "In this course we do things so many times I started doing them without thinking" and "I often re-appraise my experience so I can learn from it and improve it for my next performance".
Briggs, C.L., Fox, L., Abell, C. H., 2012 ⁹⁷	Nonequivalent control group pretest-posttest quasi-experiment	Nursing fundamentals course at a south central Kentucky university, United States. First year nursing students (n=39).	Intervention: intervention group (n=20) viewed the feature film "Wit", while the control group (n=19) had a "career opportunities in nursing" presentation. Outcomes: 1. Empathy as measured by the Jefferson Scale of Empathy (JSE)	The authors found a statistically significant increase in pretest-posttest empathy scores in the experimental group compared to the control group, and write that "At this school of nursing using a convenience sample, adding the film Wit to the nursing curriculum enhanced student empathy scores" (p. 62).	Statistically significant differences were found within the experimental group (pre to post intervention) and between groups. Furthermore, the experimental group's empathy scores were maintained (post-test #2 at 7 weeks post-intervention).

Study	Methodology	Setting and Participants	Intervention and Outcomes	Findings/ Conclusions	Notes
Chen, S. and Walsh, S. M., 2009 ⁹⁸	Nonequivalent control group pretest-posttest quasi-experiment	Five year national junior nursing college in Taiwan. Fourth year Taiwanese nursing students (n=194).	<p>Intervention: creative-bonding intervention (multi-art expression) Intervention group (n=100) participated in a creative-bonding intervention, while the control group (n=96) participated in a friendly visit.</p> <p>Outcomes:</p> <ol style="list-style-type: none"> 1. Self-transcendence as measured by the Self-transcendence scale (STS) 2. Positive attitudes towards elders as measured by the Revised Kogan's Attitudes Toward Old People Scale (RKAOP) 	The experimental group had significantly more positive attitudes towards elders. No significant difference on self-transcendence scores was found between groups. The authors conclude that "ANCOVA results indicated that after the intervention, the CBI group had significantly more positive attitudes towards elders than the FV group. Nursing school faculty may want to promote art-making activities between students and elders to foster students' interest in elder care" (p. 204).	Students who participated in the creative-bonding intervention, which included expressive art-making, had significantly higher scores on attitudes towards elders compared to the friendly visit group. However, no significant differences were found in regard to self-transcendence.
Deeny, P., Johnson, A., Boore, J., Leyden, C., McCaughan, E., 2001 ⁹⁹	Design: Descriptive cross-sectional study	Diploma and degree nursing programs in Northern Ireland First year nursing students (n=110 in the main study, along with 25 participants in the pilot study); age range from 19-30; average age of 21;	<p>Intervention: observation of a drama about death and dying</p> <p>Outcomes: opinions and feelings about the ABP initiative as measured by a researcher developed tool.</p>	The researchers found that overall, the student response to the drama was very positive: 84% of one group, and 80% of the other, believed that the drama "helped them to learn about death and dying, and gain insight into the patients' perspective" (p. 106), and 80% of students responded positively to the statement that "the drama made me think about my	The researchers evaluated a drama used to teach about death and dying. The authors created and pilot tested a questionnaire, based on a review of the literature, to evaluate the drama. Overall, the students' responses to the drama were very positive. Qualitative comments were used to support the quantitative findings.

Study	Methodology	Setting and Participants	Intervention and Outcomes	Findings/ Conclusions	Notes
		mostly female (91%).		own attitudes to death and dying" (p. 109). The authors conclude that "Drama as a teaching method was well received, and the combination of drama and group discussion was considered very effective by students, who requested more similar sessions. Drama appears highly satisfactory for achieving learning in the affective domain, and can be added to teaching methods for improving communication skills and coping strategies with nursing students who will be caring for the dying. However, further research is necessary" (p. 99).	
Emmanuel, E., Collins, D., Carey, M., 2010 ¹⁰⁰	Descriptive Cross-sectional Study	A "Communications and Assessments in Nursing" course in a three year Bachelor of Nursing program at Griffith University, Australia. First year nursing students (n=50 -146; the sample size varied with different assessments).	Intervention: designing a wearable mask that demonstrated an abstract interpretation of therapeutic communication skills Outcomes: students' learning experiences as measured by: 1. Aggregate scores on assignment. 2. Student performance categories. 3. Assessment of	The authors conclude that "the use of a creative assessment approach that incorporates art creation shows much promise in bridging the gap from a superficial understanding of concepts to an understanding characterised by deeper learning. Importantly, this project was found to assist students to internalize concepts of effective therapeutic communication and also acted as a vehicle for self reflection" (p. 724).	The researchers used multiple sources of data for evaluating this assignment. The students' artistic masks were varied in content and design, and the students' aggregate scores on the assignment demonstrated that more than 80% of students achieved a pass or higher. Using the Briggs's SOLO taxonomy (1995), the researchers found that 32% of students were uni-structural in that they made simple connections, 9% were relational in that they made connections within the content and beyond, and 30% were abstract in that they were able to generalize and transfer content to other area. In regard to the

Study	Methodology	Setting and Participants	Intervention and Outcomes	Findings/ Conclusions	Notes
			masks. 4. Student evaluations. 5. Verbal feedback.		student evaluations, the majority of students rated the assignment as an effective learning strategy (70%), and found it engaging on a personal level (82%). On the negative side, 8% found that they were not engaged in learning by this approach, and 10% were ambivalent. Overall, the results seem to indicate that most students were engaged with this assignment and could relate it to nursing. It also promoted deeper learning for some students.
Evans, B. C. and Bendel, R., 2004 ¹⁰¹	Nonequivalent control group quasi-experiment	A baccalaureate nursing class in the United States. Undergraduate nursing students; 27 students in the intervention group and 88 in the control group; 24.7 years was the average age; 90% were female; and 87.5% were Caucasian.	Intervention: narrative pedagogy with the inclusion of art forms. Outcomes: Ethical and cognitive maturity as measured by the Measure of Intellectual Development (MID) and the California Critical Thinking Disposition Inventory (CCTDI).	The authors conclude that "Students taking a class using Narrative Pedagogy demonstrated "entry" and "exit" mean scores that showed marginal and statistically significant ($p < 0.05$) improvement on the Measure of Intellectual Development and the California Critical Thinking Disposition Inventory. Using nonparametric and parametric analyses of variance, there was minor improvement on both scales in cognitive and ethical maturity and the disposition to think critically in the intervention group. For all variables, there were no significant differences between the control group and the intervention group, with or without adjustment for age, the only significant covariate. The cognitive and ethical growth documented by either instrument	In regard to the within group comparisons for the intervention group, two of the CCTDI subscales demonstrated a statistically significant change: truth-seeking and systematicity. There were no significant differences between the intervention and control groups on the CCTDI or the MID scores, with or without adjustment for age, which was a significant covariate.

Study	Methodology	Setting and Participants	Intervention and Outcomes	Findings/ Conclusions	Notes
				is probably not large enough to be considered practically significant in terms of movement toward autonomous practice" (p. 188).	
Fenton, G., 2014 ¹⁰²	Descriptive cross-sectional study	A university in the United Kingdom. Final year pre-registration nursing students (n=40).	Intervention: digital learning object (storytelling/digital storytelling) Outcomes: student perspectives of the learning activity as measured by the Digital Learning Object Questionnaire.	The researcher found that over 80% of the students "rated the digital learning object as interesting and were motivated to explore its content" (p. 52). The authors conclude that "The process of developing a digital learning object in collaboration with a service user has been considered. Although not without challenges, digital learning objects can be an effective teaching and learning strategy that enable student nurses to develop an appreciation of the lived experiences of service users" (p. 53).	Nursing students found that the use of a digital learning object was interesting and motivating (82.5%), easy to navigate (82.5%), accessible (90%), reusable (82.5%), and clear with the appropriate level of detail (80%). They also reported that it helped them to gain insight into a young person's experience of being a patient (87.5%) and into the patient's experience of healthcare (82.5%).
Masters, J. C., 2005 ¹⁰³	Descriptive cross-sectional	A psychiatric mental health class in a Bachelor of Nursing program at a university in the United States. Undergraduate nursing students (n=20).	Intervention: viewing films Outcome: students' perceptions of the learning activity as measured by a researcher developed tool	The authors conclude that "The film experience was well received by the students. They were able to distinguish between films that they liked and those that, they believed, they learned from. Students were very clear that they were not bothered by sexual or violent content (except for several grisly scenes of self-mutilation in Clean, Shaven) but that they do not like moral ambiguity and do want a happy ending....Integrating films into teaching is a viable addition to clinical that students learn from and enjoy" (p. 114-115).	Nursing students' evaluation of watching pertinent films reveals that they found it to be valuable learning experience which added to the class content and improved their understanding of mental health.

Study	Methodology	Setting and Participants	Intervention and Outcomes	Findings/ Conclusions	Notes
Mathibe, L. J., 2007 ⁸⁷	Descriptive cross-sectional study	A pharmacology course in a Bachelor of Nursing degree program at the University of KwaZulu-Natal (Howard College), Durban, South Africa. Third year undergraduate nursing students (n=25); 16 females, 3 males, and 6 did not indicate gender; median age of 20 years.	Intervention: reading and reflecting on an autobiography Outcomes: students' perceptions of learning activity	The researcher found that "A vast majority of participants agreed/strongly agreed with the five general statements (statements 1–5) regarding the use of a popular autobiography as shown in Table 2. Eighty percent (80%) of participants felt that the use of a popular autobiography stimulated their interest in cancer drugs and 84% agreed/strongly agreed that it contributed to their knowledge of pharmacology" (p. 251). The author concludes that "Using [an autobiography] to teach cytotoxic drugs is a worthwhile and rewarding exercise, from the point of view of student nurses. It is a stimulating, interactive and innovative method, which "lays foundation well for learning more intense pharmacological principles" (p. 254).	Students' perspectives of reading and reflecting on an autobiography, as measured by a researcher developed tool, indicate that this approach helped to situate their learning about pharmacology with a real-life story. They reported that this approach stimulated interest in learning about content (80%), and resulted in an increased knowledge of pharmacology (84%). They also reported that it was a valuable use of time (76%), interactive (72%), and an exciting way to learn (68%). When compared to the use of an autobiography, many students indicated that didactic methods were a less popular teaching approach (64.8%).
Özcan, N., Keser, Bilgin, H., Eracar, N., 2011 ⁵³	Pretest-post test one group quasi-experiment	Nursing Division of a Health School in Istanbul. Third class and senior nursing students (n=48); mean age of 21.77; all female.	Intervention: expressive art and psychodrama Outcome: empathy as measured by the Scale of Empathic Skill	The authors write that "Before the group study took place, the average score for empathic skill was 127.97 (SD = 21.26). After the group study, it increased to 138.87 (SD = 20.40). The average score for empathic skill increased after the group (t = 3.996, p = .000). Results show that expressive methods are easier, more effective, and enjoyable processes in nursing training" (p. 131).	Nursing students who participated in varied expressive arts activities demonstrated a statistically significant increase in empathy scores. This analysis consisted of a within group analysis, and a limitation of this study is that there was no control group.

Study	Methodology	Setting and Participants	Intervention and Outcomes	Findings/ Conclusions	Notes
Pardee, C.J., 2007 ¹⁰⁸	Nonequivalent control group posttest only quasi-experiment	Nursing pharmacology course in a baccalaureate nursing program at a private university in the western region of the United States. Undergraduate nursing students (n=126); experimental group (n=40) and control group (n= 86); mean age of 30.42 years (experimental group) and 30.08 years (control group); no statistically significant differences between groups in regard to previous healthcare experience, hours spent reading the text, and utilizing class notes and website resources.	Intervention: original songs as mnemonic devices and the control group participated in standard education along with song lyrics as a resource. Outcome: knowledge of pharmaceutical content	The researcher found that "there were not significant differences in outcomes on multiple choice examination questions at the recall, application, or analysis levels between the group who used songs and the group who did not use songs" (p. 89). The author concludes: "Although the results were not significant, this study demonstrates the need for further research into the use of alternative teaching strategies, specifically songs, in undergraduate nursing pharmacology courses" (p. iv).	No significant differences were found between groups in regard to knowledge of pharmaceutical content as measured by multiple choice tests. The dose of ABP may be an issue in this study, and it would have been interesting to have some indication of the students' perspective of this unusual learning activity in nursing education.
Shieh, C., 2005 ⁹⁰	One group pretest-posttest quasi-experiment	Obstetric and pediatric clinical course in a baccalaureate nursing degree in the United States. Undergraduate	Intervention: storytelling Outcome: perceived knowledge acquisition as measured with a	The author writes: "Mean scores decreased significantly from pre-tests to post-tests, indicating students perceived that they had gained understanding in all five knowledge areas. The knowledge areas, ranked from the most to the	Using an investigator developed tool, nursing students demonstrated a statistically significant increase in perception of knowledge acquisition in five content areas: physiological alteration, psychosocial alteration,

Study	Methodology	Setting and Participants	Intervention and Outcomes	Findings/ Conclusions	Notes
		associate degree nursing students (n=16).	researcher-developed tool.	least perceived improvement, were nursing interventions, psychosocial alteration, physiological alteration, legal/ethical/cultural issues, and community resources. Individual pre-test scores ranged from 12 to 25; post-test scores from 8 to 19" (p. 8). The author concludes that "this evaluation study suggests that story writing, storytelling, and story analysis is an effective teaching strategy. This method could augment or even, to some extent, replace lectures" (p. 10-11).	nursing intervention, legal/ethical/cultural issues, and community resources. Limitations of the study include lack of a control group and use of a researcher developed tool. As well, the knowledge questionnaire measured the students' perspectives and was not an objective measure of knowledge acquisition.
Walsh, S. M., Chang, C. Y., Schmidt, L. A., Yoep, J. H., 2005 ⁵⁵	Pretest-posttest two group quasi-experiment	A research class in a Bachelor of Science in Nursing program at a university in the United States Junior and senior BSN students (n=36); all women; Hispanic (33.3%), White (27.8%), Pacific Islander (16.7%), Black (13.9%), Other (5.6%), and one student did not state ethnic background; age range of 18 to 50; the majority of students were 25 years or younger (80.5%); 15	Intervention: the experimental group participated in creative arts activities and the comparison group in an attention control group (course instructor spent and equal amount of time with each group). Outcomes: 1. Stress as measured by The Mimi-Profile of Mental States 2. Anxiety as measured by the Beck Anxiety Inventory	The researchers found that "Data analysis determined that significant differences existed between the two groups. Following the intervention, the experimental group reported experiencing less stress ($t = -3.20$, $p = 0.003$), decreased anxiety ($t = -2.29$, $p = 0.029$), and more positive emotions ($t = 3.99$, $p = 0.001$), compared to the comparison group" (p. 332) and write that based "on the significant results of this study, use of the creative arts intervention with BSN students appears to be effective at lowering stress, reducing anxiety, and increasing positive emotions" (p. 332).	The intervention group had significantly less stress, decreased anxiety, and more positive emotions, compared to the comparison group. Although this study did demonstrate a significant reduction in stress and anxiety, and improved positive emotions, after the ABP intervention, the students were involved in the research design and analysis which may have biased the results. However, this involvement may have also resulted in the students learning about research through ABP. Students commented that this approach helped them to learn about research design, but this outcome was not measured.

Study	Methodology	Setting and Participants	Intervention and Outcomes	Findings/ Conclusions	Notes
		students had previous art experience (41.7%).	3. Emotions as measured by the Affects Balance Scale.		
Walsh, S. M., Chen, S., Hacker, M., Broschard, D., 2008 ¹⁰⁴	Nonequivalent control group pretest-posttest quasi-experiment	"Care of the Older Adult" course in a Bachelor of Science in Nursing program at a university in the Southeastern United States. Undergraduate nursing students (n=22); CBI group (n=11) and FV group (n=11); all female; authors state that groups were similar in regard to demographic characteristics except that the FV group had less exposure to elders and was predominantly Hispanic, while the CBI group was predominantly Afro-American.	Intervention: creative bonding intervention Outcomes: 1. Self-transcendence as measured by the Reed's Self-transcendence scale 2. Positive attitudes towards elders as measured by the Revised Kogan's Attitudes Toward Old People Scale (RKAOP)	The researchers found that their research hypothesis, "Students who participate in the CBI will have greater self-transcendence and more positive attitudes toward elders than students who participate in a Friendly Visit (FV) intervention", was not statistically supported. They conclude that "Results demonstrated significant differences in attitudes in the FV and changes in the expected directions in the CBI group. Self-transcendence had no significant changes. Valuable information was provided by students' comments about the interventions" (p. 363).	Although the researchers did not find statistically significant differences between groups, both groups did improve on the RKAOP (attitude towards elders) score. Interestingly, the FV group demonstrated significant changes in their attitudes towards elders which may have been influenced by moderating variables such as lower pretest scores and less exposure to elders before the intervention.
Webster, D., 2010 ⁹¹	Nonequivalent control group pretest-posttest quasi-	Psychiatric clinical course in a Bachelor of Nursing program at a university in the United States.	Intervention: the intervention group participated in a creative reflective clinical experience, and the	The author writes "Trends were noted, although no statistically significant differences in IRI scores were found for either group" (p. 87). Further, Webster (2010) writes, "Although the quantitative	No significant difference between groups, but trends were noted. Although the quantitative findings did not demonstrate statistical significance, the qualitative findings were insightful. There

Study	Methodology	Setting and Participants	Intervention and Outcomes	Findings/ Conclusions	Notes
	experiment (two groups but did not use an independent t-test)	Senior baccalaureate nursing students (n=73); creative reflective experience (n=29 and control group (n=43); age range from 20 to 49 with 72.6% between the ages of 20 and 22; 93.1% were Caucasian, 5.5% were African-American, and 1.4% were Asian; 90.4% were women; 8.2% of the students had work related psychiatric experiences, 43.8% had relatives with a mental illness, and 19.2% had friends with a mental illness.	control group participated in a conventional 14-week clinical experience. Outcome: empathy as measured by the Interpersonal Reactivity Index (IRI)	findings revealed no statistically significant differences in empathy levels, it is important to note that students in this sample had high levels of empathy prior to any instruction in psychiatric nursing, according to the IRI. It is possible that 4 weeks was not a long enough period to see any statistically significant change. It is also possible that the IRI was not as appropriate for measuring feelings of empathy toward individuals with mental illness as it would be for individuals without mental illness" (p. 93). The author concludes about the mixed-methods findings, "Nurse educators who are interested in finding creative and innovative educational strategies for fostering empathy in nursing students may do well to consider alternative approaches" (p. 94).	may be a number of limitations which affected the ability of the researchers to detect a difference. First, the dose of ABP may not have been intense enough compared to the control groups' treatment. Second, as the author mentioned, perhaps a more specific tool was needed.
Wikström, B., 2001 ¹⁰⁷	Randomized controlled experiment	A foundations of nursing course at a three year program at two university colleges of health sciences in Sweden. First year nursing students (n=267); intervention group (n=121) and control	The intervention group participated in visual art dialogues, and the control group participated in group dialogues. Outcomes: knowledge about nursing care	The author writes that "Students in the intervention group, compared to the control group, were more structured, motivated and emotionally balanced when they expressed the elements most typical of good nursing care. They showed personal readiness in caring situations" (p. 25). She concludes, "The present study showed that visual art dialogues	The researcher used a unique tool, The Wheel Questionnaire, to map and measure the students' structure, motivation, and degree of emotional investment in learning about good nursing care. Students in the intervention group participated in visual art dialogues about nursing care, and demonstrated significantly more motivation, structure, and

Study	Methodology	Setting and Participants	Intervention and Outcomes	Findings/ Conclusions	Notes
		group (n=146).	measured with the Wheel Questionnaire.	made a vital contribution to students' knowledge about nursing care and could be used in education as a complement to standard textbooks. The idea of using visual art seems to be worth cultivating because of the insight it gave the students into professional nursing care evoked by the pictures studied. Through visual art students could experience reality and begin to develop the sensitivity to others that is central to nursing situations" (p. 31).	emotional investment in their learning about good nursing care, compared to the control group.
Wikström, B., 2003 ¹⁰⁶	Randomized controlled experiment	Three year nursing program at a university college of health sciences in Swede. First year nursing students (n=144); intervention group (n=72) and control group (n=72).	<p>The intervention group participated in visual art dialogues, and the control group participated in group dialogues.</p> <p>Outcome: engagement in learning about empathy measured with the Wheel Questionnaire.</p>	The author concludes that "The result showed a significant improvement in the visual art group compared with the matched control group. Students in the visual art group were more engaged in learning about empathy when measured with the Wheel Questionnaire parameters of structure, motivation, and emotional investment. The present study supported the idea that Edvard Munch's painting could be used in nurse education complementary to theoretical knowledge on empathy to stimulate student nurses to engage in empathy learning" (p. 49).	The researcher found significant improvements in the visual art group, in regard to their engagement in learning about empathy, compared to the control group. The researcher used a unique tool, The Wheel Questionnaire, to map and measure the students' structure, motivation, and degree of emotional investment in learning about empathy. Students in the intervention group participated in visual art dialogues about empathy, and demonstrated significantly more structure, and emotional investment in their learning about empathy compared to the control group who participated in group dialogues alone. No differences were found in regard to motivation between groups.

Study	Methodology	Setting and Participants	Intervention and Outcomes	Findings/ Conclusions	Notes
Wilt, D. L., Evans, G. W., Muenchen, R., Guegold, G., 1995 ¹⁰⁵	Randomized controlled experiment	Mental health nursing class at a large south-eastern university in the United States. Senior baccalaureate nursing students (n=106).	<p>Intervention: entertainment films. There were three different treatments: a film/guidance group, a role play/guidance group, and a film/discussion group. The control group participated in student care issue discussions.</p> <p>Outcome: Empathy as measured by the Layton Empathy Test</p>	The authors write that "The findings of this study suggest that the use of entertainment films with guidance is effective in teaching empathic responses. The data demonstrate that repeated use of this teaching strategy, within close intervals, brought significantly higher scores using the Layton Empathy Test. It is also conclusive that over longer periods of time, the group mean score dropped" (p. 12).	The film/guidance group demonstrated a significant increase in empathy after the second treatment. Using ANOVA, the impact of treatments on empathy differed significantly across time. Further analysis revealed that the film/guidance group had a significant increase in empathy after the second treatment; however, this difference was not maintained on the final post-test which showed no group differences.

Appendix VII: List of JBI-QARI Study Findings

Let's go outside: Using photography to explore values and culture in mental health nursing, Aranda, K., Goeas, S., Davies, S., Radcliffe, M., Christoforou, A., 2015⁸⁰

Finding One Challenge and conflict

Illustration "Your values and your beliefs are kind of some ways intimate. And to be able to open up and share it, that is kind of dodgy ground for me, because I don't know what the others are going to think and do about it or feel (P2)." (p. 310)

Finding Two Connection, challenge and conflict

Illustration "I had no idea what my values were or how strongly I felt? (P4)" (p. 310)

Finding Three Creativity, collaboration and connection

Illustration "Maybe the end photos were not so important. But I do think the pausing and the taking of the photos definitely was important, it was kind of like 'pause and retrieve'. So when you take that image then you are seeing a perspective or a snap-shot of another person's perspective. I think it is easy to kind of plod along in life and not actually think about these things (P3)." (p. 311)

Digital story analysis utilizing the advancing care excellence for seniors framework, Bassell, K., 2015⁸¹

Finding 1 ACES framework themes

Illustration "The author of digital story two described his patient's fluid status concerns by the following statement, 'I also have type 2 diabetes, hypertension, chronic kidney disease and coronary artery atherosclerosis.' " (p. 78)

Finding 2 Individual perception of current life status

Illustration "These attributes can be seen in statements such as, 'Due to his occupation, we got to travel a lot. I've been all around the world,' and 'You see this pic, this is our happiest family photo. Yup, oh I really loved that car. She was a real beauty.' Images used to support these statements included those shown in Figure 4-42 and Figure 4-43." (p. 83)

Arts-based inquiry in nursing education, Casey, B., 2009⁹

Finding 1 Scratching surfaces: Inquiring and experiencing through the art-making processes

Illustration “The piece was made by covering the paper in lots of colours. It was then covered with a black oil pastel. The pastel was then scratched off with a needle leaving the colour. The piece represents the darkness and black cloud that falls on people when they encounter mental illness. Recovering from mental illness is a slow process and, unlike a physical illness, the improvements are difficult to see on a daily basis. The colour in the piece is in very narrow lines created by the needle. However although it is in narrow lines it is very powerful. The small day to day things in nursing can too be very powerful. The colour coming through the black is a representation of the work of the mental health nurse. By supporting, listening to and being there for people, the nurse can bring out the person's true colours. Through mental health nursing hope and beauty can emerge from the darkness. – Helen” (p. 74)

Finding 2 Developing the art of interpretation

Illustration “You sort of look at someone from a different perspective and see why are they acting that way? What did they feel at that moment? What was going on? Like the way you look at a painting; why is it so dark and gloomy? – Lisa” (p. 77)

Exploration of artistry in nursing teaching activities, Chan, Z. C. Y., 2014⁸²

Finding 1 Definitions of artistry

Illustration “Artistry is related to our daily life. For instance, singing a song in a clinical context can relieve the stress of medical staff and patients. When we need to communicate with patients, we have to find a suitable way of expressing ourselves. This is the art of communication (P7).” (p. 926).

Finding 2 Artistry in the sciences/nursing

Illustration “When we provide mental care to our seriously ill patients, especially those who suffer from terminal cancer, we can give them comfort through artistic activities. We may not necessarily have to sing songs to them, but we can draw a picture to show our consideration for them (P1).” (p. 926)

Storytelling and professional learning: A phenomenographic study of students' experience of patient digital stories in nurse education, Christiansen, A., 2011⁸³

Finding 1 Patient digital stories as a learning resource

Illustration “(Participant 2). ‘If you were just reading the words it wouldn't be as powerful. When it's a person's voice, there's much stronger emotions. You're hearing the patient's tale and voice and the feelings in the voice and you can understand it more than just reading a book.’” (p. 291)

Finding 2 Digital story as an emotional experience

Illustration “(Participant 5) ‘I felt sad and I felt angry. Angry that they had to go through all that and they really didn't need to and if somebody had just listened to them it would have made their journey so much easier. It really upsets me because I always think what if it was my family and if it was me in that situation.’” (p. 291)

Finding 3 Digital story as a reflective experience

Illustration “(Participant 5) ‘The patient story encourages me to reflect on practice which I don't think sometimes when you are on a ward you've not got time to do. Things happen and people will tell you things but then you're on to the next task, you don't recognise what has been said, but in the classroom you have time to be able to reflect. The patient story helps you to do that.’” (p. 291-2)

Finding 4 Digital story as an opportunity to gain new insights

Illustration “(Participant 11). ‘I think it just makes you aware that these are real people, with real lives that you're dealing with and maybe you look at people now and you look at the whole picture not just “that person” in front of you. It really does bring it home to you how your behaviour can have a big effect on someone else.’” (p. 292)

Stories as integrated patterns of knowing in nursing education, Hunter, L. A., 2008⁵⁹

Finding 1 Empirical knowing

Illustration “From birth he had a port wine stain all over his body, making him look very

different than most babies. Having a child with so many physical and mental challenges was a huge wake up call for my parents. Everything they had planned in their life changed the moment he was born.” (p. 7)

Finding 2 Ethical knowing

Illustration “I’ve learned in my classes this year that nurses are the advocates for patients. They should be on the patient’s side and try to do what is in the best interest for that patient. They should take the time to listen to what the patient says. I would never want anyone to go through the anxiety I felt when I thought no one believed me.” (p. 7)

Finding 3 Personal knowing

Illustration “While we were all in the hospital with my mom on the oncology unit I was so grateful for the care that was given to us by the nursing staff. Something as simple as sitting in the room with us instead of at the nurse’s station made all the difference. I hope I can be that helpful in my nursing career. The nurses went above and beyond to make us feel better and I will never forget what they did for us. I think that this will really shape my nursing career by really focusing on the whole picture and not just the surface with the patient.” (p. 9)

Finding 4 Esthetic knowing

Illustration “I think my mom’s story will definitely affect how I personally practice as a nurse. It gave me an inside look of how the patient is feeling. I feel like I will be more understanding of how vulnerable they feel. I think I will be able to connect with them on a closer level because I have her experience to use as a comparison. I will try to be mindful of how they are feeling, not just mindful of how I am doing at the technical aspects of my job.” (p. 10)

Art as a scaffolding teaching strategy in baccalaureate nursing education, Hydo, S. K., Marcyjanik, D. L., Zorn, C. R., Hooper, N. M., 2007⁸⁴

Finding 1 Art and creativity

Illustration “Poems, symbols, dance and song all express the world as we see it and one way or another, make things beautiful and more clear.” (p. 7)

Finding 2 Teamwork

Illustration “I also know I won’t be making the journey alone through the semesters of school”

	(p. 8)
Finding 3	Boundaries and horizons within self
Illustration	" <i>Pushing Limits</i> was expressed by students in the following ways: 'For one, I would never have the guts to get up in front of a class of 40 people'; 'stepping out of comfort zones and a need to branch out.'" (p. 8)
Finding 4	Boundaries and horizons in the profession
Illustration	"A good way to put all the characteristics of nurse in one picture (brave, compassionate, someone to look up to)" (p. 9)
Putting the words "I am sad", just doesn't quite cut it sometimes!: The use of art to promote emotional awareness in nursing students, Jack, K., 2012 ⁵⁸	
Finding 1	"I didn't feel like I should have been there"
Illustration	"That was because that's how I felt like, even though I know I should have been there, otherwise the attention would have been away from this woman, I didn't feel like I should have been there" (p. 813)
Finding 2	"I wasn't really angry....I wasn't angry at all"
Illustration	"...looking at the colours and the pictures and things, I think maybe I've, what's the word, sort of pushed it up, (the experience) in my head to be something bigger than it was, over emphasised it or something, so maybe I should have just let it chill out a bit, been more confident" (p. 814)
Finding 3	"...they shouldn't be doing the job"
Illustration	"I'm angry, yes angry, that they shouldn't be doing the job....it was left to the students to see what the patients wanted. I never saw a qualified member of staff answer a buzzer" (p. 814)

A descriptive qualitative study of student learning in a psychosocial nursing class infused with art, literature, music, and film, Jensen, A. & Curtis, M., 2008⁴⁸

Finding 1	An interesting hook
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Illustration	"It was an interesting way to start the class and introduce the topic of the day. It really got me hooked into thinking about the topic and quickly got me involved." (p. 4)
Finding 2	A deeper level of understanding
Illustration	"I thought this teaching strategy was unique and it made me think more outside the box. The painting made me view non-verbal communication differently." (p. 4)
Finding 3	Developing self-understanding
Illustration	"It made me a little more aware of my presence around others. I can be quite an outgoing person, and should be conscious of the way I act around those who may not be quite as open" (p. 5)
Finding 4	Developing empathy
Illustration	"Students described feeling more confident understanding their clients. 'I have a better idea of what is going on in the head of someone with a mental illness'; 'I can't believe what schizophrenics have to endure'; 'it gave me more understanding of what schizophrenics must go through just to react 'normally' to their environment'" (p. 6)
Finding 5	Increasing cultural awareness
Illustration	"I think this integration brought a perspective of how values differ, through culture and over time. Also, it helped my understanding of the judgment that is placed on suicide victims especially when honor is at stake. Culturally, it is important to know what we are dealing with in clinical settings. Also, the way we treat people with mental illness has changed, but still needs a lot more improvement." (p. 6)
Disconfirming beliefs: the use of poetry to know the lived experience of student nurses in mental health clinicals, Kidd, L. I. & Tusaie, K. R., 2004 ⁸⁵	
Finding 1	Fears about personal safety and personal competence
Illustration	"I can give him medications or build a wall on the beach's shore, but I can't stop the waves in the ocean." (p. 408)
Finding 2	Empathy for lived experiences of clients

Illustration "One student described the alienation from health care staff experienced by a client she cared for in her poem, and lamented: "Have they walked in my shoes? Have they lived my life . . . Do they see me crying? Down on my knees . . . thinking isn't there someone out there who cares about me?" (p. 408)

Finding 3 Normalization of mental illness and the client with mental illness

Illustration "One poem entitled 'The Life of a Paranoid Schizophrenic' protests "the glares, snares, and obvious stares ...the questions, suggestions, and misinterpreted impressions...forced relaxation, sedation, and routine medication" and concludes "you're the one who's challenged (mentally) and I'm the one who's free."" (p. 408).

Finding 4 The student as wounded healer

Illustration "Another student acknowledged simply that her mental health rotation was "Too Close to Home."" (p. 409)

Finding 5 Metamorphosis

Illustration "In these poems, the student wrote about personal change. Their experiences with clients and the mental health course led to positive growth, regardless of their starting point. Two poems were written in brief verse, one describing a transition from a "dark room" to "light" (Poem 2). The second affirming that qualities of strength, courage, and faith are in all human beings (Poem 3)....In "I'll Always Remember You" (Poem 4), the student expresses gratitude for having known the client, writing that the benefits she received in the relationship were "wisdom" and "A glimpse of God I saw, beautiful."" (p. 409-410)

The mandala: First-year undergraduate nursing students' learning experiences, Mahar, Diane J., Iwasiw, Carroll L., Evans, Marilyn K., 2012⁸⁶

Finding 1 Divergence from original expectations

Illustration "It was a lot of thinking...not like an evaluation cause normally when you evaluate yourself you have a check list...and then you look back...[this was] like going from the inside out, not the outside in...it felt like that...it was an eye-opening process. (Sheila)" (p. 5)

Perceptions of student nurses regarding the use of a popular autobiography as a teaching tool, Mathibe, L. J., 2007⁸⁷

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| Finding 1 | An inspiring way of grasping and maintaining concentration during the lecture |
| Illustration | "It is something interesting, it keeps us awake and concentrating. Information was easy to visualize" (p. 253) |
| Finding 2 | A simple way of acquiring and retaining knowledge |
| Illustration | "I was not being bombarded with strange and gigantic words, it makes cancer and cancer drugs easy comprehensible" (p. 253) |
| Finding 3 | A factual story |
| Illustration | "To me it was very helpful and good to use the novel from a real life story. I personally like stories; real ones" (p. 253) |

Spirituality as a universal concept: student experience of learning about spirituality through the medium of art, Mooney, B. & Timmins, F., 2007⁸⁸

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|--------------|---|
| Finding 1 | Recognizing spiritual dimensions of everyday life |
| Illustration | "I picked a sculpture called the Homeless Wanderer. I thought it was very sad and poignant. Someone really alone in society and left out in the cold. When I was thinking about nursing I think we deal with those kinds of people. They are the ones who need our help the most. That's why I picked that one." (p. 281) |
| Finding 2 | A snapshot of spirituality through others' impressions of art |
| Illustration | "Everyone has their own opinion on a painting. One person saw hope in a painting that I thought was horrible, something like the Opening of the Sixth Seal with all the thunder and lightening. I saw people falling off and dying. It was good to see everyone else's different ideas." (p. 281) |
| Finding 3 | Developing a deeper awareness of the meaning of spirituality |
| Illustration | "I think for me my personal understanding of what spirituality would have been before the set of lectures and the trip to the art gallery was probably very narrow. I would have instantly thought get the chaplain if you were in a hospital situation. Whereas now I am a lot more open to ideas, a lot more understanding that |

spirituality is not necessarily just one thing but that its basically peoples' personal feelings, whether its bad times or good times." (p. 282)

Finding 4 Spirituality transcends traditional religions

Illustration "Yes it also helped me to understand that you can help someone spiritually without it necessarily having to be religious . . ." (p. 282)

Finding 5 Spirituality-enhancing the nurses' role

Illustration "I think I would not have had a clue what to do and brushed over it if it hadn't have been for the series of lectures which has broadened the mind to think that this is an aspect of nursing that you have to deal with and it has to be done." (p. 282)

Using imaginative literature to foster cultural sensitivity, Newcomb, P., Cagle, C., Walker, C., 2006⁵¹

Finding 1 The reluctant immigrant

Illustration "We always assume that everyone wants to be in our country, but some just come with their families and really want to go back home. We always say how they should learn our language if they want to live here, but that may be the only piece of their heritage they have left... (student 1)" (p. 6)

Finding 2 The American dreamer

Illustration "The way Esperanza speaks of how it is done in "that" country reveals that she is trying to break away from her heritage. She is wanting to adopt the new way of thinking and rituals of America which I feel is common among cultures new to America. The younger generation feels that they need to "fit in" with the American culture rather than stick to their roots. (student 11)" (p. 9)

Finding 3 Prescription for nursing

Illustration "Often in the story it talks about people striving for something they cannot be and in nursing we have to realize not every patient will be able to go back to normal. So we need to treat them and get them to a place where they are comfortable and without pain. (student 16)" (p. 11)

Introducing readers theater! A strategy to foster aesthetic knowing in nursing, Pardue, K. T., 2004⁵²

Finding 1 Concern for person-centered care

Illustration	"The notion of "treating the whole patient", "focusing on the patient as a whole person", and the importance of an "individualized holistic approach" were comments frequently expressed in the evaluation of this learning experience." (p. 60)
Finding 2	Exploration of empathy skills
Illustration	"[This] really helped us to remember what our patients are going through. The story made me think about patient feelings and really trying to listen to their experience. I can use the concepts in this story in my practice by becoming a more aware healthcare professional and truly think[ing] about patient feelings." (p. 61)
Finding 3	Opportunity for reflection
Illustration	"The issues in the story made me think about experiences that I have had in the past and ways that I want to interact with my patients in the future. I was left thinking how I could change or improve my ways. I have thought a lot about this story. [This was] a good opportunity to self-reflect. This was an opportunity for inner self-analysis." (p. 61)
Finding 4	Heightened connection as a community of learners
Illustration	"It was valuable because of the groups' discussion after the reading. The sharing of the different perspectives made this learning experience valuable. The opportunity to discuss the issues [presented in the play] and hear everyone's opinion. The most valuable aspect was the discussion afterward and having everyone pay attention. This creates a wonderful group interaction and discussion." (p. 61)
Finding 5	Novel, meaningful (creative) teaching strategy
Illustration	"This was a nice variety/change to our everyday learning. This was outside the box - got us to think. This was a very interesting way to incorporate active learning. A fun, interesting alternative to a traditional lecture. It is a different way than the normal textbook and lecture style of learning. Integrating thinking with something fun!" (p. 61)
Reading Ella: Using Literary Patients to Enhance Nursing Students' Reflective Thinking in the Classroom, Pohlman, S., 2013 ⁸⁹	
Finding 1	Student reflections revealed inner, often hidden landscapes

Illustration	<p>"I would love to give all my patients a back rub when in pain, but it is more important for me to check over my three pages of medicine orders to make sure I am giving the correct dosages. This is the catch twenty-two of nursing. Suzanne mentions that some health caregivers draw a line in the sand, to separate themselves from their patients. This relationship allows me to properly care for my other patients. However, I am also a person with feelings and emotions. I respond to human suffering, too. So, this predicament leaves me somewhere toward the middle. I have to be a nurse that is caring and compassionate, and does not lose sight of the reality that I am not a friend or a family member. I am nurse with a job to do. Nursing is a job that you can only understand from the inside...I know that nursing school cannot teach me how to care. I must explore and discover this myself, through time and experience with <i>patients like Ella</i> [italics added]." (p. 286)</p>
Finding 2	<p>"Ella" prompted clarification of the past and/or triggered future projections</p>
Illustration	<p>"I remember last year as a tech I took care of a man who was...very sick. The nurse was busy with other patients and I was able to sit and talk with his wife. I felt great going home that night, like a warm feeling of right. The next day he sadly passed on.... She cried and held my hand, telling me how she was alone. I touched her arm and told her that we were there for him and he did not die alone..... That day I shed a tear and wondered why because it had been years since I had cried. I realize, after thinking about Ella, that the tears I shed were for me. It allowed me to take his death into my heart to help his wife that day. That night she left me with a huge hug that seemed to never end. She told me that I was going to be a wonderful nurse.....I wanted to break down, but I stood there like a robot, emotionless. The story showed me that we need to recognize our patients as humans, to not put that barrier around them for our emotional safety and sanity as nurses." (p. 287)</p>
Finding 3	<p>"Ella" clarified difficult-to-teach concepts</p>
Illustration	<p>"I think it is important for people entering the medical field to read and hear stories such as this one. This story does a great job at illustrating the positive as well as the negative things about some healthcare providers....Through the story of Suzanne's relationship with Ella, people are able to understand the importance of understanding and accepting patients as individuals." (p. 288)</p>
Finding 4	<p>The interface between students' thoughts and teacher responses provided a platform of connectivity</p>

Illustration "Student: The visual that Gordon creates about nurses is one of incompetence, and heartless actions. She portrayed health care workers in a poor light to make herself look as if she was everything the nurse was not...Gordon's acts, while glorious, are not feasible for any hospital organization that abides by its confidentiality....Gordon did go beyond her scope of practice for several weeks, but she didn't realize that this is what nurses do every day, not just for a few weeks. It's a way of life. Teacher: My sense is that there is often something important to learn from each and every story, with Suzanne Gordon's being no exception. She pointed out, I think, both the good and bad- meaning examples of expert care giving but then examples where she questioned the emotional attunement of some of the staff. This raises an interesting question: Why were some nurses concerned about Suzanne's emotional well-being after Ella's death? I love stories that raise questions and make us think." (p. 288)

Evaluation of a clinical teaching method involving stories, Shieh, C., 2005⁹⁰

Finding 1 Bringing learning to a personal level

Illustration "It seems I'm the real nurse in the story that has to take care of everything." (p. 7)

Finding 2 A way of knowing

Illustration "I enjoyed it. I felt as if we learned about each process of the diseases we had stories about." (p. 7)

Finding 3 More in-depth learning

Illustration "We were able to discuss significant clinical data relevant to the case that helps us understand the whole picture of the story." (p. 7)

Finding 4 Helping critical thinking

Illustration "It helps to make you think. Information given is helpful to understand about different topics." (p. 8)

Finding 5 Lack of audio-visual aids during story time

Illustration "I think I would get more out of a presentation on the subject because I am more of a visual and auditory learner." (p. 8)

Promoting empathy through a creative reflective teaching strategy: a mixed-method study, Webster, D., 2010⁹¹

Finding 1 Having expectations

Illustration “This was a good experience. I never realized I had placed a stigma on [people with mental illness] but after realizing how nervous I was getting about having to talk to my client and thought about why I was nervous, I realized it was for unfounded reasons.” (p. 92)

Finding 2 Building relationships

Illustration “I think about [the client] as a person, not like this crazy person, but a real person with real feelings and real problems.” (p. 92)

Finding 3 Changing perceptions

Illustration “A lot of the assumptions I had about [psychiatric] nursing and [psychiatric] patients have been changed through this clinical.” (p. 92)

Finding 4 Gaining understanding through creative expression

Illustration “The projects really made me think about what it is like for the clients and the importance of getting to know people before judging them.” (p. 92)

Dramatic insights: a report of the effects of a dramatic production on the learning of student nurses during their mental health course component, Welch, T. R. & Welch, M., 2008⁸

Finding 1 Forgiveness

Illustration “The whole play was about their journey through to find forgiveness, or give forgiveness, and that journey seemed to me to be the important part - the girl worked through her inner demons and came to terms with what had happened to her, and integrated it into, rather than. . . . Well, she had blocked it out before, and it became a part of her and it was painful part, but now she could move on and go past it.” (p. 265)

Finding 2 Drama as a teaching method

Illustration	<p>"For another, it was 'a much more useful tool to help students, or anyone really, to evaluate themselves and their emotional reactions to situations in a much more personal way. It is not the same thing as reading a book . . . in gaining self-understanding and self-awareness. I think that more than a lot of other experiences reading a book or a lecture, prepares us for not only just . . . like a nursing career, but as human beings, I think. That greater self-awareness and introspection I found for me personally has changed a lot of thought processes in my mind. Let's put it that way. Even in the little bits that I did explain to you it made me really very . . . I don't want to say self-aware, but it helped me to re-evaluate again my life and how I want to interact with others based on emotions similar in the play to my life as well. I found it really beneficial, actually, and the other students that I had discussions with as well.'" (p. 266)</p>
Finding 3	Empathy
Illustration	<p>"Everyone asked, 'What would I do in that situation? How would I feel? How would I react?' Each interviewee identified with one character in particular (primarily the young woman, her husband and the torture victim, but not the girl's mother, her father or the jailer/torturer), but which one seemed to depend on personal experience." (p. 266)</p>
Finding 4	Cultural identification
Illustration	<p>"But I think in terms of being aware that your patients or clients could have these issues, which is highly likely in today's society too. I don't know in Canada - because there are a lot of immigrants and we are relatively safe here from torture, but in other countries, it's huge. So, if you are dealing with individuals who are immigrants from other countries, or oftentimes they are here because they are escaping from wars and they escaping from things from the other countries - just being able to be thinking that, "Yeah, this client - I don't know that he has, but it is possible that he has been a victim, or she has been a victim of torture and sexual assault also.""(p. 266)</p>
Finding 5	Holism in nursing
Illustration	<p>"For another student, an abiding thought from the experience of the play was that the incorporation of experiences into the self is really a big theme for nurses because we are the sum of our experiences and it's a major experience that has been life-shattering and if we try to isolate it and push it away from ourselves we are almost denying a part of ourselves and that can result in great health problems." (p. 267)</p>

Finding 2 Awareness

Illustration “Writing about an aesthetic memory was effective in increasing my focus upon aesthetic aspects of nursing care that could not be taken for granted” (p. 45)

Finding 1	Poems of description
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Finding 2 Poems of feelings

Illustration

““A Nurse’s Touch”

Into my home the nurse makes her way,
She takes the time to talk and to pray.
Taking my hand she makes me feel safe,
And all of my worries have lifted away.
Her caring, loving and gentle touch,

	Shows me that nursing loves so much.” (p. 459)
Finding 3	Poems of value
Illustration	““Let Me Be a Nurse” Being a student nurse requires dedication, With years of studying and preparation. I pray for guidance and humbly ask, That I will do well with this chosen task. Preventing illness and promoting wellness. Will be our most memorable experiences. When illness strikes or pain demands, And a life is placed within my hands, Give me compassion, knowledge and skill To do the things that comfort and heal. Suffering makes patients’ fears grow worse And they seek reassurance from their nurse. Help me see things from their point of view, And always to know what is best to do. May I have a part, in some small way, In restoring good health to someone today. Let my work be all that I want it to be I ask the Great Healer to work through me.” (p. 460)
Finding 4	Poems of professional growth
Illustration	““Home Care” Home care nursing is a special need It also takes a special breed. Preparation and safety is the key. I don’t think home care is for me.” (p. 460)

Appendix VIII: Level of Confidence in the Narrative Synthesis of Quantitative Findings

The following steps for assessing the level of confidence in the outcomes of the quantitative narrative synthesis were informed by the GRADE approach:¹³⁵⁻¹⁴²

Step One: The group of studies informing each outcome was given an a priori ranking of 'high' for randomized controlled trials, "moderate" for quasi-experiments, or "low" for observational studies. This ranking was based on the research designs of the majority of studies, and if there was an equal number between two study designs, the outcome was ranked at the lower level.

Step Two: A group of studies informing an outcome was downgraded a level for the following reasons:

1. Risk of bias: determined by the score on the first five items of the JBI-MASARI critical appraisal tools. If a study received three or fewer "yes" ratings, it was considered to have risk of bias, and if the majority of studies informing an outcome had a risk of bias, the ranking was downgraded.
2. Inconsistency or heterogeneity of evidence: determined by any evidence of equivocal findings within an outcome. Thus, if the group of studies had equivocal findings about an outcome, it was downgraded.
3. Indirectness of evidence: downgraded if there was evidence of an indirect comparison of two interventions or of populations, outcomes, or interventions.
4. Imprecision of results: determined by assessing if a study reported confidence intervals, and if one or more studies supporting an outcome did not provide this information, or the confidence intervals were concerning, it was downgraded.
5. Publication bias: downgraded if there was evidence of studies with non-significant findings remaining unpublished.

Step Three: A final grade for the level of evidence was assigned. The final ranking could be one of four levels/categories: high, moderate, low, and very low. A group of studies supporting an outcome was downgraded one category per issue, to the lowest possible level of "very low".

Appendix IX: JBI Levels of Evidence

LEVELS OF EVIDENCE FOR EFFECTIVENESS

Level 1 – Experimental Designs

Level 1.a – Systematic review of Randomized Controlled Trials (RCTs)

Level 1.b – Systematic review of RCTs and other study designs

Level 1.c – RCT

Level 1.d – Pseudo-RCTs

Level 2 – Quasi-experimental Designs

Level 2.a – Systematic review of quasi-experimental studies

Level 2.b – Systematic review of quasi-experimental and other lower study designs

Level 2.c – Quasi-experimental prospectively controlled study

Level 2.d – Pre-test – post-test or historic/retrospective control group study

Level 3 – Observational – Analytic Designs

Level 3.a – Systematic review of comparable cohort studies

Level 3.b – Systematic review of comparable cohort and other lower study designs

Level 3.c – Cohort study with control group

Level 3.d – Case – controlled study

Level 3.e – Observational study without a control group

Level 4 – Observational –Descriptive Studies

Level 4.a – Systematic review of descriptive studies

Level 4.b – Cross-sectional study

Level 4.c – Case series

Level 4.d – Case study

Level 5 – Expert Opinion and Bench Research

Level 5.a – Systematic review of expert opinion

Level 5.b – Expert consensus

Level 5.c – Bench research/ single expert opinion

(JBI, 2015, p. 1-2)

LEVELS OF EVIDENCE FOR MEANINGFULNESS

1. Qualitative or mixed-methods systematic review
2. Qualitative or mixed-methods synthesis
3. Single qualitative study
4. Systematic review of expert opinion
5. Expert opinion

(JBI, 2014, p. 6)

Appendix X: JBI Grades of Recommendation

JBI Grades of Recommendation	
Grade A	A 'strong' recommendation for a certain health management strategy where (1) it is clear that desirable effects outweigh undesirable effects of the strategy; (2) where there is evidence of adequate quality supporting its use; (3) there is a benefit or no impact on resource use, and (4) values, preferences and the patient experience have been taken into account.
Grade B	A 'weak' recommendation for a certain health management strategy where (1) desirable effects appear to outweigh undesirable effects of the strategy, although this is not as clear; (2) where there is evidence supporting its use, although this may not be of high quality; (3) there is a benefit, no impact or minimal impact on resource use, and (4) values, preferences and the patient experience may or may not have been taken into account.

(JBI, 2014, p.1)

Chapter 5: Determining the Fit: Comparing Three Grounded Theory Approaches

Prelude

For the primary research study about ABP in undergraduate nursing education, CGT was one possible methodological approach for exploring the phenomenon. However, in order to realize and rationalize the selection of a specific GT approach, the potential options were examined. Three commonly used variations of GT were analyzed in Chapter 5: classic grounded theory, Straussian grounded theory, and constructivist grounded theory (Charmaz, 2006; Charmaz, 2014; Corbin & Strauss, 2008; Glaser & Strauss, 1967; Glaser, 1978; Glaser, 1992; Strauss & Corbin, 1990; Strauss & Corbin, 1998). Although these three GT approaches have key similarities, they also have differing philosophical assumptions that influence the ways in which GT strategies are implemented. Furthermore, these approaches have been refined over time.

In this paper, a broad overview of GT is provided, similarities between the three GT approaches are described, distinguishing considerations are selected, differences among the approaches are analyzed with these considerations, and then the rationale for the choice of CGT is presented. This analysis provided a clear justification for why CGT was the best methodological fit for this research study about how undergraduate nursing students learn through ABP. The student wrote the initial draft of this GT methodological paper, and revised it in response to her advisor's and committee members' constructive feedback. The student will be the sole author for this manuscript entitled, "Determining the Fit: Comparing Three Grounded Theory Approaches", and the article will be submitted for publication after the doctoral thesis defense. This paper is deemed to be of publishable quality as it builds upon the current body of literature by integrating recent GT texts, and by using a literature-informed framework to analyze the three approaches. This manuscript can also inform the work of other researchers who are conducting a GT study.

Abstract

Background: When planning a research study, the choice of a specific methodology should be based on an awareness of its philosophical underpinnings, and unique characteristics. Grounded theory is a research methodology that incorporates systematic guidelines for simultaneous data collection and analysis, in order to develop theories that are grounded in real-life experiences. This methodology has a distinct history and evolution which has resulted in the development of numerous grounded theory approaches that can be used in research investigations. In order to realize and rationalize the selection of a specific grounded theory approach, one must examine the range of potential options.

Aim: The purpose of this paper is to compare the similarities of three widely used grounded theory approaches, classic grounded theory, Straussian grounded theory, and constructivist grounded theory, and then to contrast them with key distinguishing characteristics.

Discussion: Although these three grounded theory approaches have key similarities, they also have differing philosophical assumptions that influence the ways in which grounded theory strategies are understood and implemented. In this paper, a broad overview of grounded theory is provided, similarities between the three grounded theory approaches are described, distinguishing considerations are selected, differences among the approaches are analyzed with these considerations, and then a research exemplar is used to demonstrate the rationale for the selection of one approach. Although there is a substantial body of scholarly work on which this paper builds, this analysis incorporates important revisions found in recent editions of seminal grounded theory texts. Additionally, this work contributes to the existing literature through contrasting the three approaches in a systematic manner with prominent distinguishing characteristics developed from a review of the literature.

Conclusion: Understanding the similarities and differences of the grounded theory approaches can facilitate methodological transparency and philosophical/methodological congruence. It can also help a researcher to determine the best approach for their particular study and for who they are as a researcher. The evolution of grounded theory has resulted in an array of methodological choices. With thoughtful consideration, this variety of approaches can address the needs of diverse researchers studying wide-ranging topics.

Determining the Fit: Comparing Three Grounded Theory Approaches

When planning a research study, the choice of a specific methodology should be based on an awareness of its philosophical underpinnings, and unique characteristics, so one understands what it does best (Crotty, 1998). Grounded theory (GT) is a qualitative research methodology that incorporates guidelines for simultaneous data collection and analysis, in order to develop theories that are grounded in real-life experiences (Charmaz, 2006; Glaser & Strauss, 1967; Strauss & Corbin, 1990). Methodologies evolve. They are adapted to fit a changing historical or philosophical milieu (Ralph, Birks, & Chapman, 2015). GT has a distinct history that has resulted in the development of numerous approaches. Although these GT approaches have key similarities, they also have differing philosophical assumptions that influence the ways in which GT methods are implemented (Charmaz, 2014). Examining these differences can help one to make an informed decision, about which approach is the best fit for their study, and then to rationalize and articulate one's choice.

The purpose of this paper is to compare the similarities of three widely used GT approaches, classic grounded theory (Glaser & Strauss, 1967), Straussian grounded theory (Strauss & Corbin, 1990), and constructivist grounded theory (Charmaz, 2006), and then to contrast them with key distinguishing characteristics. Although there is a substantial body of work upon which this paper builds, this analysis incorporates important revisions found in Corbin and Strauss's (2015) and Charmaz's (2014) recent editions of their seminal GT texts. Additionally, this work contributes to the existing literature through contrasting the three approaches in a systematic manner with prominent distinguishing characteristics developed from a review of the literature. Comparing and contrasting these GT approaches will facilitate the appropriate selection of a research methodology and enable methodological transparency (Amsteus, 2014; Evans, 2013).

Background

GT is a methodology with roots in the theoretical perspective of symbolic interactionism, and was initially formulated by Barney Glaser and Anselm Strauss (1967). GT is widely used internationally and across many disciplines (Morse, 2009a). Strauss and Glaser actively mentored graduate students, and a number of their students have continued developing and promoting grounded theory. This evolution has resulted in numerous approaches (Morse, 2009b). The most commonly used forms include: classic grounded theory (CLGT) (Glaser & Strauss, 1967), which is the original version, Straussian grounded theory (SGT) (Strauss & Corbin, 1990), and constructivist grounded theory (CGT) (Charmaz, 2006). These three versions will be analyzed as they are the most extensively developed and used (Polit & Beck, 2012). Another important variation, often used in conjunction with CGT, is situational analysis (Clarke, 2005).

There are differing viewpoints on the evolution of GT. Some scholars view it as the natural maturing of a methodology (McCann & Clark, 2003b), and write of how GT developed within a positivist/post-positivist perspective but that there has been a needed move towards a constructivist perspective (Charmaz, 2006; Mills, Bonner, & Francis, 2006). Alternatively, Wuest (2012) asserts that GT is firmly rooted in the constructivist paradigm, and that researchers bring their own epistemological lens to the study that influences the ways in which methods are used. However, Wuest also argues that researchers do need to acknowledge their own orientation to GT, and the approach that they are drawing on for their work. Others view this evolution as confusing and as an erosion of GT's analytical power (Duchscher & Morgan, 2004; Evans, 2013; Glaser, 2002; Greckhamer & Koro-Ljungberg, 2005). In summary, there are now various GT approaches with common elements (Charmaz, 2014; Corbin & Strauss, 2015; Wuest, 2012), and some scholars believe that these approaches have differing philosophical assumptions shaping their methods (Charmaz, 2014; Mills et al., 2006).

Comparing Similarities: Family Resemblances of Grounded Theory Approaches

GT approaches have a recognizable set of “family resemblances” (Bryant & Charmaz, 2007b, p. 11), which are hallmarks of a GT study. It is important to identify the common characteristics of CLGT, SGT, and CGT in order to understand differences within the framework of their similarities. Key characteristics of GT include that it elucidates a process; begins with inductive logic; encompasses simultaneous data collection, analysis, and theory construction; incorporates constant comparison and memo writing; employs theoretical sampling; and focuses on the generation of a GT (Charmaz, 2006; 2014; Corbin, 2009; Corbin & Strauss, 2015; Duchscher & Morgan, 2004; Elliot & Lazenbatt, 2005; Glaser & Strauss, 1967; Hall & Callery, 2001; Hood, 2007; Hunter, Murphy, Grealish, Casey, & Keady, 2011; Mills et al., 2006; Morse, 2001; Ralph et al., 2015; Walker & Myrick, 2006). See Table 1 for a description of these similarities that were identified based on a review of the literature.

Distinguishing Characteristics for Contrasting the Approaches

Although CLGT, SGT, and CGT have similarities, significant differences lie in their philosophical assumptions and therefore, the ways in which methods, or “techniques used to gather and analyze data” (Crotty, 1998, p. 3), are used (Walker & Myrick, 2006). This paper focuses on distinguishing characteristics which are identified in the literature as the most significant, and which are the most essential for deciding on a GT approach. First, each approach has a specific history as it originated in a certain time period which influenced its development (Clarke, 2009; Greckhamer & Koro-Ljungberg, 2005; Ralph et al., 2015). Second, each of the approaches has an underlying philosophical perspective (Heath & Cowley, 2004; Mills et al., 2006). Philosophical perspectives encompass assumptions about the nature of reality (ontology) and the nature of knowledge (epistemology), which have significant implications for the methods used to develop new knowledge (methodology) (Crotty, 1998; Ralph et al., 2015). Although all

three approaches have roots in symbolic interactionism (Corbin & Strauss, 2008), they are also imbued with either positivist or constructivist underpinnings (Charmaz, 2000; Ralph et al., 2015), and this stance will be examined here. Third, as a result of divergent philosophical assumptions, the role of the researcher differs between approaches (Charmaz, 2006). The researcher's role involves ideas about the nature of the research-participant relationship (Heath & Cowley, 2004), theoretical sensitivity (Mills et al., 2006), treatment of the literature (Mills et al., 2006), and identification of research questions (Hunter et al., 2011). Fourth, there are significant differences in the views of data and data analysis procedures, and the emphasis on inductive, deductive, or abductive logic (Charmaz, 2009; Heath & Cowley, 2004; Kelle, 2005; Reichertz, 2010; Walker & Myrick, 2006). Fifth, there are differing views of the GT that emerges from the analysis (Heath & Cowley, 2004; Mills et al., 2006). Lastly, all three approaches have unique strengths and limitations (Polit & Beck, 2012). The three GT approaches will be analyzed with these distinguishing characteristics in the order of their historical development, as the developer(s) of each approach both builds on and reacts to the previous version(s).

Contrasting Differences: Distinguishing Characteristics of the Three Approaches

Classic Grounded Theory

History and origins. Barney Glaser and Anselm Strauss (1967) published their revolutionary GT text at the beginning of the qualitative revolution (Charmaz, 2000). Quantitative research and the post-positivist paradigm were dominant at the time, and they wanted to establish qualitative research as a rigorous process and defend it from critique (Bryant & Charmaz, 2007a; Charmaz, 2006). This time period was the “golden age of rigorous qualitative analysis” (Denzin & Lincoln, 2005, p. 17), during which qualitative researchers were formalizing their methods. Thus, they developed a methodology of reliable data analysis in the original version of GT, but also gave it a positivist direction (Bryant & Charmaz, 2007a). Further, they

came from different backgrounds: Strauss had a background in symbolic interactionism and Glaser in quantitative research (Stern, 2009). Hence, CLGT began on somewhat unsteady philosophical foundations and their differences “planted the seeds of divergent directions” (Charmaz, 2009, p. 129). Originating in the work of Glaser and Strauss (1965; 1967; 1968) about their work with dying patients, Glaser argues that CLGT is the pure form of GT and has continued to develop the original work in his subsequent publications (Glaser, 1978; 1992; 2001; 2002; 2007). For example, further CLGT development includes explaining abstract concepts such as theoretical sensitivity and developing numerous coding families (Glaser, 1978). In contrast to Strauss, Glaser remains consistent with their early work (Charmaz, 2006).

Philosophical perspective. The seminal CLGT texts focus on methods and have little discussion of underlying philosophical assumptions (Bryant, 2009), but these assumptions can be inferred and seem to echo post-positivist pre-suppositions. Some assert that CLGT has positivist assumptions of an orderly real world which can be objectively observed (Charmaz, 2000; Clarke, 2005), while others contend that CLGT is actually based on a post-positivist paradigm as it assumes that an objective reality exists but acknowledges that it can never be perfectly apprehended (Annells, 1996; Ghezeljeh & Emami, 2009b; Hall, Griffiths, & McKenna, 2013; Ralph et al., 2015). Further, Charmaz (2000) describes a continuum between objectivist and constructivist GT, and Mills et al. (2006) propose that there is a methodological spiral from post-positivist to constructivist approaches. Both place CLGT as the most positivist/post-positivist of the three GT approaches. A positivist realist ontology assumes that an external reality exists and has meaning apart from the human mind (McEwen & Wills, 2011) and a post-positivist critical realist ontology assumes that real worlds exist but it is impossible for people to truly perceive it (Annells, 1996; Lomborg & Kirkevold, 2003). The title, *The Discovery of Grounded Theory* (1967), conveys the assumption that there is an external reality that can be found (Charmaz,

2000), and CLGT researchers assert that there is a true theory in the data (Mills et al., 2006).

Other CLGT features consistent with an objectivist epistemology include: valuing a neutral expert observer, separating data and the observer, and developing parsimonious abstractions free of context (Glaser & Strauss, 1967; Mills et al., 2006).

Role of the researcher. Consistent with objectivism, CLGT researchers should have as few predetermined thoughts as possible and maintain their role as a detached observer (Glaser & Strauss, 1967; Hall & Callery, 2001). Glaser (2002) believes that through constant comparison, “Personal input by a researcher soon drops out as eccentric and the data become objectivist not constructionist” (p. 98). Thus, there is a focus on the neutralization of researcher bias through constant comparison, instead of on reflexivity (Mruck & Mey, 2007). Further, theoretical sensitivity is “the ability to recognize and extract from the data elements that have relevance for the emerging theory” (Birks & Mills, 2011, p. 176) and in CLGT it is achieved through immersion in data (Glaser, 1978). Although Glaser’s coding families can enhance theoretical sensitivity (see Table 2), these codes are applied later in the analysis (Glaser, 1978; Walker & Myrick, 2006). In CLGT, the literature review is delayed in order to prevent preconceived ideas (Glaser & Holton, 2007). Furthermore, the researcher does not need an initial research question or guiding theory, which could foster unwanted researcher influence (Glaser & Holton, 2007).

Data and data analysis. CLGT has an objectivist epistemology as Glaser (2002) claims that data are objective and discovered. CLGT assumes that the “natural world is available for observation and analysis” (Hall & Callery, 2001b, p. 260). Data are a true representation of the research participants’ realities and CLGT does not consider the context of the data, unless it emerges as a code (Glaser & Holton, 2007). CLGT researchers use diverse forms of data (Glaser, 1992), and Glaser is the main proponent of using quantitative methods in GT (Stern, 2007). The

goal of CLGT analysis is to objectively watch for emergence of the GT through data analysis (Glaser, 1978, 1992; Glaser & Strauss, 1967).

Coding involves two phases. First, substantive coding incorporates two sub-phases of open and selective coding, produces categories and their properties, and identifies a core category. Then, theoretical coding occurs at the conceptual level, involves the use of coding families in some studies, and weaves the categories into a GT (Glaser & Strauss, 1967) (see Table 2). There are key differences between GT approaches in coding, specifically, in the timing and level of researcher intervention (Evans, 2013; Greckhamer & Koro-Ljungberg, 2005; Walker & Myrick, 2006). These differences have fueled a debate about emergence versus forcing the data with a preconceived framework, with Glaser claiming that CLGT alone allows theory to emerge from the data (Glaser, 1992). Accordingly, CLGT data analysis occurs with induction with no external frame until theoretical coding (Glaser, 1978; Heath & Cowley, 2004). Further, deduction and verification of hypothesis should be left for quantitative researchers, and Glaser and Strauss (1967) write, “comparative analysis both subsumes and assumes verification and accurate description, but only to the extent that the latter are in the services of generation” (p. 28).

The grounded theory. In CLGT, views of the GT have positivist leanings (Charmaz, 2006), and Glaser (2002) states that CLGT “makes the generated theory as objective as humanly possible” (p. 97). Thus in CLGT, theories are real and rise “directly and rigorously out of the data, devoid of interpretivism” (Duchscher & Morgan, 2004, p. 605). It is believed that the theory represents a correspondence with reality (Thomas & James, 2006). Therefore, a certain set of data should produce the same GT if the research was rigorous (Duchscher & Morgan, 2004; Heath & Cowley, 2004). Glaser (1992) also asserts that the GT should have explanatory power. In CLGT, the GT surrounds a core category, or major theme, which unites all of the conceptual categories (Glaser, 1978). Of note, each GT approach offers distinct evaluation criteria (see Table 3).

Strengths and critique. CLGT has a number of strengths. First, what Glaser and Strauss (1967) proposed was revolutionary and a powerful force for the legitimization of qualitative research (Charmaz, 2009). In their seminal work, they challenged the status quo with their rigorous qualitative approach and assertion that researchers could develop theory from the data instead of using hypothetical-deductive methods of theory development and testing (Hall et al., 2013). Second, Glaser has remained faithful to the original version in his work; thus, some assert that CLGT retains the analytical power of GT (Evans, 2013; Heath & Cowley, 2004). Third, CLGT is a flexible approach that is less prescriptive than SGT (Evans, 2013). Yet, it is still rigorous and results in a high level of abstraction. Lastly, because researchers bring few preconceived notions, and do not place unnecessary structure on the data, the resulting GT may have a greater theoretical completeness (Evans, 2013).

CLGT has come under significant critique. First, there is a lack of explicit discussion of the philosophical assumptions (Greckhamer & Koro-Ljungberg, 2005). Bryant (2007) accuses Glaser of his persistent refusal to engage in the philosophical debates; thus, some aspects of CLGT seem untenable with current discourses. Second, an unbiased researcher is one of these untenable assumptions. Numerous scholars argue that the uncontaminated researcher is a naïve notion and not congruent with the tenets of qualitative research in which the relationship between the researcher and participants is valuable for creating knowledge (Charmaz, 2008c; Corbin, 1998; Kelle, 2005; Mills et al., 2006; Thomas & James, 2006). Third, others critique the artificial separation of inductive and deductive logic (Reichert, 2010; Thomas & James, 2006). Fourth, CLGT has a limited ability to explicate a meaningful understanding due to a reliance on participants' overt concerns (Charmaz, 2000). Fifth, there is an overuse of sociological terms and laissez faire guidelines, which makes CLGT less accessible (Charmaz, 2000; McCann & Clark, 2003b). Sixth, CLGT tends to privilege the researcher's knowledge, through valuing a distance

between the researcher and the researched. Without strategies to address this power differential, researchers can elevate their own assumptions and interpretations to an objective status (Bryant & Charmaz, 2007a; Hall & Callery, 2001). Lastly, CLGT has a micro-focus and does not pay attention to structural conditions which affect the participants' perspectives (McCann & Clark, 2003b; Morse, 2001; Thomas & James, 2006).

Straussian Grounded Theory

History and origins. The differences between Glaser and Strauss were stressed when the partnership of Strauss and Juliet Corbin emerged (Heath & Cowley, 2004; Morse, 2009b), and they published the *Basics of Qualitative Research* (Strauss & Corbin, 1990; 1998). Initially, their goal was to offer an accessible GT text with well-described techniques (Heath & Cowley, 2004). However, this book caused a rift between Glaser and Strauss, and Glaser (1992) wrote a scathing critique of SGT's prescribed approach. By the 1990's, two versions of GT were evident: CLGT (Glaser & Strauss, 1967), and SGT (Strauss & Corbin, 1990; 1998) which seems less positivistic/post-positivistic (Bryant & Charmaz, 2007a). Although scholars in the 1960's had challenged conventional positivistic ideas (Berger & Luckmann, 1966; Kuhn, 1962), GT remained unchanged until SGT (Bryant & Charmaz, 2007a). Strauss died in 1996; however, Corbin continued to develop their approach and believes she has stayed true to the key aspects of their earlier work (Corbin & Strauss, 2008; 2015). Regardless of the significant revisions found in the third and fourth editions (Corbin & Strauss, 2008; 2015), many researchers continue to utilize earlier versions of SGT (Charmaz, 2014).

Philosophical perspective. The philosophical perspective of SGT has pragmatist and interactionist foundations, but is also somewhat ambiguous and has evolved over time (Corbin & Strauss, 2008; Greckhamer & Koro-Ljungberg, 2005). Corbin (1998) writes about their first book (Strauss & Corbin, 1990): "It was meant as a supplemental text, therefore it omits most of the

epistemological foundations” (p. 122). They intended to include a chapter explicating their theoretical foundations in their second text (Strauss & Corbin 1998); however, the editor deleted the content (Corbin & Strauss, 2008). Numerous scholars interpret SGT as moving towards constructivism in the first two texts (Annells, 1997a; Lomborg & Kirkevold, 2003; McCann & Clark, 2003b; Mills et al., 2006), which is a social scientific perspective that “assumes that people, including researchers, construct the realities in which they participate” (Bryant & Charmaz, 2007c, p. 607). Constructivism has a relativist ontology that assumes there are multiple realities, and a subjective epistemology that assumes that knowledge is the result of an interaction between the researcher and the participants (Polit & Beck, 2012). Evidence for constructivist leanings can be found in statements like “theorizing is the act of constructing” (Strauss & Corbin, 1998, p. 25) and “there are many alternative interpretations of data” (Corbin, 1998, p. 122), and when they write, “We emphasize that it is not possible to be completely free of bias” (Strauss & Corbin, 1998, p. 97). However, others argue that the original version of SGT is positivist, uses linear approaches, and has a realist ontology, as it assumes an external reality, and objectivist epistemology, as it values unbiased data collection (Charmaz, 2000; Evans, 2013; Hall & Callery, 2001). This vacillation between positivism and constructivism can also be seen as a “struggle to move within the changing moments of qualitative research” (Mills et al., 2006, p. 4).

Further, an evolution of philosophical perspectives has occurred within SGT (Ralph et al., 2015). In 1994, Strauss and Corbin started positioning themselves as relativist pragmatists (Strauss & Corbin, 1994), and in the third and fourth texts, Corbin now claims to be a constructivist (Corbin & Strauss, 2008; 2015). Although she admits their early work was more positivistic, she notes her new views are reflected in recent work through acknowledging the existence of multiple complex realities which correspond to real events, the varied participant responses to events, and the construction of theories by researchers (Corbin & Strauss, 2008;

2015). As well, research techniques and procedures are framed as tools instead of directives.

Charmaz (2014) also views SGT as moving towards constructivism in the third edition (Corbin & Strauss, 2008).

Role of the researcher. In contrast to CLGT, in SGT the researcher is not viewed as a blank slate and has an interpretive role (Corbin & Strauss, 2015), which is more consistent with constructivism (McCann & Clark, 2003a, 2003b). The researchers' experience can enhance theoretical sensitivity, facilitate the generation of hypotheses, and create a base for making comparisons (Corbin, 1998). In a later edition of their text, they write that "objectivity in qualitative research is a myth" (Corbin & Strauss, 2008, p. 32), and assert that the researcher should aim for sensitivity to the participants/data, rather than objectivity. Throughout the evolution of SGT, reflexivity is increasingly acknowledged as vital to ensuring that the researcher's perspectives are helpful, rather than restrictive, during data collection and analysis (Corbin & Strauss, 2008; 2015). Strauss and Corbin (1990) assert that theoretical sensitivity is enhanced not just through immersion in the data as with CLGT, but also through the use of analytic tools such as the flip-flop technique and waving the red flag (see Table 2). In contrast to CLGT, in SGT the literature can inform research questions, increase theoretical sensitivity, and stimulate reflections (Strauss & Corbin, 1998). As well, a broad research question should be stated before the research (Strauss & Corbin, 1990). Similarly to CLGT, Corbin and Strauss (2015) assert that one should not normally begin their research with an extant theory, although a theoretical framework can be an effective lens with which to view data.

Data and data analysis. In SGT, data are not viewed as completely separate from the researcher, and it is acknowledged that "there is no one 'reality' out there waiting to be discovered" (Corbin & Strauss, 2008, p. 10). Similar to CLGT, data in a SGT study can encompass many forms, although unstructured interviews are highlighted (Strauss & Corbin,

1998). In contrast to CLGT and CGT, in SGT data analysis there is a focus on using analytical tools, which are thinking techniques that promote interaction between the researcher and the data, and it is the only approach that originally had three distinct phases of coding: open, axial, and selective (Walker & Myrick, 2006) (see Table 2). These phases are more complex and detailed than CLGT or CGT, and the researcher intervenes more intensively through the use of analytical tools and questions (Strauss & Corbin, 1998; Walker & Myrick, 2006). Open coding involves going through the text and coding it (Strauss & Corbin, 1998). Open coding also involves the discovery of a category's properties and dimensionalizing them. Axial coding involves putting fractured data back together with the use of the coding paradigm, a framework of questions derived from one of Glaser's coding families which facilitates the identification of the relationship between structure and process, and the linking of categories and subcategories (Corbin & Strauss, 2015). The paradigm guides the researcher to group codes into three components: conditions, inter/actions and emotions, and consequences (Corbin & Strauss, 2008). Lastly, a core category is identified during selective coding and the researcher conceptually relates all categories to the core, or central, category (Strauss & Corbin, 1990). In the latest two texts, open and axial coding are presented as iterative and flexible processes. Further, the term selective coding is not used and this final process is referred to as theoretical integration (Corbin & Strauss, 2008; 2015). They have also developed a conditional/consequential matrix as a device to make connections between the macro and micro conditions affecting the phenomenon, and assert that any experience needs to be located within the larger context in which it occurred (Corbin & Strauss, 2008; Strauss & Corbin, 1998).

Of note, the SGT researcher intervenes earlier in the analysis process with the use of a preconceived coding paradigm during axial coding and before the development of a core category, compared to CLGT where flexible theoretical codes are used after the identification of

a core category (Walker & Myrick, 2006). Another key distinction is the emphasis on deduction and verification of hypotheses, as opposed to induction as in CLGT (Heath & Cowley, 2004; McCann & Clark, 2003b). Strauss and Corbin (1990; 1998) contend that researchers make statements about the relationship between concepts, and these hypotheses are then validated in subsequent data collection. In later texts, there is less emphasis on verification and more on the interplay of induction and deduction (Corbin & Strauss, 2008; Walker & Myrick, 2006).

The grounded theory. In SGT, the view of the GT has both positivist and constructivist elements (Charmaz, 2006). The results of a study can produce a range of outcomes, from rich descriptions, to conceptual ordering, to an explanatory GT (Corbin & Strauss, 2008). However, Corbin and Strauss (2015) clearly differentiate between description, which describes an event or phenomenon, and theory, which is the aim of GT. Consistent with positivist definitions of theory (Charmaz, 2006), Corbin and Strauss (2008) define theory as “a set of well-developed categories (themes, concepts) that are systemically interrelated through statements of relationship to form a theoretical relationship that can be used to explain some phenomena” (p. 55). A GT can be substantive, middle-range or formal; however, it is viewed as one possible interpretation that does not exactly represent reality (Corbin & Strauss, 2015). SGT views the GT as constructed, and they construct it with analytic tools and an external framework that distinguishes SGT from the other two approaches (Heath & Cowley, 2004). Similarly to CLGT, SGT researchers aim to identify a core category for the GT (Corbin & Strauss, 2015).

Strengths and critique. There are a number of strengths of SGT which have made it a popular GT approach (Hunter et al., 2011). First, there is a clear description of the complex SGT research procedures (Walker & Myrick, 2006). Second, SGT enables the researcher to focus on both the micro and macro influences on the phenomenon of study, as the use of the conditional/consequential matrix can enable the researcher to understand the phenomenon within

the larger societal context; thus, enriching the GT (McCann & Clark, 2003c; Mills et al., 2006; Walker & Myrick, 2006). Third, some scholars assert that the rigorous analytic tools, such as the coding paradigm, enable the construction of sufficiently analytical theories (McCann & Clark, 2003c; Mills et al., 2006).

There are also numerous critiques of SGT. First, SGT is more rigid than other approaches and this focus on systematic procedures may interfere with the researchers' sensitivity to the data, and promote a power differential between researcher and participants (Bryant & Charmaz, 2007a; Evans, 2013; Heath & Cowley, 2004; Hunter et al., 2011). Second, the mechanistic coding procedures can produce a linear model of cause and effect, moving towards a positivistic linearity (Hall & Callery, 2001; Heath & Cowley, 2004). Third, the timing of intervention in analysis is too early, and the level of intervention too intense, which can constrain theory construction (Charmaz, 2000; Glaser, 1998b; Mills et al., 2006; Walker & Myrick, 2006). Thus, the emphasis on using analytical tools can result in forcing the data into preconceived ideas instead of allowing the GT to emerge (Bryant & Charmaz, 2007a; Duchscher & Morgan, 2004; Glaser, 1998b). Fourth, intensive researcher speculation can create a focus on deduction; thus, validating existing knowledge rather than discovering new knowledge (Evans, 2013; Glaser, 1992; Heath & Cowley, 2004; Thomas & James, 2006).

Constructivist Grounded Theory

History and origins. Kathy Charmaz, a sociologist, developed CGT based on ideas from two of her mentors: Barney Glaser and Anselm Strauss (Morse, 2009b). CGT returns to CLGT strategies, but has repositioned GT from its positivist underpinnings to that of constructivism (Bryant & Charmaz, 2007a). Charmaz (1995) began writing about her ideas during the “crisis of representation” (Denzin & Lincoln, 2005, p. 18), which was a time period when qualitative researchers were seeking new models of truth and when objectivity became problematic (Birks &

Mills, 2011). Charmaz (2008b) claims that CGT “builds on Glaser’s useful methodological strategies...but it does not duplicate the logic of inquiry in classic grounded theory statements. Instead it adopts the logic of Anselm Strauss’s pragmatism – and takes it further by integrating 21st century methodical assumptions” (p. 136). Charmaz (2006; 2014) has written two books on CGT. In addition to these two books, she has written extensively about her approach to GT (Bryant & Charmaz, 2007a; 2007b; 2007c; Charmaz, 1990; 1995; 2000; 2004; 2008a; 2008b; 2008c; 2009).

Philosophical perspective. In contrast to CLGT and SGT, Charmaz writes explicitly about her philosophical assumptions (Charmaz, 2006; 2014). Charmaz takes a constructivist stance; therefore, CGT has a relativist ontology and subjective epistemology (Charmaz, 2006; 2014; Mills et al., 2006). CGT acknowledges reality is a social construction, as opposed to CLGT which asserts there is one true reality (Ghezeljeh & Emami, 2009). Charmaz (2000) writes that a CGT “distinguishes between the real and the true. The constructivist approach does not seek truth” (p. 523). Thus, CGT researchers do not deny the existence of objectively true worlds but are more concerned with the “world made real in the minds and through the words and actions of its members” (Charmaz, 2000, p. 523). This view is congruent with current discourses which acknowledge that reality exists, but what is important is how people construct it (Crotty, 1998). CGT has a subjective epistemology as it assumes that researchers are not separate from the research and knowledge is co-created (Charmaz, 2000). Both Charmaz (2000) and Mills et al. (2006) position CGT on the far end of the positivist-constructivist continuum compared to CLGT and SGT.

Role of the researcher. In contrast to CLGT, the CGT researcher is a co-creator of knowledge (Charmaz, 2000). Accordingly, the researcher influences the research through interactions with participants and data (Charmaz, 2014). The researcher’s experience is valued in

this approach, and in one CGT study a researcher spent five months in the practice setting to gain experience with the studied phenomenon and to increase theoretical sensitivity (Hoare, Mills, & Francis, 2013). In contrast to CLGT, CGT researchers also aim to nurture relationships with participants in order to understand their perspective, uncover hidden meanings, and invite honest expression (Charmaz, 2006). Charmaz (2014) also asserts that researchers need to be reflexive in order to not force their preconceived ideas on the data, and views memo writing as key to reflexivity. In CGT, theoretical sensitivity, or sensitizing concepts, can guide the research, but are “points of departure” to develop ideas rather than forcing data into preconceived ideas (Charmaz, 2014, p. 30). Sensitizing concepts are broad terms that “give researchers initial but tentative ideas to pursue” (Charmaz, 2014, p. 30). Also, in contrast to CLGT, the use of theories can develop theoretical sensitivity, a literature search orientates the researcher, and a research question is developed before the research (Charmaz, 2014; Harling & Turner, 2012).

Data and data analysis. CGT researchers acknowledge the subjectivity of data and data analysis, which aligns CGT with constructivism, and Charmaz (2000) writes that CGT “reclaims these tools from their positivist underpinnings” (p. 510). The researcher and participants co-construct the data, and thus, data are a product of the research instead of an observation, or window on reality (Charmaz, 2006; 2014). Similarly to CLGT and SGT, CGT researchers use multiple sources of data, and Charmaz (2014) emphasizes intensive interviewing to attend to participants’ stories and to construct theories. In contrast to CLGT, CGT researchers use thoughtful probes to understand implicit meanings and are attentive to the participants’ context (Charmaz, 2014). In contrast to SGT, CGT analysis focuses on flexible data analysis procedures to elucidate social processes, instead of on the application of external devices such as the coding paradigm (Charmaz, 2006).

CGT data analysis is similar to CLGT in that it includes at least two phases, initial and focused coding, and has less researcher intervention than SGT (Charmaz, 2014; Mills et al., 2006) (see Table 2). Initial coding involves studying fragments of data and labeling them with codes, and Charmaz (2014) encourages the use of gerunds, to elucidate process, and in-vivo codes. Focused coding uses initial codes that reappear frequently, and are the most relevant, to code and categorize larger portions of data. Focused codes are more conceptual, and certain focused codes are elevated to abstract categories (Charmaz, 2006; Ripat & Woodgate, 2012). Categories can be major or minor, and some, chosen for their incisiveness and how they relate to other categories, will become the main theoretical concepts of the GT (Charmaz, 2006). Theoretical integration begins with focused coding and culminates in the final GT (Charmaz, 2014). Further, external frameworks such as axial coding (Strauss & Corbin, 1998) and theoretical codes (Glaser, 1978) can be useful if they “earn their way” into the analysis (p. 153).

CGT is the first GT approach to clearly describe inductive-abductive logic, which is the iterative process of the researcher moving back and forth between data and conceptualization, as a key part of data analysis (Charmaz, 2009). Abductive logic involves contemplating possible theoretical explanations for one’s initial observations, and then attempting to confirm or disconfirm these tentative ideas to arrive at the most plausible explanation (Charmaz, 2014). GT researchers make inferences from the data (inductive) and then check them through theoretical sampling and additional data (abductive) (Charmaz, 2014). Abductive logic is in-between inductive logic, the focus of CLGT, and deductive logic, discussed in SGT (Clarke, 2009). Some scholars assert that the use of abductive logic is described in some SGT texts without using the term (Bryant, 2009; Reichertz, 2010).

The grounded theory. A theory “states relationships between abstract concepts and may aim for either explanation or understanding” (Thornberg & Charmaz, 2012, p. 41); however,

CGT emphasizes theoretical understandings. Charmaz (2014) differentiates between positivist theory, which aims to explain and predict through “explanatory generalizations that theorize causation”, and interpretivist theory, which aims for interpretive comprehension through “abstract understandings that theorize relationships between concepts” (p. 228). In CGT, the GT emerges from the researchers’ interaction with the data, rather than emerging objectively from the data for an unbiased researcher to discover. Further, CGT theory “constructs an image of a reality, not the reality” (Charmaz, 2000, p. 523) and there are likely many possible theoretical interpretations from one set of data (Greckhamer & Koro-Ljungberg, 2005). As well, the GT may be comprised of theoretical concepts with no core category, as CGT emphasizes multiple realities in which there may not be a unitary theme (Charmaz, 2006; Heath & Cowley, 2004).

Strengths and critique. CGT encompasses a number of strengths. First, it offers a re-interpretation of GT; thus, enabling researchers to “adopt grounded theory strategies without embracing the positivist leanings of earlier proponents” (Charmaz, 2000, p. 510). Second, CGT addresses the tension between objective emergence from the data, as in CLGT, and the researcher forcing the data with their intervention, as in SGT, through focusing on researcher reflexivity and abductive reasoning (Bryant, 2009; Duchscher & Morgan, 2004; Kelle, 2005). Third, CGT offers more clearly described strategies than in CLGT, but with less prescriptive procedures than in SGT (Charmaz, 2000). Fourth, CGT addresses concerns about the power differential between researchers and participants through reflexivity, relationality, and collaboration (Charmaz, 2006; Hall & Callery, 2001). Fifth, CGT seeks to develop mutuality with participants, which uncovers hidden meanings and results in an insightful theoretical interpretation (Charmaz, 2006).

There are also a number of critiques of CGT. First, Glaser (2002) argues that CGT erodes the analytical power of GT, and his critique includes that CGT: forces the data through interview guides and prolonged interviews; remodels CLGT into a form of qualitative data analysis; and

neglects using careful CLGT strategies to render the data objective. Second, some question if CGT differences with GT are larger than its similarities, and if Charmaz is trying to legitimize her work by associating it with GT (Thomas & James, 2006). Third, others question if a methodology can be radically changed and still be the same methodology (Greckhamer & Koro-Ljungberg, 2005; Morse, 2009b). Fourth, speculation exists regarding if it is possible to come up with a set of theoretical ideas when one assumes multiple realities (Corbin, 2009). Lastly, at times Charmaz uses the terms constructivism, constructionism, and social constructionism interchangeably, which can be confusing (Andrews, 2012; Evans, 2013).

Selecting a Grounded Theory Approach: Purpose, Philosophy, and Pragmatics

With all the available GT options, how can one decide? Three considerations, which flow from the distinguishing characteristics analyzed, were used to direct the methodological choice for one GT study: purpose, philosophy, and pragmatics. A working example of this study, which explored how undergraduate nursing students learn through arts-based pedagogy (ABP) will be used to illustrate these considerations.

Of utmost importance, there needs to be congruence of the GT approach with the research question and desired knowledge from the study (Corbin & Strauss, 2008; Crotty, 1998; Evans, 2013; Houghton, Hunter, & Meskell, 2012). The researcher needs to consider the purpose of the study, or what type of GT theory/knowledge is desired, and which approach would best support this goal (Annells, 1997b; Mills et al., 2006). If a theoretical understanding of a situated process is desired, as opposed to the discovery of an objective theory, then the type of knowledge desired may be consistent with CGT. The level of theory desired in the study of ABP was not a high level of abstract theory, but rather a theoretical understanding of a practice issue. This research aim can be well addressed with CGT and its view of GT as a theoretical understanding (Charmaz, 2006). Further, the process of ABP appears to be complex and multifaceted. CGT clearly asserts that the

theoretical understanding should incorporate diverse viewpoints and that there may or may not be a core category (Charmaz, 2006).

Numerous scholars discuss the importance of choosing a research approach that is congruent with the researcher's personal beliefs (Annells, 1997b; Corbin & Strauss, 2008; Crotty, 1998; Evans, 2013; Ralph et al., 2015). Charmaz (2006) provides a clear description of the constructivist philosophical underpinnings of CGT. CGT was an appealing approach because it is a contemporary variation which has moved GT from its post-positivist to constructivist philosophical assumptions (Charmaz, 2006). From this analysis, CGT was the best fit with the researcher's personal philosophical beliefs, which are summarized in the view that people have subjective access to an objective reality, but their social constructions of this reality are of particular interest. Furthermore, artistic expressions represent the constructions of people and ABP is actually based on constructivist ideas about learning (Bryant et al., 2003; Rieger & Chernomas, 2013; Rieger & Schultz, 2014).

As can be seen from this analysis, philosophical foundations have significant implications for the role of the researcher. CGT acknowledges the experiences and knowledge of the researcher, because it views data collection and analysis as a co-construction (Charmaz, 2006), and this characteristic was appealing for this study about using the arts with nursing students. CGT enabled the reflexive, thoughtful incorporation of both the researcher's background as a nurse educator and experiences with community arts. As well, CGT facilitates reciprocity with participants through partnerships and reflexivity (Gardner, McCutcheon, & Fedoruk, 2012), as opposed to CLGT, and has flexible procedures that elucidate the participants' voice (Charmaz, 2006). Students are a vulnerable group because of the power differential between faculty and students (Anderson, 2011; Edwards & Chalmers, 2002); thus, this aspect of CGT was a good fit for this study. Furthermore, Charmaz (2006; 2014) acknowledges that extant theories can

increase a researcher's theoretical sensitivity and inspire sensitizing concepts; thus, CGT allowed for the transparent use of the learning theory that influenced the researcher in the development of the study.

Lastly, there are pragmatic considerations in most research studies, and CGT appeared to be the most feasible GT approach for this research project. CGT procedures are more defined than CLGT, but these methods are flexible and not as cumbersome as SGT (Bryant & Charmaz, 2007a). CGT procedures also seemed to have an ideal balance between emergence and forcing. CGT acknowledges the researcher's influence on the research, in contrast to CLGT, but also values emergence of ideas from the data unencumbered by preconceived frameworks (Charmaz, 2006). Thus, CGT is a balanced method that acknowledges the role of the researcher, but does not have overly prescriptive methods.

Conclusion

Understanding the similarities and differences of the GT approaches can facilitate methodological transparency (Amsteus, 2014) and philosophical/methodological congruence (Crotty, 1998). It can also help a researcher to determine the best approach for their particular study and for who they are as a researcher. The evolution of GT has resulted in an array of methodological choices. This variety can address the needs of diverse researchers studying wide-ranging topics. GT researchers will most likely continue to develop their methodology, and GT will be adapted further to meet the needs of future generations of researchers. Corbin and Strauss (2008) fittingly cite Dewey (1934), "If the artist does not perfect a new vision in his process of doing, he acts mechanically and repeats some old model fixed like a blueprint in his mind" (p. 50).

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Table 1

Similarities Between GT Approaches Informed by the Literature

Characteristic	Description
Elucidates a process	Explicating a social process (Hood, 2007; Morse, 2001), which is comprised of “unfolding temporal sequences that may have identifiable markers with clear beginnings and endings and benchmarks in-between” (Charmaz, 2014, p. 17).
Begins with inductive logic	Starting by looking at the data with no ideas to prove or disprove. Issues of importance emerge from people’s descriptions (Corbin, 2009; Hunter et al., 2011; Mills et al., 2006).
Simultaneous data collection, analysis, and theory construction	Concurrent data collection and analysis. Analysis begins early with the first few interviews, and focuses on developing theoretical ideas (Charmaz, 2006; Elliot & Lazenbatt, 2005; Hall & Callery, 2001).
Constant comparison	Developing successively more abstract ideas through comparing data with data, data with code, code with code, code with category, and category with category, in order to identify commonalities and differences (Charmaz, 2014; Corbin, 2009; Duchscher & Morgan, 2004; Elliot & Lazenbatt, 2005; Hall & Callery, 2001; Hunter et al., 2011; Walker & Myrick, 2006).
Memo-writing	Keeping a written record of comparisons and analytical thoughts about the data/data analysis process in order to develop theoretical ideas and direct theoretical sampling (Corbin, 2009; Duchscher & Morgan, 2004; Hood, 2007; Elliot & Lazenbatt, 2005).
Theoretical sampling	As theoretical ideas are developed, concepts derived from the early analysis will guide the collection of additional data to elaborate the developing theoretical categories and address conceptual gaps. Researchers often start with convenience/purposive sampling, and then move to theoretical sampling. Theoretical saturation, the point at which new data no longer provide theoretical insights, is the criteria for stopping data collection (Charmaz, 2006; Corbin, 2009; Hunter et al., 2011; Walker & Myrick, 2006).
Generation of a grounded theory	Developing theoretical abstractions which are grounded in the data and encompass the variation of participants’ experiences. Most grounded theories are substantive theories, as they explicate delimited phenomenon in a particular area. When theoretical ideas transfer across areas they can be developed into a more formal theory encompassing a higher level of abstraction with broader applicability (Charmaz, 2014; ; Corbin, 2009; Glaser & Strauss, 1967; Morse, 2001; Streubert & Carpenter, 2011).

Table 2

Data Analysis Procedures

GT Version	Classic Grounded Theory (Glaser & Strauss, 1967; Glaser, 1978;1992)	Straussian Grounded Theory (Corbin & Strauss, 2008; 2015; Strauss & Corbin, 1990;1998)	Constructivist Grounded Theory (Charmaz, 2006; 2014)
Coding Stages	1) Substantive Coding Open Coding <ul style="list-style-type: none"> Coding through immersion in the data. This sub-phase ends with the discovery of the core category. Selective Coding <ul style="list-style-type: none"> Selectively only coding data which relate to the core category. 	1) Open Coding <ul style="list-style-type: none"> Coding pieces of data with line-by-line coding. Identifying categories, and their properties or dimensions. 	1) Initial Coding <ul style="list-style-type: none"> Studying fragments of data and labeling them with codes.
		2) Axial Coding <ul style="list-style-type: none"> Putting the fractured data back together through making connections between categories and subcategories. Involves the use of a coding paradigm to identify these links. 	
	2) Theoretical Coding <ul style="list-style-type: none"> Integrating substantive codes into a grounded theory. A theoretical coding family may be used. 	3) Selective coding <ul style="list-style-type: none"> Selecting a core, or central, category. Conceptually relating all categories to the core category, and to the other categories in order to form the GT. In the 2008 and 2015 texts selective coding is not used and this final process is referred to as theoretical integration. 	2) Focused Coding <ul style="list-style-type: none"> Using initial codes that reappear frequently, and are the most relevant, to theoretically code all future data.

Analytical Tools Used During Data Analysis	Theoretical Coding Families <ul style="list-style-type: none"> • Choosing a family of theoretical codes to integrate the fractured data back together. • There are at least 18 theoretical coding families, which are flexible sets of codes derived primarily from sociological theory. 	The Coding Paradigm <ul style="list-style-type: none"> • The coding paradigm came from one of Glaser's coding families (the six C's) and is used during axial coding or to code around a category. • Focuses the researcher on the conditions of the phenomenon, actions/interactions and emotions of participants, and consequences of the actions/interactions or emotional responses. 	Potential Tools for Analysis <ul style="list-style-type: none"> • Can employ analytical tools developed by other grounded theorists in a CGT study if they are appropriate for the emerging analysis.
		Conditional/consequential Matrix <ul style="list-style-type: none"> • A coding device to make connections between the macro and micro conditions affecting the phenomenon of study. • Used during axial coding or selective coding. 	
		Exemplars of Other Analytic Tools for Probing the Data <ul style="list-style-type: none"> • Flip-flop technique: turning a concept inside out by looking at opposite extreme conception of a concept to highlight its properties. Waving the red flag: when words such as 'never' or 'always' arise, this occurrence should alert the researcher to investigate this claim further. 	

Table 3

Evaluation Criteria for Grounded Theory Studies

Classic Grounded Theory (Glaser, 1978)	Straussian Grounded Theory (Corbin & Strauss, 2008; 2015)	Constructivist Grounded Theory (Charmaz, 2006; 2014)
1. Fit 2. Work 3. Relevance 4. Modifiability	<p>Corbin and Strauss (2008):</p> 1. Fit 2. Applicability 3. Concepts 4. Contextualization of concepts 5. Logic 6. Depth 7. Variation 8. Creativity 9. Sensitivity 10. Evidence of memos <p>Provide 13 additional criterion for judging the credibility of findings.</p> <p>Corbin and Strauss (2015): Offer 16 checkpoints for evaluating the methodological consistency, and 17 checkpoints for evaluating the quality/applicability, of a GT study.</p>	1. Credibility 2. Originality 3. Resonance 4. Usefulness

Chapter 6: You Want Me to do What?

Nursing Students' Experiences with Arts-based Pedagogy

Prelude

Chapter 6 includes a detailed description of the CGT study exploring nursing students' experiences with arts-based pedagogy. This primary research study builds on previous research studies, and the work in this paper-based thesis, by elucidating a theoretical understanding of this social process in a particular setting. The analysis culminated in a substantive GT about how undergraduate nursing students learn through ABP in nursing education. The research study and findings will be discussed in this manuscript, and then integrated with the findings from the concept analysis and the JBI systematic review in the concluding chapter of the thesis. CGT, the methodology which was selected in Chapter 5, was used to conduct this study. The strengths and limitations of using CGT for this inquiry will be discussed briefly in this paper, and then reflected upon in a more in-depth manner in the concluding chapter.

The student conducted the CGT research study under the supervision of her advisor and committee members, wrote the initial manuscript draft, and revised the manuscript in response to constructive criticism from her advisor and committee members. The manuscript is entitled, "You Want Me to do What? Nursing Students' Experiences with Arts-Based Pedagogy". The student will be the primary author on this paper, and her advisor and committee members will be the co-authors. This manuscript will be submitted for publication after the doctoral thesis defense. This paper is deemed to be of publishable quality as it builds upon the current body of literature by explicating a theoretical understanding of how undergraduate nursing students learn through the arts. This manuscript can also inform both future research about APB and nursing educators' practice.

Abstract

Background: Diverse pedagogical approaches are needed to help students develop the wide range of competencies needed for professional nursing. The capacity of arts-based pedagogy (ABP) to promote holistic learning is being realized in nursing education. ABP is a teaching approach in which an art form is integrated with another subject to foster learning. The arts have unique attributes which can engage students in meaningful learning. No studies were found which explicated nursing students' learning process through ABP.

Purpose: The research question was: How do nursing students learn through ABP in undergraduate nursing education?

Methodology and Methods: The theoretical perspectives of symbolic interactionism and transformative learning theory guided this study. A constructivist grounded theory methodology was used to elucidate an in-depth understanding about this process. Participants from a baccalaureate nursing program were recruited for this study with purposive and then theoretical sampling. Thirty-four semi-structured interviews were conducted with thirty nursing students who had ABP experiences, and eight interviews with nursing instructors. Four sources of data collection were utilized: a socio-demographic questionnaire, semi-structured interviews, photo/visual elicitation, and field notes. The socio-demographic data were analyzed with descriptive statistics and all other data with constructivist grounded theory procedures. Through simultaneous data collection and analysis, levels of abstraction were induced from the data, additional data were gathered to refine these categories, and the research culminated in a substantive grounded theory about ABP.

Findings: The arts as a catalyst for learning emerged as the core category. In order to learn through the arts, students engaged in a creative learning process. However, there were diverse factors that influenced the students' perspective of, and response to, ABP. Students' response to

ABP determined if and how the arts became a catalyst for unique and transformative learning.

This grounded theory, which encompasses four categories, describes and elucidates the variation of students' experiences with ABP.

Conclusions: These findings provide insight into why, how, and when nursing students learn through ABP, and can facilitate the effective implementation of ABP into nursing education. This work could also inform the education of other healthcare professionals and the use of arts-based approaches in healthcare.

You Want Me to Do What? Nursing Students' Experiences with Arts-based Pedagogy

The arts have enhanced people's lives and cultures for all of human history, and some believe they have the potential to do the same for learning in nursing education. Dewey (1934) writes that "Art is the most effective mode of communications that exists" (p. 286). Thus, the arts can open up new modes of perception and expression for nursing students about diverse subjects (Bryant et al., 2003). The aim of nursing education is to prepare professional nurses for practice. Increasingly complex healthcare environments require a wide-range of knowledge, skills, and competencies to meet the demands of practice (McAllister, 2015). In addition to scientific knowledge and technical skills, entry-level practitioners need to demonstrate competencies such as ethical and interpersonal proficiencies (College of Registered Nurses of Manitoba, 2013). As nursing is both an art and a science (Carper, 1978; Pavill, 2011), a wide diversity of effective pedagogical approaches is needed to develop essential competencies for professional nursing (Rieger & Chernomas, 2013). Educators need to create learning environments that support students to expand their capacities for thinking, feeling, and doing (McAllister, 2015).

In recent years, nurse educators have integrated the arts with core nursing subjects in order to promote a well-rounded education (Pavill, 2011). Arts-based pedagogy (ABP) is a teaching approach in which an art form is integrated with another subject matter in order to foster meaningful student learning (Dattoo & Chagani, 2011; Goldberg, 2012; Haidet et al., 2016; Ogden, DeLuca, & Searle, 2010). Students learn about another subject through engaging in artistic processes by either responding to works of art, creating works of art, and/or performing artistic works and this kind of artistic engagement can result in arts-based learning (Rieger & Chernomas, 2013).

There are numerous reasons for this growing interest in ABP, such as changes in nursing curriculum, shifts in philosophical views of learning, and a growing realization that the arts can

foster insightful ways of expressing and representing knowledge (American Association of Colleges of Nursing, 2008; Forbes & Hickey, 2009). There have been significant changes in nursing education over the last century; however, there is a growing consensus that further curriculum reform is needed (American Association of Colleges of Nursing, 2008; Benner, Sutphen, Leonard, & Day, 2010; Canadian Association of Schools of Nursing, 2014). There has been a trend from lecture style teaching to student-centered instruction in which the learner plays an active role in knowledge construction (Schaefer & Zygmunt, 2003). Thus, there is a need for new pedagogies and innovative approaches to address these current discourses and advance the practice of nurse educators (Scheckel, 2009). Teaching strategies, such as ABP, which emphasize learning processes; develop creative thinking; connect thoughts and feelings; and incorporate active learning are needed (Rieger & Chernomas, 2013).

There is a growing body of research evidence about ABP in nursing education. ABP alters both the learning process and the learning product (Rieger, Chernomas, McMillan, Morin, & Demzcuk, n.d.). ABP enables nursing students' learning to be more authentic (Janzen, Perry, & Edwards, 2011), multi-sensory (Christiansen, 2011), and participatory (Davidson, 2004). As well, learners reported an increased sense of responsibility for learning (McKie, 2012) and engagement (Jensen & Curtis, 2008). There are numerous reported positive outcomes of ABP such as self-awareness (Hydo, Marcyjanik, Zorn, & Hooper, 2007; Mahar, Iwasiw, & Evans, 2012), awareness of others (Jack, 2012; McKie, 2012), empathy (Casey, 2009; Welch & Welch, 2008), cultural sensitivity (Newcomb, Cagle, & Walker, 2006), reflection (Christiansen, 2011; Jack, 2012), and deeper understanding (Mahar et al., 2012; McAndrew & Roberts, 2015). The emerging body of research indicates that ABP has a meaningful impact on nursing students' development as professionals. However, there is a need for theoretical understanding of how nursing students learn through the process of ABP. This understanding could help nurse

educators to develop, and refine, ABP experiences. The research question for this study was: how do nursing students learn through ABP in undergraduate nursing education?

Research Design

Theoretical Perspectives

This study was theoretically guided by symbolic interactionism (SI) and transformative learning theory (TLT). SI is a theoretical perspective that explains how human action is based upon the individual's meaning of a situation or object (Blumer, 1969; Charon, 2010). SI posits that these meanings are constructed through a process of social interactions, which occur through the use of symbols, and personal interpretations of those interactions. Through understanding meanings that situations have for an individual or group, one can understand their action towards the situation. In this interpretive study, the researcher inquired about the individual's meaning of ABP, and the factors that influenced this meaning. TLT provided a theoretical perspective for the exploration of the learning process students experienced with ABP. Mezirow (2009) views transformative learning as "the process by which we transform problematic frames of reference...to make them more inclusive, discriminating, open, reflective and emotionally able to change" (p. 92). This learning theory provided insight into how adult students learn, and what type of learning occurred with ABP. Together, SI and TLT guided the research design, enabled the researcher to develop theoretical sensitivity in this constructivist grounded theory study, and provided insight into the study findings.

Methodology: Constructivist Grounded Theory

Constructivist grounded theory (CGT) was the research methodology used in this study. Grounded theory (GT) is an approach to data collection and analysis which emerged from SI, and provides flexible guidelines for developing a theory about a social process that is grounded in the data (Charmaz, 2006; 2014). Recently, Charmaz proposed CGT, which takes a constructivist

view. It assumes that data are a co-construction of meaning between the researcher and participants, and focuses on explicating liminal meanings. The research purpose and question were congruent with CGT, which elucidates social processes. As a substantive theory about a practice issue was desired, rather than a highly abstracted theory, this purpose fit well with CGT. Other appealing features of CGT (Charmaz, 2006; 2014) were that it could facilitate the primary researcher's reflexive integration of her nurse educator and arts experiences, allow for the use of extant theories throughout the research, and elucidate the student participants' voices with flexible procedures.

Participants and Setting

Participants were nursing students and instructors in a baccalaureate nursing program in a mid-western Canadian city. The students had experienced reflecting on nursing practice, or issues important to practice, with ABP in two courses (see Table 1). The first was a third year community course in which the students develop a creative reflection about a community clinical experience, and share it in a group seminar. The second was a third year theory course which addresses issues, politics, and public policy in nursing. Students create a photo essay exploring a local social justice issue and its health impacts, and share it in a class presentation. Recruitment from both courses ensured variation in ABP experiences, stage in the program, social dynamics, and learning environment, and provided rich information that contributed to and challenged the emerging theory (Charmaz, 2014). Thirty nursing students and eight nursing instructors participated in the study. As students were recruited from a pool of students that had completed two ABP assignments, some chose to volunteer twice ($n=4$); thus, 34 student interviews were conducted. Initially, 11 students were interviewed during purposive sampling. Theoretical sampling commenced once theoretical categories were identified from analyzing the first 11 interviews, and included interviewing students ($n = 23$) with a revised interview guide and

interviewing their nursing instructors ($n = 8$). Data collection stopped when theoretical saturation occurred, which is the point at which data no longer provides theoretical insights (Charmaz, 2014).

In total, 19 students shared their perspectives about the creative reflection (55.9%), and 15 about the photo essay (44.1%). The majority of the student participants were under the age of 35 (66.6%), female (93.3%), and white (80.0%) (see Tables 2 and 3). Of the 30 students, 86.7% had been in the program for three years or less, indicating they were in synchrony with their cohort. They had an average of 2.6 years of post-secondary education before entering nursing. For 64.7%, this was their first or second ABP experience in the program. To frame their ABP experiences, students rated the value of ABP out of 100, and 47.4% rated the creative reflection as 76 or higher, and 26.3% between 51-74. For the photo essay, 40.0% rated it as 76 or higher, and 46.7% between 51-72. Of the eight instructors, the majority were over the age of 45 (75.0%), female (100.0%), white (100.0%), and had 20 or more years of experience as a nurse (62.5%) and five or more years as a nurse educator (87.5%). Three taught in the course with the photo essay (37.5%), and six with the creative reflection (75.0%).

Ethical approval was obtained from the relevant institutional ethics review boards, and informed consent was obtained prior to data collection. Ethical considerations were based upon the ethical principles of beneficence, human dignity, and justice (Polit & Beck, 2012). As students were a vulnerable population due to the power differential between the researcher/teacher and the students (Edwards & Chalmers, 2002), an intermediary was used for recruitment procedures to avoid perceived coercion.

Data Generation

Four data collection strategies were utilized: a socio-demographic questionnaire, in-depth semi-structured interviews, photo/visual elicitation, and field notes. Data were collected from

February to December 2015. Socio-demographic information was collected in order to describe participant characteristics and promote transferability of the findings. One semi-structured interview was held with all participants to gather rich narrative descriptions of the students' experiences with ABP from the students' and instructors' perspectives. Interviewing was guided by a semi-structured interview guide. The interview duration ranged from 30 to 67 minutes for nursing students, and 45 to 80 minutes for nursing instructors. The average interview duration was 47 minutes for nursing students and 63 minutes for instructors. The first author conducted the interviews, which were held in a convenient and private location of the participant's choosing. Most students (n=32) brought pictures of their creative reflection (or their actual work), or brought their photo essay, to the interview where they were viewed on a laptop computer and discussed. Visual/photo elicitation is an arts-based research method that introduced stimulus for the interview, promoted collaboration between the researcher and participants, and fostered recall of pertinent experiences during the retrospective interview (Frith & Harcourt, 2007; Harper, 2002). At the end of the instructor interviews, instructors were shown a visual diagram of the emerging GT and asked for their feedback. This form of visual elicitation provided insightful data for the emerging theory. Descriptive field notes were written about the interview context.

Data Analysis Procedures

Socio-demographic data were analyzed with descriptive statistics and other data with CGT analysis methods. Data collection, analysis, and theory construction occurred simultaneously (Charmaz, 2014). All interviews were recorded and transcribed verbatim and identifying information removed from transcripts. In order to improve the quality of the transcripts and empower participants, participants were offered a transcript review (Hagens, Dobrow, & Chafe, 2009). Although 15 participants requested a transcript review, no participants made any changes. Data were managed with ATLAS.ti. Coding and memo-writing began early

with the first few interviews, and two phases of coding were utilized: initial and focused coding (Charmaz, 2014). Initial coding involved studying fragments of data and labeling them with codes to build concepts inductively, and focused coding categorized large amounts of data by using the most analytically significant codes from the line-by-line coding. Gerunds were also used to elucidate a process, and in vivo codes to privilege the participants' voices. After 11 interviews were analyzed, a focused coding framework was developed. The emergent framework was used to code all following interviews. New participants' data were compared to focused codes from previous participants and their data were added to the framework. During focused coding, the codes became increasingly conceptual and explicated, and certain focused codes were elevated to abstract categories. These categories were chosen for their incisiveness, theoretical reach, generic power, and relationships to other categories. Theoretical integration, which involved analyzing the linkages and relationships between categories, began during focused coding and continued until the construction of the GT. Theoretical integration was achieved through coding, constant comparison, memo-writing, and diagramming a visual representation of the emerging GT. The researchers' knowledge of nursing education and creative processes, and the reflexive use of the literature and theories, contributed to theoretical sensitivity (Charmaz, 2014).

Study Trustworthiness and Evaluation Criteria

Trustworthiness and evaluation criteria adopted for this study were recommended by two authoritative sources: Lincoln and Guba's trustworthiness criteria (Guba & Lincoln, 1994; Lincoln & Guba, 1985) and Charmaz's (2014) four evaluation criteria of credibility, originality, resonance, and usefulness. These criteria were addressed in several ways. In order to have an in-depth understanding, the researchers engaged in prolonged engagement with the study topic and persistent observation with in-depth interviews and photo/visual-elicitation (Charmaz, 2014; Polit

& Beck, 2012). The primary researcher teaches in the same nursing program in which the study was conducted, and brought her perspective as an educator to this research project. However, she wrote reflective memos and discussed the study with her research supervisor to be reflexive about her influence on the research process. Careful documentation of the constant comparison process and key analytical decisions occurred through memo-writing. Data (student participants from different courses and instructor participants) and method (interviews, photo/visual-elicitation, and field notes) triangulation was used in this study. Theoretical sampling encompassed a form of member checking and searching for confirming/disconfirming evidence. The usefulness of this study was enhanced by employing an integrated knowledge translation approach which involved consulting knowledge end users throughout the research process (Canadian Institutes of Health Research (CIHR), 2012). Other strategies included: compiling comprehensive field notes, participant transcript reviews, initial line-by-line coding to elucidate hidden meanings, and using theoretical saturation as the indication for stopping data collection (Charmaz, 2014; Polit & Beck, 2012).

Findings

In this study, *the arts as a catalyst for learning* emerged as the core category of the GT. Although the arts were not the focus of learning, in that the primary aim was not to learn about the arts, when students engaged with ABP the arts acted as a catalyst, or an event that impacts change, with that change being learning. If students engaged with ABP, there were characteristics of the arts that contributed to their ability to foster important learning. In order to learn through the arts, students navigated a creative learning process with different phases. However, there was variation in the students' experiences of this learning process. Some reported that they did not find meaning in the ABP experience because of various factors which influenced their response to ABP. In these situations, the arts were at best annoying, and at worst, stressful. *The arts as a*

catalyst for learning was identified as the core category, or main phenomenon (Charmaz, 2014), as it relates meaningfully to all other categories (see Table 4 for the categories and sub-categories, Figure 1 for a visual diagram of the GT, and Figure 2 for an artistic interpretive sketch of the GT). The core category encapsulates the creative learning process (category: *engaging in a creative learning process*), is influenced by the identified conditional factors (category: *factors influencing students' meaning making and response to arts-based pedagogy*), and can result in important learning (category: *learning, when learning occurs*). This GT provides insight into why (*the arts as a catalyst for learning*), how (*engaging in a creative learning process*), and when (*factors influencing students' meaning making and response to arts-based pedagogy*) the arts are a catalyst for learning, and what happens when they are (*learning, when learning occurs*).

Core Category: The Arts as a Catalyst for Learning

Participants described how the arts could be a unique catalyst for learning in nursing education because of the distinct features of the arts as ways of knowing and expressing. The core category encompasses the following sub-categories which explain these features: musings through mediums; emotional connection with learning; leaving the comfort of my computer; my perspective, your perspective; creating a unique pedagogical space; and it's personal.

Musings through mediums. The arts enabled students to muse through different mediums than they normally would – artistic ones. The arts offered a lens, or a way of seeing and expressing, that changed the way clinical experiences and social justice issues were viewed. One student said: “using these pictures just made it so obvious, I mean, you can read manuscript after manuscript. But when you use pictures...it becomes real. Almost tangible.” Students explained how representing knowledge through the arts demanded that they use their judgment to select the most salient points on which to focus. In order to represent their thoughts with art, students also needed to select a concept/issue and an art form, and think conceptually in order to match these

two in a meaningful way. As one student said, “It’s supposed to be a symbol of what you’re trying to say.” One student described how she had to assess whether the photographs portrayed the concepts she wanted to highlight or whether they furthered stereotypes and stigmatization:

in general people think of sex trade workers, a very specific image comes into their mind.

And even when we were taking our pictures, we were like, well, are we being too

judgmental? Are we...not taking it sensitively enough? So you try to be cognizant of that.

Participants also described how when searching for a meaningful experience or issue, they needed to think a bit deeper in order to understand what would fit well with an art form. One student explained, “...it’s not creating something that isn’t there. But it kind of helps you dig for what is there.” Musings through mediums fostered inquiry about the concept or experience; thus, art making was iterative. One student expressed it as a conversation with her painting: “And this is just me and my reflection. This is me and my board. We both are sitting and just kind of talking to each other.” The lens of the arts also highlighted specific aspects of experience. Some participants noted how an art form directed students to focus on the holistic or relational side of nursing. One student commented that ABP “helps the other side of your brain work....You’re used to, you know, the science and the math of everything...How does this work in the body? How does that medication work?...And this lets the other side open.”

Emotional connection with learning. ABP enabled the self-expression of emotions and an emotional connection to the subject. One student explained why this was important to her:

we don’t talk enough about our feelings in this program...I guarantee you every single

student in this program has cried at one point about something that’s stressful for them,

whether it’s financial, the burden of, you know, dealing with their family or not seeing their

family or...there’s just the workload. And I think we need to talk about it more. And we

talk so much about supporting our patients and giving them support but...we never really talk about us...And I think this assignment was.

Students described how an art form had a unique ability to help them express difficult emotions. One said, “it felt...so deep... I was in tears...Giving an opportunity to discuss, to talk, to, let out maybe these bottom emotions.” Sometimes clinical involved emotionally difficult situations, and they were able to process and express these experiences. One student visited the same high school which she attended as an adolescent, where she had struggled with feelings of belonging as an Aboriginal child adopted by a white family during the 60’s scoop. She shared:

when I came back there, I felt like I had a place...And even talking to the other nurses...I told one of them my story. And they said, you know, we need someone like you here...it was validation for me...And I was like...I’m home...it felt familiar for me and it was like coming home. But I wasn’t the same person I was when I was there so many years ago.

She had an “epiphany moment” when processing this emotional journey (see Figure 3):

I think nursing school helped me kind of understand that. And understand myself. Where I came from. Become comfortable with that and be able to move forward because before I think I was stuck and I was lost. And I don’t feel lost anymore...and writing this poem made me figure that out.

Figure 3. Student poetry for the creative reflection

Two Paths

We all look the same here, same skin, same smell, same amount of poverty
 Is this where I belong?
 At two weeks old, I am scooped up by the government and put down
 I look around
 They all look the same here, same skin, same smell, same amount of wealth
 Except for me
 Is this where I belong?
 They shout names at me
 They hate my skin
 They have made it clear that I don't belong here
 I like it here but it doesn't matter
 I walk away with a closed heart and a closed mind

At 15, I pack up and run far away from where they do not want me
 We all look the same here, same skin, same smell, same amount of poverty
 Is this where I belong?
 "Why do you talk that way?" They ask me.
 "Why don't you want to know where you're from?
 You know you can't have a future if you don't know your past!"
 They hate my insides.
 They have made it clear that I don't belong here
 I like it here but it doesn't matter
 I walk away with a closed heart and a closed mind
 My life is a paradox, I am walking two paths

As I age, walking two paths reveals
 That there are two sides to every story
 That there is more than one truth
 More than one perspective

Walking two paths reveals
 Truths about myself
 It opens my heart and mind
 To a greater understanding of people
 It has given me eyes to look with greater insight

My paths which once tormented me, have become a great gift
 My journey becomes a blessing

Walking two paths reveals
 We are all more similar than different
 The layers unravel and I see the truth in all people
 I walk into the communities where I was once misunderstood and I misunderstood others
 I walk in with an open heart and an open mind
 We all look the same here, different skin, different smell, different ways of life
 My paths blend into one
 This is where I belong

Students shared that the level of emotional expression and debriefing that occurred during the seminar was a unique experience within the context of their undergraduate nursing program. One student shared about the emotional connection she experienced:

But there's a lot of growth going towards...becoming a nurse. And I felt like it was really good to have the feeling that I wasn't the only one going through that... to hear it kind of similarly voiced like from everybody...it was just, it made me feel really good.

Participants also described how the arts helped them to connect emotionally with the concept or situation. One said that they were able to put their emotions into it and maybe "that's why it's such a precious project." This emotional connection seemed to alter learning. One student described how taking photographs for the photo essay deepened her appreciation to genuinely empathize:

It's one thing to research it because you don't identify with it. But when you're down there looking at them and it's cold and you're in your car, it's profound...I had the knowledge from researching the topic. We had put that together. And it was sad I would say...You empathize with them. But you don't really empathize with them until you see them.

Some students also reported feeling like they were in the picture, or feeling an emotional connection, when they viewed others' projects. They described the ability of certain art forms to elicit emotion. One student shared how music could evoke emotion about particular points in the photo essay. One instructor described a reflection through dance: "It was emotional I think for the student who performed because she really put her heart and soul into it. It was beautiful. Very moving." This emotional connection could also be draining as one student explained:

I think it's really hard because you're asking a bunch of students that don't have a lot of time or a lot of money or a lot of...emotional capacity to go through this creative process. Which in and of itself can be really emotionally exhausting...if you're truly being creative...it weighs on you....it's hard. You're taking basically a piece of yourself and putting it out there and this is something that you have to share with your peers. That you have to share with your instructor. So if you're really asking for that true creative essence, it's really exhausting.

However, many students still valued the emotional connection with learning, as one reflected:

I want to walk out of here remembering specific things that meant a lot to me and that will change me emotionally and then I'll remember for the rest of my career, you know. And this...poem and that experience would be one I would say. (see Figure 4)

Figure 4. Student poetry for the creative reflection

Teen Mom Burden

To be faced with financial burden is no joke
 These teen moms are always broke
 Hard to get by on minimum wage
 Week by week they have to gage
 How much money for food, clothes and rent
 By the end of the week, all the moneys been spent
 We sit here asking what they aspire to be
 And all they can think about are the costs and the fees
 School isn't cheap, we all can relate
 This upcoming term alone will cost us 2,468
 So who are we to judge where their money should go
 These young moms constantly worried about how their child will grow
 In this world full of judgment, hate and blame
 I couldn't help but notice their heads looking down with shame
 I wanted to tell them to be proud of who they are
 Because that incision line on your belly is not just a scar
 It's a symbol of strength, purpose and love
 A sign this gift of life was sent from above
 Lets take some time to think about what was said
 Because it's not going to be easy, there's a long road ahead
 Let us stick together to find people who care
 Because we should never feel alone; there's good people out there I swear
 So the next time you see a teen mom on the street
 Lend a helping hand to get them back on their feet

Leaving the comfort of my computer. This sub-category encompasses both the experiential element of ABP and how it can engage learners with their community. ABP helped

learners to get away from their computers and to find out what was happening with other students and instructors in their learning community, practitioners in their professional community, and clients, populations, and agencies in their physical communities. One student said about taking pictures of a social justice topic for the photo essay (see Figures 5 and 6):

it made it real, getting out of the classroom, talking and interacting with others had a huge impact; the photos representing these interaction...I mean it's one thing to look something up on the computer and see statistics and, you know, just see the written word. But it's another thing to go into the communities and see where the refugees are living.

Figure 5. Student photograph for the photo essay



Figure 6. Student photograph for the photo essay



One participant's photo essay topic was on rural access to healthcare (see Figures 7 and 8) and she described how she had to drive to a rural town to take pictures of the hospital:

I actually had to make the effort to like truck down there just...to go see it. I pulled onto the side of the road to...get a shot and you can see...it sucks driving on these highways. It sucks being that far out... And just seeing...the no physician in emergency room today or just these...hand-written sticky notes that people are putting...on hospital doors. It's like this actually is happening.

Figure 7. Student photograph for the photo essay



Figure 8. Student photograph for the photo essay



Further, the photo essay involved group work, and this requirement engaged learners with other students through both the challenges and successes of group work. In the creative reflection, students connected with their learning community through sharing at group presentations. Some students that did not enjoy ABP itself still valued this connection with others.

My perspective, your perspective. ABP elicited multiple perspectives about a topic, and encouraged students to express their own thoughts, to consider another's perspective, and to acknowledge the reality of multiple valid interpretations. Students got to "learn how everybody sees that issue." One student described how group work facilitated discourse as they created together: "I think it was actually really good. And being able to bounce ideas off of each other and...talk about the things that we've seen." An instructor explained that in the photo essay, "the ones who work collaboratively, there's a lot of discussion on what is the best thing to put on those photos." Group presentations unveiled different perspectives of clinical learning experiences. In one seminar, three people reflected on the same clinical encounter and one participant noted how they all had different perspectives: "it was the same visit but...she pulled something out of that, different than what I pulled out of it." Students found that there was not always a right viewpoint with the arts, and that it was okay to express their own viewpoint. One student noticed that when art was shared, "the person receiving it can also have their own interpretation." Through reflecting on others' experiences or artwork, students were also able to view clients' perspectives in a new way.

Creating a unique pedagogical space. ABP opened up a pedagogical space in which students could pause and reflect within a busy curriculum. Representing concepts with art demanded time for a creative process. Students needed space to contemplate and create. One participant admitted: "I think maybe like with all reflections...I never really stopped to pause ...so I think, yea, doing this reflection made me pause and look back." Another said: "it changes

the pace I think a little bit...it kind of gives you a little break where you can be yourself and express what you want to say.” Participants described how ABP democratized the classroom through creating a unique space for diverse learners to flourish and shine. For some students, ABP was more accessible: “this assignment was very special to me because, because of my English, sometimes I’m not able to put my thoughts into words but I was able to put my thoughts into pictures. And I think they were powerful.” One instructor noted:

there’s a whole other group of students that, you know, have a lot of creativity. And...for them to be able to express it in a different way than writing the exam, I think it’s great.... some of these other students that were maybe just average were able to shine.

Students described ABP as creating an engaging, fun, and safe learning space, and one said:

it’s hard to be...in the nursing school...everybody’s grading you on every little thing. And it’s just, it’s intimidating...so it’s nice to have a little bit of fun too. I mean you’re still learning but...it’s a fun learning.

The emotional and personal aspects of ABP may be another reason that students were engaged. This engagement created a space that enhanced learners’ memory and retention of content.. One student observed: “I think the verbal presentation...just went in and out...And pictures, they really stick with you.”

It’s personal. Students described the personal nature of ABP, which often integrated their private life, interests, and emotions into their nursing education. Students discussed how through ABP they expressed personal thoughts, connected to a personal interest, explored a personal struggle, engaged in self-care, and told or heard about a personal story. One student said, “And I mean I did this because I had to do it but by the end I felt like there was more meaning to it because I was able to add my own...personal touch to it.” Because there was a lot of personal choice within both assignments, students could choose a topic that was personally meaningful to

them and feel a sense of ownership of their work. Students were able to incorporate parts of their personal lives into their nursing education through selecting an art form or topic that they had previously enjoyed. One student explained,

I had an awesome time actually doing this just because I love painting and... during my nursing years, I really didn't have enough time to do it ever except during the summer. So I was like, this is perfect time to do something that I really enjoy. (see Figure 9)

Figure 9. Student painting for the creative reflection



Some students discussed how artistic expression helped them to care for themselves:

...it calms me down and, I'm just so passionate about it and I just kind of forget all of my problems and I just concentrate on that... I took time and I was like in my room, listening to music...it's relaxing...it just didn't feel like what my other assignments were like.

ABP humanized pedagogical experiences as students personalized social justice issues and could then relate to them. Photography brought them into closer contact with the issues and helped students to “put a face to those people that you are writing about.” One instructor described how, in the photo essay, students were able to view social justice issues as situated in a personal stories and look at it in “a more humane view...Because now it all of a sudden it’s close to home.”

Engaging in a Creative Learning Process

The arts as a catalyst for learning was the core category; however in order to learn through the arts, students described *engaging in a creative learning process* to create something new or to combine ideas in a new way. This category describes learning through ABP as a creative process with a number of phases (sub-categories) that occur over time. In this study, students navigated their ABP experiences by moving iteratively through the following five phases: clarifying: you want me to do what?; engaging in divergent and convergent thinking; implementing, elaborating, and refining plans; presenting work; and evaluating work and ABP.

Clarifying: you want me to do what? There was an initial phase in which students tried to comprehend what they were being asked to do. This phase often included an element of disorientation, as one student explained: “they sprung it on everybody... we are used to structure. This is how we do things here...and then you’re like OK, here. Go be, go make some art. And people are like what? Are you kidding me?” Students had a range of initial reactions. Many students questioned the purpose of ABP and were initially negative as they did not think that the arts had value in nursing education, did not view themselves as creative, or felt time-pressure. One student shared: “I really hated the idea at the beginning... because I don’t consider myself a creative person” and another, “I really have a hard time relating how arts and crafts are going to be beneficial for my nursing career.” Others had a positive initial reaction as one student expressed, “I was excited because oh we get to do something fun.” And some students were

neutral, accepting that: “It’s an assignment that needs to be done, I’ll do it.” Instructors attempted to prepare students with a clear syllabus and thoughtful orientation with exemplars, but students were not used to this type of assignment and some just wanted to be told what to do. One student described having to open up to a new type of assignment: “I said, I’m not happy about doing this...And she [nursing instructor] said, just give it a shot...a lot of people really like it...I was like OK...so I’m going to have an open mind...let’s see how it goes.”

Engaging in divergent and convergent thinking. Once students grasped what they were being asked to do, they needed to decide on what they were actually going to create. This decision phase seemed shorter with the photo essay and longer with the creative reflection. There was also variation within the creative reflection: some students seemed to come up with ideas quickly, while others found this process challenging. In both assignments, the students were given a lot of choice about the content as well as the medium. This phase involved both divergent (exploration of many ideas) and convergent (deciding on one key idea) thinking, with some describing a period of incubation (Kelly & Leggo, 2008; Wallas, 1926). Students described an initial period of divergent thinking which included brainstorming, deliberating between different art forms, and letting their mind wander before reining it in. They looked out of the classroom for ideas, got ideas from orientation, thought about their previous skills, and found inspiration on the web. An initial idea spawned other ideas. Selecting an art form often posed a particular challenge for nursing students as one described: “That was the most stressful, coming up with just the idea of which medium am I going to use.” Students also spoke of a moment of illumination, or of a convergence on one idea: “and then it just kind of came to me.” One student said, “I had so many different...ideas...none of them seemed to fit until I had remembered that something my grandmother says.” Sometimes converging on a specific idea happened during a meaningful

clinical experience. Some students also described a period of incubation, or being able to sit “with that idea for a while”. One student said:

Sometimes it’s just you gotta not think about it to think about it...like even with the studying, we have to stop every now and then and just do something that has nothing to do with school and then go back to it with a fresh mind.

However, the undergraduate program included time constraints that left little time for rumination. Other restrictions included money and assignment guidelines. One student explained:

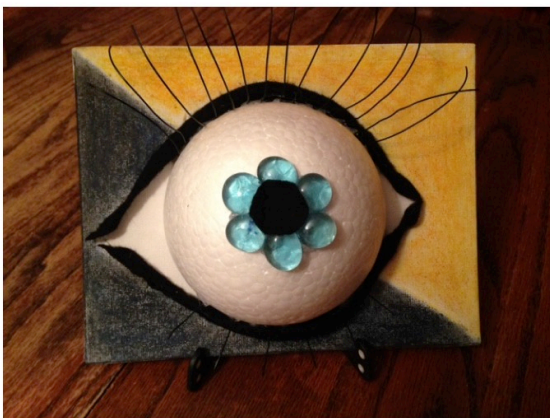
So when we were thinking of things to do, I thought of many things I could do... but it was just to think of something that I could do in that small time frame and present to a class...And money, money was a thing too because I didn’t want to spend too much on it... it’s tough being a student. You can’t always afford to do what you’d like to do.

The two assignments had some differences during this phase. In the creative reflection, students had to select a meaningful clinical experience and use an art form with which to reflect on it. In the photo essay, decision-making involved others as it was a group project. Convergent thinking involved negotiating and sometimes compromising to decide on a plan, as one student noted, “...at first it was kind of stressful because you’re in a group...and it’s hard to be creative in a group because you have three different opinions on everything.” But they could also draw on others’ creativity. One instructor said: “because it was a group assignment, you always find someone who’s got that creative bone in them.” Resolving what concept/experience and art form they were going to explore was an important part of moving on and feeling more comfortable with ABP. Some students described feeling anxious until they chose an idea and made a plan: “I was also just really happy to find a connection. And once I found it, I kind of like latched onto it for dear life like I finally figured out what I’m going to do for this assignment.”

Implementing, elaborating, and refining plans. After deciding on an approach, students implemented their plans through externalizing ideas using artistic materials and representations. This phase was active and experiential, and for some students took longer than other types of assignments. Although they started out with a plan, the project changed, grew, and emerged as the student worked on it. This revising of ideas seemed to be part of musings through mediums, and at times, resulted in deeper thinking. Often there were challenges that they had to successfully navigate. Sometimes they returned to divergent-convergent thinking, as described by one student,

I had an idea and then it changed into something and then I did this and, oh that didn't work, OK, I'll try this. And, yea, it's just a process... I knew my idea and then I made my piece and then...as I'm making my piece I'm thinking about...why I did certain things. Oh I'll do this because I could show this. And, yea, it just evolved it. (see Figure 10)

Figure 10. Student art work for the creative reflection



This phase was defined by active engagement with an art form. In the creative reflection students created primarily independently, but in the photo essay they created collaboratively, although to different degrees. Through implementing, learning occurred as students needed to clearly and creatively link an art form with a clinical experience (creative reflection), or photos/music with a social justice issue (photo essay), and reflecting on it in a meaningful way. Students often combined ideas in unexpected ways. One student painted a tree to reflect on the classroom she visited in her community clinical, and its strengths and characteristics (see Figure 9). The congruency impacted the meaningfulness and the learning which occurred. One student said:

I think that if the students actually...put themselves into it, you can make connections that you didn't think you would be able to and learn things about yourself that you didn't know...Some people do and you can see that when they present that they made these really amazing connections that you, you didn't see before.

Some participants believed taking one's own pictures or creating original work, rather than reflecting on other's art, elicited more creativity, engagement, and meaning.

However, some students admitted that their assignments were forced or fake, as they were unable to meaningfully match an art form and a concept, or had someone else do the assignment for them. One student admitted: "Yea, it was more or less I just kind of made everything up." Another student described choosing an art form/idea because it was easy and then embellishing it. This forced matching resulted in not finding meaning in incongruent elements. There were also restrictions on the students' implementation process. One student reflected:

I would have taken it a million times more seriously because I actually feel like I personally could have benefited a lot. And not that I didn't benefit from it but like I could have really gone there...just to feel that...space to breathe and to...really think about stuff instead of just throwing something together ...I really do believe that...creativity needs space. And

you need time to ponder stuff. And when you're busy running around doing stuff... you can't really let it sit in there and marinate and ponder it.

Students also described needing to adapt their work to meet assignment guidelines, or to work together as a group. One student described this adaption as a diversion: "it diverted from what my original idea was to something that's more what they wanted, not what I wanted."

Presenting work. Students described presenting their creative work as an important part of their process. As part of the photo essay, peers viewed the artistic presentation, and for the creative reflection, students shared their creative artifact and reflected on it. Many students were very positive about the presentations. One instructor described the group presentation as a type of artistic simulation as they learn vicariously "through somebody else's experience." Students saw this as an opportunity to teach others, instead of just submitting the assignment to their teacher. In the photo essay assignment, the presentation provided students with an opportunity to advocate about a social justice issue. One student displayed a sense of agency in her comment:

I think that what was the best part about this project was the fact that we got to show it to...60 other people. So we could share our passion. But also teach them so hopefully we would plant that seed and, and start that creation of a better world... It was being able to recognize that maybe that maybe, just maybe you've now started 60 people thinking seriously about this issue. And just maybe they're going to say it to others. It really plants that seed. Whereas writing that paper and giving it to your instructor, it ends there.

Students found presenting the photo essay easier as it involved showing their project to others instead of presenting it verbally. Students also noted that the creative reflection was a particularly vulnerable assignment, and some reported feeling unusually nervous to share something so personal. One student shared:

I'm usually not nervous when I do stuff in front of the class and that. But all of a sudden...

I was sweaty, I went first and I, because I like to get things like that out of the way. I was sweaty...my palms were sweating. And I could hear my voice shaking. And I was... super nervous...I think it hit me that I was sharing a piece of me with all these people in the room...it was like here I am. I almost felt naked.

During the presentation students also watched how others were treated. As the arts can be vulnerable and emotional, if others were treated poorly it quickly become an unsafe environment.

Evaluating work and arts-based pedagogy. Evaluation was multi-faceted, and occurred throughout the creative process. It included a number of forms: self-evaluation of one's own work, comparing one's work to others' work, formative and summative instructor evaluation, and evaluation of the assignment. Although evaluation was a challenge for some students, others viewed it as a neutral component. Self-evaluation occurred throughout the process. For example, students asked during implementation if their learning was worth the time it was taking and engaged in self-assessment to ensure that their work was of high quality. Students' self-evaluation comments included areas for improvement and also feelings of accomplishment.

During the group seminar, students compared their work to others and were impacted by their peers' feedback about their work. This evaluation was not formal, but an influential part of developing meaning. Students found validation from other's comments before, during, and after the presentation, and through comparing their own work to others. They evaluated if their assignment was within range of their peers work. If it was, they seemed to feel better about their assignment. This comparison could also result in a participant feeling badly about their assignment if they felt it was below the level of their peers. One participant shared:

I guess like my major thing is I was scared how it would look compared to other people's because I know there's probably other people in the class who are more creative than I am

when it comes to certain things and so I was kind of comparing myself to others... I was worried that my piece would be compared to others.

Students also discussed both formative and summative instructor evaluation. One student described her instructor's personal comments: "She said that I did a great job... She said, you did a wonderful job. It's so nice to get positive feedback. And it makes me feel so good." The summative evaluation differed somewhat between the two assignments. Some students found the photo essay guidelines to be quite clear: "you really have all the questions like...what you have to include in order to get a good mark. And the creative reflection, it was more open." The creative assignment was perceived as graded less specifically, or as not graded at all even though there was an evaluation associated with the assignment. One student commented: "We never got a mark...it was just like an overall grade in the course." Summative evaluation was controversial amongst participants. Some students questioned if a personal and vulnerable artistic assignment should be evaluated, and in the photo essay, if the important learning can even be assessed, such as transformations of perspective. One student proposed:

But if you want people to feel like they can be honest, they have to be able to put out whatever they can or want to without being reprimanded. So if they kind of adopted that and just being like, OK, no matter what you put in, you're going to get your marks for it.

Because if people are feeling threatened, they're not going to be honest.

However, students admitted that they would not have tried as hard if it was not evaluated.

After completing the assignment, students decided if their learning was worth the effort. If ABP was meaningful, and not too stressful, they appreciated the experience. Positive comments included: "I thought it was profound. I thought that I found a lot of information that I probably I didn't know." and "it turned out that it was like one of the best experiences I've had in nursing." However, there was variation. One student said, "I still felt like it was a lot of work for a pass/fail

course”, and another simply noted, “I think it was just a waste of time.” However after experiencing ABP, many students value of the assignment was higher than their initial value of it.

Factors Influencing Students’ Meaning Making and Response to Arts-based Pedagogy

Students moved through a process to create the assignment, but participants engaged with this process to different extents and there were intervening factors that influenced the students’ perspective of and response towards ABP. These factors were barriers or facilitators to engagement and learning with ABP. Further, many students seemed to change their perspective of ABP over time. There were a few general trajectories: some were initially negative about the experience and remained negative, some were initially negative and became positive, some were initially positive and remained positive, and some were initially positive but became negative. Their perspective often changed at three junctures: when they converged on an idea, during implementation of their plans, or during the group presentations. Five sub-categories encompass the factors influencing the students’ experiences: personal factors, determining if survival and belonging needs are being met, authentic experiences, social interaction, and external structures. Some factors were more influential at the beginning of the process, and some in the later phases.

Personal factors. There were numerous personal factors that influenced students. Varying levels of creative characteristics (Kelly, 2012), such as comfort with ambiguity, originality of ideas, fluency of idea generation, preference for risk-taking, and flexibility of thinking, helped them navigate ABP. These factors particularly influenced the divergent-convergent phase, and students’ comfort with the ambiguity of ABP. One participant shared her perspective of the ambiguity: “Like you’re free to do whatever you want here. So it’s easier for me to do this kind of assignment than something else. I...like having freedom.” Sometimes a student’s attitude towards growth helped them to have a positive perspective. One student said, “this was kind of an

assignment where we all had to step outside of our comfort zone a little bit, and by doing that you can grow...as a person.“

Personal values in regard to creativity in nursing, emotions, vulnerability, personal sharing, reflection, and advocating for others, also influenced students' perspectives. For example, some students valued the vulnerability of sharing a personal creative artifact with their learning community, and others thought it was not appropriate. One student explained:

you can be a really creative person and not be OK with sharing that with other people too, ...I'm creative...but my creativity is mine...And especially like with instructors. Like with the community instructor that I didn't feel any particular bond with that now you're asking me to make something that's really personal and meaningful to me and you want me to share it to this person.

In contrast, another student said: “I don't want to hide how I felt. I really want to tell people. This is the way I was feeling. This is the way I'm feeling now.”

Another important personal factor was students' creative self-efficacy and their experience with the arts, which often influenced their initial reaction. One student shared, “I do not see myself as an artistic person. This assignment, which asked me to tap into my creative side terrified me because I lack confidence that the creative side of me even exists.” When a student had a lower creative self-efficacy they often struggled more with the divergent to convergent process, as they found it hard to come up with ideas due to self-doubt or fear. In contrast, one student expressed a high level of creative self-efficacy: “I'm actually a very creative person...my family is a group of musicians” During implementation, when some students experienced a growing sense that this project was within their ability, their creative self-efficacy and perspective of the assignment improved. However, some students who started with a high

creative self-efficacy were initially positive and then became negative as they were disappointed in their ability to create art within this context.

Students' motivation, and whether this motivation was extrinsic or intrinsic, impacted their engagement with ABP. One student described internal motivation when she said: "And I just picked whatever I felt was important to me...I feel like I didn't have to please anybody except myself." When students chose a topic because of personal interest, this personal connection increased the students' internal motivation. One student explained:

I think we all could relate to the topic. And so we all had that drive to want to do it... I think any time you can identify with something or you have a passion for something, then you want to do even better.

In contrast, some participants created their project to obtain external rewards such as marks, instructor desires, or peer affirmation. If a student was too focused on evaluation, they lost sight of what was personally meaningful about the assignment, which restricted their creative process. One student stated: "I mean we could have been more creative but if it didn't match in the minds of the teachers, then, you know, the mark would go down." For some, ABP became irrelevant in the midst of higher stakes evaluations:

you look at where you're sitting in all of your courses and what do you need to put the most focus in and what exam you need the highest mark in and you decide how you're going to spend your time based on that.

Some students just wanted to get through the course, and this motivation restricted their effort.

If a student enjoyed ABP, or entered a creative flow, then the time commitment needed to engage with the creative process was viewed as worthwhile. Students also noted that their learning preferences impacted their enjoyment of the assignment: "I'm a very visual learner... I would prefer this over writing a paper any day." If students experienced feelings of

accomplishment or pride about their project, they usually developed a more positive perspective.

This factor seemed influential once the assignment was completed. One participant said,

I was happy to present it because I thought that I'd made a pretty good connection that I didn't think I would be able to...when I started...I drew so many blanks. And then it just kind of came to me and so when I presented it, I was proud of it.

However, if they were not proud, or felt like they were forcing it, ABP lost meaning. Further, if a student experienced stress with ABP, they had a more negative perspective. Even if they learnt something, but were too stressed, it could make them ambivalent. One student engaged in a type of risk-benefit evaluation: "So...this project was extremely stressful for me. But in the end it wasn't too, too bad...I have mixed feelings if this is valuable or if this is not. So a part of me thinks yes, and a part of me thinks, no not really."

Determining if survival and belonging needs are being met. Whether students' survival and belonging needs were being met or threatened (Maslow, 1943), influenced their regard for ABP. This assessment changed over time and was influenced by the students' priorities. Students described the following survival needs as being met/threatened by ABP: learning skills, developing as a professional nurse, financial costs, balancing multiple academic demands, and passing the course. For example, if students viewed ABP as useful for their professional development as a nurse, they valued it. However, if this basic need was not met, the students saw little purpose in ABP. A feeling of threat to their survival needs often influenced initial reactions as one student said: "Maybe it's because we were just so overwhelmed with assignments and we just thought...we have to go out. We have to take our...own pictures and...this just sounds like a lot of effort." Some were concerned that it would threaten their progress, as one instructor observed:

But this is a bit of an unknown for them and they've never done it before and I think that's where the fear comes in is like, well I don't feel creative. I'm not good with arts and crafts so therefore I feel already like I'm going to fail.

This sub-category interacted with a students' creative self-efficacy, as if a student was concerned that their lack of creativity would impact their GPA, they tended to de-value or even resent the assignment. The phase of divergent thinking was influenced by felt survival needs such as money and time: "we didn't want to spend too much money on whatever we were going to do." Some students felt better about ABP once they have an idea, and saw that they could "survive" it.

Students were also concerned about their love and belonging needs when presenting their project, but for some, the group seminar actually increased their sense of belonging. Some participants were concerned about being embarrassed or worried that they would be judged on their artwork. However, often they were surprised by the group seminar, as one student shared, "But every, like I mean everyone, was really positive. They said ... really nice things about the paintings themselves and the connection that I made...it was really good." Another said:

But then by the time I was done, I'm like no, I'm feeling good about this. This is actually pretty good. And the feedback I got from my peers is you had the best one in the room... because I felt I did really well with it even though I was...full time shaking.

Authentic experiences. An important part of valuing ABP included finding authentic aesthetic experiences/content to work with when creating an artistic piece. Students needed aesthetic experiences/content (Archibald, 2012) to make a personal or emotional connection, and to inspire them to reflect. For the creative reflection, aesthetic experiences/content could be a difficult or positive experience, but seemed to be one that had a level of emotion attached to it. Having authentic aesthetic experiences/content seemed to make the divergent to convergent process easier. One student said,

it didn't take me that long to figure out what I wanted to do after I experienced that day...

And I feel like...with this kind of assignment you need something to like touch you...a

little bit. Like be a little bit more meaningful...Because I feel like you need to...connect.

Students valued the assignment less if they did not find something significant to express through their artwork .

Students who described coming to value ABP often did so because they experienced authentic reflection or learning. This realization frequently came during implementation, and surprised some. One student described how she initially struggled with the assignment, as she “didn’t want to fake it.” But her perspective changed because she felt she “didn’t actually have to make it up.”, and could be genuine and honest in her work. She reflected on how nurses need to work within their resources through purchasing a painting for \$4.00 and repainting it with her homemade paints (see Figures 11 and 12). In her painting, she reflected on her community client, who was a powerful advocate for her disabled child. Further, authentic learning included seeing the link with nursing. One student explained: “I thought of it...as fluffy. But...after I made my relation between my creative reflection and nursing, I can see the benefit to thinking outside the box.” There seemed to be a continuum from having an authentic learning experience, to going through the motions and faking/forcing it. Some students admitted to forcing photographs to match content or reported instances of academic dishonesty in which others made the creative reflection for a student. If students felt like they were “fluffing it up a little bit” or knew that someone else had completed the assignment for a student, they questioned the value of ABP.

Figure 11. Student painting for the creative reflection

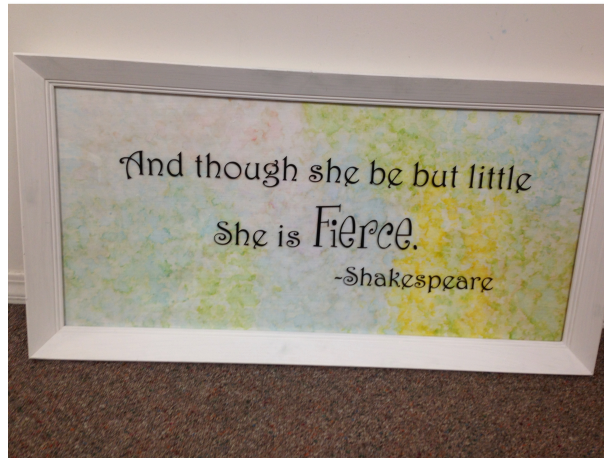


Figure 12. The art piece before refurbishment



Social interaction. Learning through ABP was a social process in that the students' experiences were influenced by interactions with others, including interactions with peers,

interactions during group work and group presentations, and interactions with instructors.

Although peers influenced students, an authentic personal experience challenged group perspectives. One student shared that at the beginning of the course “everybody was kind of saying negative things about it... So it’s kind of more like a negative thing at the beginning. But then I made it into positive because I really enjoyed.” With the creative reflection, some found it difficult to voice dissent. One student said:

I can see the benefit to it, but I would never say that to them because to them there was no benefit. I think it’s hard to say something positive because then people...want you to agree with them. We want to be like united in your voice as students and so sometimes it’s easier to just laugh about, oh yea, the assignment was really silly and not say. But, you know, I do think I got something from it in the end.

In the photo essay, students’ preference or experiences with group work influenced their perspective. If students did not like group work, or were concerned it would influence their grade, this preference influenced their initial reaction. Others found the group work to be fun and collaborative. Many students appreciated being able to select their own group members when undertaking the photo essay. Group creativity varied from synergistic to restrictive for students. If the group process restricted their creativity when making the project, students with high creative self-efficacy found the group work challenging as they had to collaborate with less creative people. One student said:

Because with the other one [photo essay], you have to kind of think about...how everybody wants to put the presentation together and you have to think about everybody else, but here [creative reflection] I’m just thinking kind about myself and what I want to put into. And I don’t think about what anybody else’s opinion is...it’s my own creation.

However, people with low creative self-efficacy felt supported by the group process.

Many students described positive interactions during the group seminar, and this experience had a significant impact on their perspective. One student said: “But in the end, once it was all done, it was really fun in the class to watch them all. And then to see yours presented too. So I, in the end, I ended up liking it.” Students also valued any validation they received. Although she was initially nervous about the presentation, one student shared: “I felt validated. Like it was OK that I was feeling this. And people came up to me afterwards and started asking me questions about my life.” However, if students felt like no one cared about the presentation, or that “they were just kind of one after the other”, it highlighted that the assignment was unimportant. One student said: “it was three minutes long and I was at the end, it was very rushed. We were overtime...then there was no questions, no comments.... It was like, nobody actually cared.”

Students were impacted by their interactions with instructor about projects, but also by the general quality of interactions with instructors. Some students felt supported by their instructors, and this nurturing environment resulted in deeper meaning making. One student shared:

I found that my instructor made my experience in that course one that was comfortable and able for me to express myself...She validated how I felt... She didn't tell me what to do but she supported me so that I felt confident... she gave me that feeling that I was smart. I was competent. And that my ideas were relevant and that...was huge for me. And then that made me do better...and put effort into my work because she believed in me.

Students discussed informal interactions more so than the formal feedback they received. There were also negative aspects to these interactions, especially if the instructor was viewed as too prescriptive or not supportive. One student, who was concerned about grades, said: “I was scared...for my instructor's feedback. Because...she's very critical person...it made me fearful of what she's going to say” ABP is often personal, and students were sometimes hurt by the lack

of positive feedback. It was also difficult to receive unclear or limited feedback, as one student noted:

the only part that I found hard with her was that she didn't give a lot of feedback...it's creative and...you can do whatever you want with it...So I think that would have been beneficial just to have like a half-way point being like this is what I have so far.

The culture of nursing education prevented some students from talking to their instructors about their struggles for fear of looking incompetent to the person grading them. One student admitted:

I guess it's...I fear that if I go to my instructor too much about something that maybe it might reflect poorly on my performance. So I...kept those feelings to myself. But thinking back now, I wish I would have approached her about that so that she could have made it less frustrating at first ... it's like a nursing student culture almost that, don't go to your instructor too much because then it'll reflect poorly on your performance.

External structures. There were also external conditions that intersected with personal factors and influenced students. These structures included characteristics of the assignment; aspects of the course and orientation; features of the nursing program; and the definition of nursing. The creative reflection was more of an open-ended assignment, with less prescriptive guidelines, and the photo essay was more of a closed-ended creative assignment, with more rules. Some students found an open-ended assignment unsettling, in that they did not know what the teacher expected. One student explained: "I think that much freedom almost intimidates people...Like I don't even know what direction to go in." In contrast, some students found the openness of the creative reflection appealing and the photo essay restrictive. Although there was less ambiguity, there was also less opportunity for creative thinking. There seemed to be an interaction between creative characteristics/self-efficacy and which assignment they preferred.

Overall, students found the course orientation helpful. Students talked of the value of seeing exemplars, including exemplars made by instructors, and one student said, “I think that when we saw the example that was given and the possibilities, that it was positive. It looked like the end result looked really good so we were like, wow, we can do that too.” One instructor thought that it was a challenge to give enough ideas to inspire students, but not so many, that it could limit their creativity or intimidate them. Despite orientation, some students found assignment guidelines were unclear, which had repercussions for their perspective. Further, when students were negative about the relevance of the overall course it impacted their ABP experience.

The ABP experience took place within a nursing education program, of which it was one of many assignments. Participants described how they were more used to structured assignments. Further, both assignments occurred within the third year of the program; thus, they were being asked to engage in a new way of learning in their final year of the program. One student shared:

The artsy part has not really been incorporated enough I think in the Nursing program. So your brain is always, well here’s a rubric...This is how we want you to lay it out structurally...And then all of a sudden it was, here you go, you have free reign. Go, go figure it out. And then all of a sudden I had to think for myself.

One instructor commented that this is a new set of skills, one which students are not used to being evaluated on. Some students valued this uniqueness while it seemed to be a source of stress for others. Either way, students had to adjust to completing a new type of assignment, and how well they adjusted to that challenge impacted their view of it.

The participants’ definition of nursing, which relates to societies’ social construction of nursing, impacted the student’s perspective of the relevance of ABP and whether it met their professional development needs. Some students viewed nursing as a science rather than an art and had to deal with the apparent incongruence of ABP. One student discussed how the arts

could be viewed in nursing contexts: “art, there’s a stigma to it...if something is artsy, it’s fluffy, you know, and it’s not real science...like it’s less valid.” Another said about ABP:

It almost like the two don’t go together. They just seem like two totally different realms.

Nursing is very, you stick to the guidelines. It’s very on paper and you do this, this way and there’s no outside the box. Whereas with creativity, you’re not limited.

One instructor noted how nursing students may be at a unique place in that they tend to value the more concrete aspects of nursing practice, and they may not fully appreciate other sides of nursing. This insight was congruent with what one student said about professional courses:

I think there’s a lot of frustration and, especially in third year, about the type of assignments and classes that we’re having and how they’re kind of watering down the basics that... we want to learn... Everyone’s really sick of like the communication classes and the discipline classes.

Learning, When Learning Occurred

In reflecting on the learning that occurred through ABP, participants identified several aspects that were important to them. This learning seemed to be a consequence of engagement with the creative learning process of which the arts were a catalyst. This final category encompasses seven sub-categories representing the students’ learning: authentic reflections and revelations; making connections; transformations of perspective; deeper understanding, respect, or empathy for others; developing unique nursing skills; inspired towards advocacy; and negligible, unimportant, or none. Some of these sub-categories interact; for example, authentic reflections could result in transformation of perspectives, or a deeper understanding.

Authentic reflections and revelations. Students described authentically reflecting through ABP and revealing these insights to others. Some participants discussed how the vulnerability of ABP resulted in authentic reflections and forced them to go deeper. An instructor observed that:

“It wasn’t just a surface reflection. It was many layers.” Through having an authentic reflective experience, students came to value reflection. One student shared about her art (see Figure 10):

Self-observation...is an important piece to overcoming challenges because once we begin to see our processes, thoughts and actions more objectively, we can determine if they truly match our desired outcomes...which gives us an opportunity to improve. This is my reflection. My self-observation. Art.... I now have more experience in recognizing my thoughts, associated feelings and resulted actions or behaviours.

Students reflected on a broad array of topics from their journey to becoming a nurse, to a meaningful or troubling clinical experience, to various social justice issues. Through reflection, students gained a deeper understanding of themselves and some took this opportunity to share with their learning community on a deeper level than they had previously. One student said, “I think that when I read this poem people understood what it felt like to be me for a minute.” (see Figure 3) When peers accepted these authentic revelations, the students felt affirmed.

Making connections. Through ABP, students were able to make connections between concepts and real life, or with other concepts. Students had to take photographs of social justice issues in their own community for the photo essay, and one instructor explained how students responded to seeing social justice issues in their environment:

I know that park, I’ve been there. Oh there’s a lot of homeless people there at night. Had no idea...I go there during the day with my kids...there’s people sleeping underneath... the play structure or whatever they’ve...And you’re thinking, this is really Winnipeg?...This is Winnipeg at night?...Same place you were just a couple of hours ago.

This connection increased the relevance and their understanding of the issue. Students described how they learned about community resources and agencies through the experiential community

engagement with ABP, and made connections with their nursing practice. ABP also helped previous content to become more vivid. One student described this learning when taking photos:

when you see it, you can't deny it when you see it...we're so pro mental health now from seeing it...we were out there. It was minus 50. We saw it. And it really solidified, I think, our learning in that way...I think our previous years had kind of given us a little bit of that information...So we weren't walking into it blindly. So...we actually drove around the core area just to see how many people suffer from addictions.

Some students linked two different concepts with ABP, or previously learned concepts in a new way. One student discussed how many little experiences helped her to become the nurse she wants to become. So it was not the impact of just one assignment, but of how ABP fit within the context of the entire program. Lastly, some students made new connections between the arts and nursing as a profession. One student said: "So one thing it taught me is how, how using arts can make the experience more meaningful for you. Like when you come to reflect about it."

Transformations of perspectives. Students talked about changes in perspective that will impact their future nursing practice as a result of ABP experiences. One student said, "It was just an eye opener. This whole thing was just...an eye opener." Another shared:

I was reflecting on maybe some...judgments I may have had about these girls before I went there about teen parents that are irresponsible, like that...And then when I went there and actually met these girls, I realized like how, how far they have to overcome...to further their education.

Through both assignments, students' personal assumptions were challenged as they realized and revised some of their own judgmental thoughts towards others. Students discussed how they were able to look at the whole person and realize contextual factors influencing the individual:

you read about African refugees and what they go through and the trauma and, you

know, their living conditions and all of that. And you just see it on paper...but going out and taking the pictures and talking to the people that have experienced it, you know, and doing your assignment on that, it's totally different. (see Figures 5 and 6)

With the photo essay, many students talked about how it helped them to realize a disadvantaged groups' vulnerability to healthcare inequities. Students also described changing perceptions about the value of creativity within nursing, role of the public health nurse, and unrealized client strengths. Transformation also occurred in regard to learning content in a meaningful way. One student commented on the importance of this type of learning:

for people that are working with the public...we have to be so culturally aware, you know, assignments like this I think, because they put you in a different position where you get an alternative perception, makes a huge difference on learning experience.

Students' belief that they were not creative was another assumption that was challenged. Students who felt a sense of accomplishment about their assignment, especially after doubting if they were creative enough, reported a transformed sense of their own creativity. One student shared:

And I do not see myself as an artistic person. The closest I would get to creating a portrait is probably a stick figure. This assignment, which asked me to tap into my creative side terrified me because I lack confidence that the creative side of me even exists...We all have things that we do not think we are capable of doing. And sometimes it can be hard to get past that feeling of self-doubt. However, I discovered that with the right tools and supports, even I can create something beautiful...I am capable of more than I ever thought possible.

Deeper understanding/respect/empathy for others. Through creating and sharing the ABP assignment students reported developing a deeper understanding of others, and of those in their learning community. One instructor described how if a student connected personally with a clients' story through ABP, this connection fostered a deeper understanding of the client and their

context. One student described how role-playing, when taking pictures for a photo essay about discrimination, developed a deeper understanding of how it feels to be another: “I think it kind of puts you in that shoes” (see Figure 13). One student explained why this is important:

thinking about the person that you’re, that you’re dealing with what issues they may have when they go home...So thinking about the person as a whole instead of just the IV that you have to start or the medication that they have to have, can help you build that relationship with your client.

Figure 13. Student photograph for the photo essay



Through vicariously living through others’ experiences during the group presentation, students came to understand other experiences and learn about them. Presentations also increased students’ understanding of others in their learning community, as they learned about their peers’

creativity or interests. Students valued these interpersonal ties that enhanced their knowledge of, and connectedness to, others. One student explained:

And like things that I never knew about people who I consider my friends in the program, like that they're musically talented or that they're really good artists. Things that you don't talk about in the context of nursing... So everybody has so many layers then things like this ...help you get to know people better. It's like one of my friends played the guitar and sang. And I remember thinking like, you can play the guitar? Like we've been friends for 3 years. What do you mean you can play the guitar?

Developing unique nursing skills. ABP resulted in developing important nursing skills such as self-care, presenting through creative means, creative abilities, collaborating with a group, empathy, interpersonal skills, cultural competence, interpretation of an ambiguous situation, and reflective capacities. A number of students discussed discovering a new vehicle for self-care and the importance of creating for their wellbeing. One instructor noted:

a lot of them end up enjoying that and seeing it as part of self-care because...self-expression can be a form of stress management and, and so it can be a real positive. And I think that can be surprising for students is that...It's actually stress relieving.

Students also discussed developing relational skills through working collaboratively with a group or developing empathy through connecting with others' stories. One student said:

it's a valuable skill you have to learn how to work with people and sometimes you're going to get the short end of the stick and someone's going to bail on you and it's going to suck and you just kind of have to eat it. But that in and of itself is kind of a life lesson.

One student explained why learning about interpersonal skills was important to her: "because you ...could have all the knowledge and be useless as a human being to somebody." Learning to present creatively was also significant. Students described how they learned that "there's

different ways of getting your point across” and how to present in a new ways. In the photo essay assignment, students reported that they learned to advocate through presenting in a creative way:

I learned how to make a photo essay... Present the information in a way that still gets the info out there but also like makes an impact in a different way, like with all the visual and the auditory and what not. So it kind of packed a little bit more punch than if I just stood up there and read like a research paper to the class.

Inspired towards advocacy. Participants discussed how the photo essay inspired them to advocate about social justice issues. One student said it “instills the sadness in you that, you know, something needs to be done and makes you want to make change.” Another shared that:

I had no idea how rich nursing actually was until I got here. It’s not just about putting that bandage on so to speak. And I don’t want to downplay any of...what we’ve learnt practically as nurses do. But what I’m recognizing is that nurses can be far, far more than that. And, to be political advocates.

Negligible, not important, or none. In contrast, when a student maintained or developed a negative perspective of ABP, it seemed to result in less effort, less engagement, and inauthentic assignments. Some students reported no learning, negligible, or unimportant learning, or that their learning was not worth the stress of the assignment. One student said: “What am I learning from this? That you like to cross stitch...Like we didn’t learn anything” Another student shared candidly, “it’s really hard to say...I’ve kind of pondered it a lot to say...what I really learned from it. I don’t really think I learned a lot of anything if I’m being completely honest.” Another expressed how the project felt futile: “we did all this stuff, right. And then when we leave there, it gets thrown out...we did all that work and then it just goes in the garbage.” This group of students either felt that they experienced very little to no learning, or that they did not need the art form to reflect or learn.

Discussion

The purpose of this study was to develop a theoretical understanding of how nursing students learn through ABP in nursing education. The resulting substantive grounded theory adds to the literature surrounding ABP, as it provides theoretical insight into why, how, and when the arts become a catalyst for unique and transformative learning with nursing students. These findings provide insight into the complex and creative process with ABP, and reveal that students have varied meaning of, responses to, and outcomes from ABP experiences.

The findings indicate that the arts can be a powerful catalyst for learning (core category) due to their unique qualities. ABP fostered deeper and different ways of viewing clinical experiences and social justice issues. The arts offered alternative meaning making processes for students; providing different symbolic languages for both internal conversations with self and external communication with group members (Charon, 2010). Charon (2010) writes that “art is always almost a symbol” (p. 51) and that “Between reality and what we see and do stands the symbol” (p. 59). As Reggio Emilia educators claim, there are hundreds of languages with which to interpret and express one’s understanding of reality (New, 2007). Through art, one may transform previous understandings by “considering something familiar from another angle” (New, 2007, p. 52) and breaking “stock responses” (New, 2007, p. 60). Our findings are in accord with other studies indicating that ABP can help nursing students to view situations or phenomenon in a new or different way (Christiansen, 2011; Darbyshire, 1994; Hydo et al., 2007; Pohlman, 2013).

The arts may also be a powerful catalyst as they foster learning in the affective domain. Participants reported that ABP elucidated student’s internal emotional worlds and emotional connections. Although both language and art are used to externalize internal processes, art forms may unlock aspects of personal meaning and emotions (Eisner, 2002; Morell, 2011). Scholars argue that learning can be accessed through emotional processes in addition to technical-rational

ones (Giddens, Caputi, & Rodgers, 2015; Lawrence, 2008). In a review about the interaction of emotions and cognition mediated through the human amygdala, the researcher found that emotions can enhance the formation and recollection of episodic memory, and draw attention towards what is important (Phelps, 2006). Immordino-Yang and Damasio (2011) write that when learners tag emotions to information it increases meaning and motivation. Further, emotional maturation is vital to nursing competence as nurses often experience difficult emotions (Akerjordet & Severinsson, 2007; Lapum, Yau, Church, Ruttonsha, & David, 2015). Researchers have found that ABP developed nursing students' understanding of emotions (Deeny, Johnson, Boore, Leyden, & McCaughan, 2001; Jack, 2012; Mahar et al., 2012).

Our findings also revealed that the arts foster experiential, active, participatory, creative, and student-centered experiences; thus, meeting a number of the recent demands for curriculum change. ABP may be particularly useful as a teaching strategy within a concept based curriculum (Giddens et al., 2015). In this study, the arts opened up a pedagogical space for process and demanded conceptual thinking. Giddens and colleagues (2015) write that students form an understanding of concepts through various experiences in which they can see similarities and form images of common characteristics. For example, artistic metaphors could help students to learn about complex concepts through creatively "comparing two elements that are dissimilar yet share common traits" (Sutherland, 2001, p. 417). An art form can act as a schema or visual representation for promoting a deeper understanding of an unfamiliar concept (Sutherland, 2001; Weaver, 2010). Conceptual understandings and their artistic representations often operate in a reciprocal relationship; the art form represents what was learned conceptually, but through creating the artistic representation, the student also learns about the concept (New, 2007). These ideas are consistent with other researchers' findings that ABP fostered a deeper understanding of complex concepts important to nursing such as empathy (Casey, 2009; Welch & Welch, 2008)

cultural awareness (Jensen & Curtis, 2008; Newcomb et al., 2006), spirituality (Mooney & Timmins, 2007), forgiveness (Welch & Welch, 2008), patient-centered care (Pohlman, 2013), and boundaries (Lillyman, Gutteridge, & Berridge, 2011).

Another important finding was that students learned through *engaging in a creative learning process* (category two) that echoes elements of the creative process described by creativity theorists (Kelly, 2012; Kelly & Leggo, 2008; Wallas, 1926). The creative process is “the sequence of thoughts and actions that leads to novel, adaptive productions” (Lubart, 2001, p. 295). Wallas (1926) described the creative process as four iterative stages: preparation (analysis of the task to be accomplished), incubation (development of ideas without conscious effort), illumination (the ‘aha moment’ or solution), and verification (testing concepts to see if they work). Others have extended Wallas’ work (Lubart, 2001). For example, Amabile (1996) added a communication phase in which the work is shared. Further, Kelly and Leggo (2008) discuss the divergent-convergent pulse. However, Wallas’ model is the “conceptual anchor” for many newer theories (Sadler-Smith, 2015, p. 342).

The creative process was somewhat different within this context, as it was constrained by the structure of an undergraduate nursing program, impacted by students’ unfamiliarity with the ABP, and required for their progress in the program. In nursing education, there was an initial phase of disorientation. When trying to decide on an idea, the busy nursing program left little time for divergent thinking and demanded early closure. Some students found this aspect stressful as they felt forced to find an idea. As well, there was significant choice in both assignments, which differentiated them from other nursing assignments and may intensify the divergent-convergent phase. In nursing education, when incubation occurred, it often occurred when working on other problems, if at all. When implementing plans, the timeline in nursing education may be shorter than with other creative processes. With both assignments, group presentations

were an important part of the students' experiences. Evaluating work is part of some creativity models (Lubart, 2001); however, some students found formal evaluation challenging. Another challenge is that many nursing students had low creative self-efficacy and few previous opportunities to develop their creative characteristics. These challenges restrict the creative process in nursing education and strategies to address these factors should be considered when planning ABP experiences.

These results differ from studies about the creative process in other settings, which resonates with scholars' assertions that the creative process is domain specific (Julmi & Scherm, 2015; Lubart, 2001). The creative process has been studied in diverse contexts such as art-making (Botella et al., 2013; Elliott, 2011; Mace & Ward, 2002), song-writing (McIntyre, 2011), adolescents creating in the arts and sciences (Lassig, 2013), creative writing (Enko, 2014), natural sciences (Diakidoy & Constantinou, 2001), and culinary arts (Hu, Quan, Han, Wang, & Adey, 2010). Mace and Ward (2002) conducted a GT study about professional artists' art-making process. They describe four phases of the art-making process: artwork conception, idea development, making the artwork, and finishing the artwork and resolution. Their results differ from ours in the following ways: the participants did not experience initial disorientation, the participants had extensive knowledge of art-making processes which informed each phase, the art-making was initiated by an inspired idea, the in-depth idea development/implementation occurred over a longer timeframe, there was a thoughtful gathering of art supplies; the artwork often built upon previous work, evaluation was primarily self-evaluation, and the artwork could either be exhibited, abandoned, or postponed depending on the artist's evaluation of the worth of the work. Although their GT (Mace & Ward, 2002) has some similarities to this one, there are also notable differences in the two creative processes such as the requirement of nursing students

to present a completed work within a short timeframe. This requirement could potentially restrict nursing students' creative processes.

According to SI, in order to understand a person's meaning of a phenomenon, their social interactions and individual interpretations need to be considered (Charon, 2010). The third category, *factors influencing students' meaning making and response to ABP*, provided insight into both of these. The students developed personal meaning of ABP, and how they defined it was much more important than any objective definition in regard to their actions. Further, this perspective seemed to change over time. Reframing a phenomenon changes one's relationship to it, and Charon (2010) conceptualizes this process with a metaphor:

Barriers in the water change the direction of the stream...So too do our directions change as we encounter new situations, as new factors enter our lives. Streams of water change because smaller brooks enter and cause a change in the direction. So too do other people - individuals and groups- enter our stream of action, and as we interact with them, our directions are changed, too (p. 115).

However, as Charon (2010) points out, people are different than the stream in that they are not just pushed around by it, but interpret situations and choose responses. Similarly, if students had an authentic learning experience with ABP, negative opinions of their peers lost influence.

Both individual interpretation and social interaction influenced the students' definition of ABP. The identified factors interacted with the students' creative process and their value of ABP. For example, findings revealed how a high creative self-efficacy and possession of creative characteristics, such as originality of ideas and fluency of idea generation, could make the divergent to convergent process less stressful and more productive for students. Some scholars write about how personal creative characteristics can enrich one's creative process or make it less or non-creative (Lubart, 2001). Students are located at different points along that creative

development continuum from less to more proficient, which can influence their experience of ABP. Another example is motivation. Internal or external motivation seemed to influence if students were able to authentically engage with and enjoy the creative learning process. In a study of female fine art students, Stanko-Kacxmerek (2012) also found that intrinsically motivated participants had significantly higher levels of positive affect, or pleasure, during the creative process and evaluated their creative process and products higher than externally motivated students. In our study, students' definition of nursing also influenced their meaning of, and effort with, ABP. Art is subjective, and science is often viewed as objective (Bayer, 2006). ABP produces a certain kind of knowledge: subjective, personal, and contextual (Eisner, 2002). If students viewed nursing as a science, art lost usefulness for them. Sometimes ABP disrupted students' views of nursing as primarily a science, and gave the developing practitioners a glimpse into the importance of the art of nursing practice. Often students were surprised by how ABP actually 'worked' in the end and began to see the value of more subjective ways of knowing. This experience could influence their views on the scope of nursing as a profession.

A key question in regard to ABP is: what is worthwhile learning in nursing education? When one looks at the learning encompassed in the fourth category, *learning, when learning occurred*, there are outcomes which are significant to the development of professional nurses, but which may not be testable on exams. The type of learning is more about a way of being and relating, than about an effective transfer of content (Doane & Brown, 2011; Valiga, 2014). Some nurse educators are calling for an ontological turn in nursing education in which the subject becomes "the student as a developing person and nurse" (Doane & Brown, 2011, p. 22). Thus, epistemology serves the ontological focus on students' personal transformations towards professional ways of being (Benner et al., 2010; Doane & Brown, 2011).

In the participants' recollections, ABP fostered transformations of perspectives. Students reported reflecting on experiences and assumptions, and becoming more inclusive, discriminating, and open (Mezirow, 2009). This type of learning may occur as ABP incorporates two major elements of TLT: reflection on assumptions and participation in discourse with others (Mezirow, 2009). Further, the arts can be a catalyst for transformative learning because they tap into unconscious knowledge, bring experiences into public view to reflect upon their meaning, and create insights not easily accessible through technical-rational academic activities (Butterwick & Lawrence, 2009; Cranton, 2006). Transformative learning is important in nursing education, where adult learners have preconceived assumptions (Morris & Faulk, 2012). These results are in line with previous studies which revealed the potential of ABP for transformative learning (Christiansen, 2011; Kidd & Tusaie, 2004; Webster, 2010).

A common view amongst participants was that meaningful reflection was central to their learning, which is significant considering the importance of reflection within nursing (Scanlan & Chernomas, 1997). Written reflections are the main approach in nursing education, and some question the effectiveness of journaling as the lone strategy (Epp, 2008; Karpa & Chernomas, 2013). ABP can offer an alternate and meaningful mode for reflection. A possible explanation for this might be that the arts enable the grasping of concepts and experiences through the process of transforming them into a tangible product (Davis, 2012). Thus, it allows for a deeper, different, and more thorough inspection (Eisner, 2002). Other researchers have found that ABP fostered reflection with nursing students (Casey, 2009; McAndrew & Roberts, 2015; Pardue, 2005; Pohlman, 2013). Some students described how reflecting on difficult experiences and emotions through the arts became a method of self-care. In Aristotle's (trans. 1342) writing about *catharsis*, he wrote that the arts have a calming effect on people's emotions "as though they had

gone through a medical cure and a catharsis”. This potential of ABP is important to note, as burn-out and vicarious trauma are occupational hazards of professional nursing (Sabo, 2011).

The competencies and skills fostered through ABP can also develop students’ relationality with patients. Other qualitative researchers have found similar results (Casey, 2009; Kidd & Tusaie, 2004; Webster, 2010; Welch & Welch, 2008). Through artistic languages, the concepts become situated in a story or context. There are many personal and contextual factors which influence nurse patient relationships, and Doane and Varcoe (2007) argue that caring relationships are vital to enacting responsiveness to, and responsibility for, patients. ABP can privilege a “relational inquiry lens” (Doane & Varcoe, 2007, p. 198) which looks at the patient’s and nurse’s contexts, and in doing so, promote effective nursing practice, sound clinical judgment, and ethical care (Doane & Varcoe, 2007; Spadoni, Doane, Sevean, & Poole, 2015). Further, empathy is an essential component of relational nursing (Kelley, Lepo, & Frinzi, 2011), and participants described how ABP fostered empathy for others.

One interesting finding was that ABP developed students’ creative characteristics and creative self-efficacy, which is the “belief one has the ability to produce creative outcomes” (Tierney & Farmer, 2002, p. 1138). Many participants described how this type of learning was unusual in the nursing program; yet, everyday creativity is an important component of the art of nursing and can be used to solve real-life problems (Albarran, 2004; Carper, 1978; Doane, 2002; Fasnacht, 2003). One of the CIHR’s (CIHR, 2016) strategic directions is to promote creativity in health research. Although creativity is essential to nursing practice and research, as inquiry is a creative process, scholars assert that conformist education can cause a loss of creativity (Fasnacht, 2003). In one study, the researcher found that, overall nursing students’ creativity scores decreased by the end of their program (Sullivan, 1987). However, Ku and colleagues (2002) investigated the effectiveness of a creativity innovation with nursing students, and found

certain aspects of creativity increased significantly, indicating that the skills necessary for creative development can be taught. There are calls for a focus on cultivating creativity in nursing students (Chan, 2013; Fasnacht, 2003).

An important, but somewhat concerning finding was that some students reported negligible, unimportant, or no learning. This finding is also evident in the quantitative measurement of the students' value of ABP experiences (see Table 2). Of the 34 student interviews, four students (11.8%) rated the value at 25 or under, and three students (8.8%) rated it between 26 and 50. The factors influencing students' perspectives of ABP provide insight into why some did not value their experience. Strong negative influences included: feeling uncreative; being externally motivated; finding ABP stressful; feeling survival needs were not being met or feeling vulnerable during presentations; worrying about their grade; feeling that they had faked or forced their project; having a negative group experience; finding the creative reflection too open-ended or the photo essay too restrictive; experiencing an unsupportive instructor relationship; or thinking that ABP is not congruent with nursing. As can be seen in Table 3, a higher proportion of older students rated ABP highly (66.7%); thus, cognitive maturity (Morris & Faulk, 2012) may be also be a factor. There may be other influencing factors only alluded to by participants, but discussed in the literature, such as the impact of learning preferences or styles (Pettigrew, 2015), culture (Yao, Wang, Dang, & Wang, 2012), and learning environments (Mezirow, 1991).

Implications

These findings have a number of important implications. ABP resulted in important learning for the development of professional nurses, and participants suggested that ABP should be integrated throughout the nursing program. Further, creativity could be developed through thoughtful curriculum planning (Chan, 2013). Educators should plan for variation and layering of ABP experiences within nursing programs. Hickey (2008) discusses closed-ended parameter

creative tasks, with more rules and clearer directions, and open-ended parameter creative tasks, with fewer guidelines. To address the diversity of students and develop their creativity, a mix of open and closed ended assignments could be incorporated. Although some may prefer closed-ended tasks, eventually an interplay of closed and open ended approaches allows creativity to grow (Hickey, 2008). From these findings, it also seems beneficial to alternate between group and individual creative experiences, as both offer valuable types of learning.

Another implication is that there may be key places in nursing students' development when ABP may be especially valuable. Mezirow's (2009) concept of a disorientating dilemma can provide insight into planning effective ABP experiences. These are periods of uncertainty, or situations that challenge students' assumptions, which may be fertile ground for transformative learning through the arts (Spadoni et al., 2015). Further, certain courses might be more congruent with ABP, as participants described the importance of reflecting on aesthetic content. Thus, nurse educators need to carefully consider the match of the course content or experiences, and ABP. Students suggested mental health or palliative courses as places in the curriculum where they would find ABP meaningful, as they dealt with difficult emotions in these contexts. Two other examples of potentially potent uses for ABP are to incorporate a critical pedagogical approach that can unveil hidden experiences, or to elicit personal sharing to build the learning community.

These findings also revealed variation in student experiences of ABP. There is, therefore, a need to consider if and how ABP could be more meaningful and less stressful for those who did not engage with, or learn from, the experience. Nurse educators should expect that a proportion of students will respond in a negative way to ABP, and offer more attention and assistance to those students. It became apparent through the students' narratives, that it is important to provide appropriate alternatives and supports for those taking their first steps in expressing and representing knowledge through artistic means. A good entry point may be an assignment with

more guidelines and in which everyone works within the same modality; thus, decreasing the risk-taking aspect of the experience. Particular attention should also be given to creating environments that foster creativity with novel arts-based experiences. Nurse educators should ensure that there is: enough flexible time and space for creative work, appropriate resources for working with artistic mediums, a collaborative learning community, and a balance between structure and freedom (Chan, 2013; Davies et al., 2013).

There were times in the creative process that were especially stressful for students, and nurse educators should focus on these key junctures. Many students were initially disorientated as they did not see the congruence of ABP with nursing or they had doubts about their creativity. Thus, nurse educators need to frame ABP thoughtfully. A clear link needs to be made between ABP and important learning outcomes for nursing (de la Croix, Rose, Wildig, & Willson, 2011), such as the ability of ABP to highlight relational components of practice or to nurture creative habits of the mind (Pavill, 2011). Nurse educators could help nursing students to see that creativity is necessary in professional nursing, and how developing one's creative abilities could positively impact their future nursing practice (Carper, 1978). For example, professional nurses frequently need to come up with creative solutions for complex clinical situations (Chan, 2013). To address students' creativity concerns, educators could discuss how all individuals are creative (Pavill, 2011), and explain the differences between the creativity of exceptional artists and the everyday creativity used for living (Kelly & Leggo, 2008). Educators can foster students' self-efficacy with strategies such as encouraging ideas through brainstorming, showing exemplars, modeling creativity, and introducing the assignment early to allow time for creative planning.

Deciding on an art form or concept was very stressful for some students. Describing the creative process to students, and guiding them to look for an experience in which they had a personal or emotional connection may help with this process. It is also important to realize that

periods of idea generation are key to the creative process. In order to overcome a lack of creative stimuli, nurse educators could foster a collaborative brainstorming session amongst students to increase learners' repertoires of ideas. Kelly (2016) suggests an idea exchange of a rotating succession of one-on-one conversations in which no idea is criticized. Through this collaboration, students collect, gather, and record many ideas before they select one to develop more fully. This strategy fosters collective innovation, and collaborative development is a key component of creative development (Kelly, 2016). Students may also need support to develop their ideas or skills to work with artistic modes. Nurse educators could provide exemplars of potential art forms, and web resources of accessible art-making approaches. It is important to provide varied resources that are sensitive to students' levels of creative self-efficacy, creative characteristics, and personal values such as their value of vulnerability. As well, if students are concerned about costs, nurse educators could suggest using recycled materials, or identify where students can find free materials for creative projects.

Time and energy are needed for the creative process. Nurse educators should consider the assignment load and exam dates of the course in which the ABP experience is located, and of the other courses the students are involved with. Ensuring a feasible assignment load, and offering students' choice, could decrease feelings of resentment (Lillyman et al., 2011). In regard to the group creative process, participants in this study highly valued being able to select their own groups and having smaller group sizes.

Additionally, some students felt nervous about sharing their creation in a group presentation. Educators could employ the following strategies to address this worry: providing support to listen to student concerns (Ruth-Sahd, 2003); establishing rapport within the group (Lillyman et al., 2011); fostering a safe trusting context through nurturing diversity and discourse (McAllister, Tower, & Walker, 2007); and giving students control over when and what to share (McGrath &

Higgins, 2006). Participant suggestions included having a smaller group size for class presentations, ensuring that there is enough time for each presenter to feel heard, and sitting in a circle for more vulnerable assignments. One alternative to decrease the group size could be to have a gallery exhibit in addition to the sharing time. Half of the group could visit the gallery exhibit while the other half shares about their work, and then the groups could switch.

Summative evaluation was stressful for some students, and some questioned grading ABP assignments. Hickey (2008) suggests that with a closed-ended task, such as the photo essay, higher stakes evaluation such as grades may be appropriate to avoid students seeing the assignment as busywork. With more open-ended tasks, such as the creative assignment, lower stakes evaluation is more appropriate and offers the most potential for creative growth. In nursing, the focus is not on evaluating if the art was skillful. A clear rubric that evaluates if learning outcomes were met, combined with formative feedback, could provide rewarding and sensitive assessment (Deci, Koestner, & Ryan, 2001; Hickey, 2008; Oermann, 2015). The learning outcomes assessed could include those associated with creative development (Kelly, 2016). One option could be to design a rubric in collaboration with students to encompass criteria that both the instructors and students value. Although not all ABP experiences are evaluated, ABP can provide an alternative mode of assessment when used appropriately. Incorporating multiple forms of assessment is important (Oermann, 2015), as students might be able to share what they know in one medium more so than another. This diversity offers the educator an opportunity to triangulate different forms of assessment and may be a more democratic educational approach. Another important consideration is to draw out the students' internal motivation rather than highlighting their external motivation. Ensuring personal choice and clearly linking ABP to nursing is important, as is considering how summative evaluation affects students' motivation (Deci et al., 2001). Hickey (2008) asserts that there is an interaction between

task parameters and evaluation methods, and that grades for highly creative assignments can be detrimental to internal motivation and the creative process.

Supportive relationships with educators are vital for positive ABP experiences (Fasnacht, 2003). Nurse educators need to balance clearly communicating flexible guidelines and supporting students in their freedom of expression (Casey, 2009; Chan, 2013). Accordingly, the educator needs to move towards the role of a facilitator (Bryant et al., 2003). Further, nursing students are adjusting to a new way of learning, thus, educators need to be secure in supporting students through a potentially uncomfortable journey (Taylor, 2007). Educators also need to be aware of their own non-verbal behavior when students are presenting their artistic creations to others, and of the impact of informal feedback and formative evaluation. If a student has lower creative self-efficacy, they may need more feedback throughout the process. It is also important to remember that even with exemplary instruction and planning, not all students will engage with ABP, and that some will value it more than others because of various factors.

Limitations

A limitation of this study is that both of these assignments were evaluated, and this factor may have impacted the students' ABP experiences. The transferability of this study is also limited as all participants came from the third year of one condensed nursing program, and the findings may be unique to this context. Furthermore, most student participants were white, female, and under the age of 30, and most nursing instructors were over the age of 44, and all were white and female. As there was not a wide range of ethnic diversity, we were not able to attend to cultural differences and its potential intersection with ABP experiences, but research shows that culture may have an impact on creativity (Adarves-Yorno, Postmes, & Haslam, 2007; Yao et al., 2012). This study involved 30 students. Approximately 234 students were recruited according to class sizes, and 58 students volunteered for the study. Of note, some of the students

volunteered twice and interviews were not conducted with all student volunteers. It is not known why other students did not volunteer for the study or how they experienced ABP. Further, a main criticism of SI is that this theory has a focus on individual action (Burbank & Martins, 2009) which could have restricted the exploration of external conditions, like the influence of registration exam preparation on students' priorities for learning. The researchers also used one retrospective interview to elucidate a process, and key junctures may not be remembered well. Participant observation may have added further insight into experiences of group presentations. The researchers did not assess which clinical group students were in, and instructors clearly influenced students' experiences. Additionally, the researcher's previous relationships with participants may have been constraining if they desired to please the researcher with socially desirable answers.

Future Research

Further qualitative research is needed to determine how this GT is applicable in other settings, both nationally and internationally, and with other nursing student learners (i.e. graduate students). Investigation needs to be done about the learning process with ABP in other settings to elaborate, develop, and extend this GT. In future studies, it would be insightful to analyze students' artwork as an additional source of data which could further elucidate the learning that occurs with ABP. A longitudinal qualitative study, in which interviews are conducted at key junctures, could also expand this grounded theory. Another longitudinal study could assess the long-term effects of ABP, or of multiple ABP experiences integrated into a curriculum. This study should be replicated with different types of ABP experiences, such as art-observation experiences or non-evaluated ABP experiences, and in multi-disciplinary contexts. To enhance our understanding of facilitating ABP, additional research is needed from the nurse educator perspective. Theoretical understanding about the arts and learning in other healthcare arenas,

such as arts-based knowledge translation, is needed. Quantitative or mixed-methods research is necessary to determine the efficacy of ABP in nursing education contexts. Future experimental or quasi-experimental studies could investigate the effectiveness of ABP on learning outcomes identified in this study such as empathy, cultural competence, creative self-efficacy, creative characteristics, self-care, and levels of reflection. It would be interesting to compare the effectiveness of different ABP experiences and to compare evaluated versus non-evaluated ABP experiences. There is also a need for understanding the impact of teaching styles and evaluation methods on ABP experiences. Observational quantitative studies could provide insight into significant factors associated with valuing of, and learning from, ABP. Further qualitative and quantitative investigation of the development of creativity in nursing students is clearly needed.

Conclusion

In this study, participants described the unique features of the arts that make them powerful pedagogically; the creative learning process with ABP; the barriers and facilitators to engaging with and learning from that process; and the kind of learning that occurred as a consequence of ABP. This substantive grounded theory enhances our understanding of the variation of students' experiences with ABP. It describes and provides insight into why, how, and when ABP results in significant and transformative learning, and can inform the effective implementation of ABP into nursing education. These findings also help us to see that working with the arts "challenges and transports us; it offers an invitation to transformation and an opportunity to see things anew." (Ayers, 2004, p. xiii). Continued efforts are needed to make ABP accessible for more nursing students.

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Table 1

Description of Arts-based Experiences

Creative Reflection	Photo Essay
<p>Purpose: To utilize the arts to meaningfully reflect on one's clinical practice.</p> <p>Description: An individual activity in which students choose an artistic form to express their reflection on a significant concept, theme, or experience from their community clinical practice.</p> <p>Course: Community Clinical Nursing Practice, Year 3 (final year in the program)</p> <p>Presentation: The creative reflection is presented and explained to peers and instructors in a group seminar.</p> <p>Evaluation: The creative reflection is evaluated by nursing instructors during the group presentation, and anecdotal comments are entered into a clinical evaluation tool. These comments provide evidence for the students' overall clinical grade.</p>	<p>Purpose: To use a photo essay to highlight a social justice issue that is occurring locally.</p> <p>Description: As a small group (i.e. 3 to 4 members), students create a series of photographs accompanied by a short sentence/paragraph of text and music which tell a story.</p> <p>Course: Issues, Politics, Public Policy and Professional Nursing, Year 3 (final year in the program)</p> <p>Presentation: The photo essay is shown to peers and instructors in a group seminar.</p> <p>Evaluation: The photo essay is submitted to nursing instructors and evaluated with a rubric. The photo essay mark is worth 20% of the student's final grade.</p>

Table 2

Participant Demographics

Student Participants (n=30)	
Characteristic	n (%)
Age range (years)	
20-24	8 (26.7)
25-29	8 (26.7)
30-34	4 (13.3)
35-39	7 (23.3)
40 and above	3 (10.0)
Gender	
Female	28 (93.3)
Male	2 (6.7)
Ethnicity	
White	24 (80.0)
Asian	1 (3.3)
Metis	4 (13.4)
Other	1 (3.3)
Years of post-secondary education (pre-nursing)	
None	4 (13.3)
1 year	5 (16.7)
2 years	7 (23.4)
3 years	6 (20.0)
4 years	4 (13.3)
5 or more years	4 (13.3)
Years in nursing program	
3 years or less	26 (86.7)
Over 3 years	4 (13.3)
Number of arts-based assignment in the nursing program (n=34)	
1	7 (20.6)
2	15 (44.1)
3	5 (14.7)
4 or more	7 (20.6)
Value of the assignment total (n=34) out of 100	
0-25	4 (11.8)
26-50	3 (8.8)
51-75	12 (35.3)
76-100	15 (44.1)

Value of the creative reflection (n=19) out of 100	
1-25	2 (10.5)
26-50	3 (15.8)
51-75	5 (26.3)
76-100	9 (47.4)
Value of the photo essay (n=15) out of 100	
1-25	2 (13.3)
26-50	0 (0.0)
51-75	7 (46.7)
76-100	6 (40.0)
Instructor Participants (n=8)	
Characteristic	n (%)
Age range (years)	
Under 29	0 (0.0)
30-34	1 (12.5)
35-39	1 (12.5)
40-44	0 (0.0)
45-49	2 (25.0)
50-54	2 (25.0)
55 and above	2 (25.0)
Gender	
Female	8 (100)
Male	0 (0.0)
Ethnicity	
White	8 (100)
Other	0 (0.0)
Years in the nursing profession	
0-9	0 (0.0)
10-19	3 (37.5)
20-29	3 (37.5)
30 and above	2 (25.0)
Years as a nurse educator	
0-4	1 (12.5)
5-9	3 (37.5)
10-14	3 (37.5)
15 and above	1 (12.5)

Table 3

Comparison of Socio-demographic Characteristics between Different Values of ABP

Characteristic	Very Low Rating 0-25/100 (n=4) n (%)	Low Rating 26-50/100 (n=3) n (%)	Moderate Rating 51-75/100 (n=12) n (%)	High Rating 76-100/100 (n=15) n (%)
ABP assignment				
Photo essay	2 (50.0)	0 (0.0)	7 (58.3)	6 (40.0)
Creative reflection	2 (50.0)	3 (100.0)	5 (41.7)	9 (60.0)
Years of age				
20-29	3 (75.0)	1 (33.3)	11 (91.7)	5 (33.3)
30 and above	1 (25.0)	2 (66.7)	1 (8.3)	10 (66.7)
Ethnicity				
White	2 (50.0)	3 (100.0)	9 (75.0)	13 (86.7)
All others	2 (50.0)	0 (0.0)	3 (25.0)	2 (13.3)

Table 4

Core Category, Categories, and Sub-categories

Category	Sub-category
Core Category: The Arts as a Catalyst for Learning	Musings through mediums
	Emotional connection with learning
	Leaving the comfort of my computer
	My perspective, your perspective
	Creating a unique pedagogical space
	It's personal
Engaging in a Creative Learning Process	Clarifying: you want me to do what?
	Engaging in divergent and convergent thinking
	Implementing, elaborating, and refining plans
	Presenting work
	Evaluating work and arts-based pedagogy
Factors Influencing Students' Meaning Making and Response to Arts-based Pedagogy	Personal factors
	Determining if felt survival and love/belonging needs are being met
	Authentic experiences
	Social interaction
	External structures
Learning, When Learning Occurred	Authentic reflections and revelations
	Making connections
	Transformations of perspectives
	Deeper understanding/respect/empathy for others
	Developing unique nursing skills
	Inspired towards advocacy
	Negligible, unimportant, or none

Figure 1. Visual diagram of the grounded theory

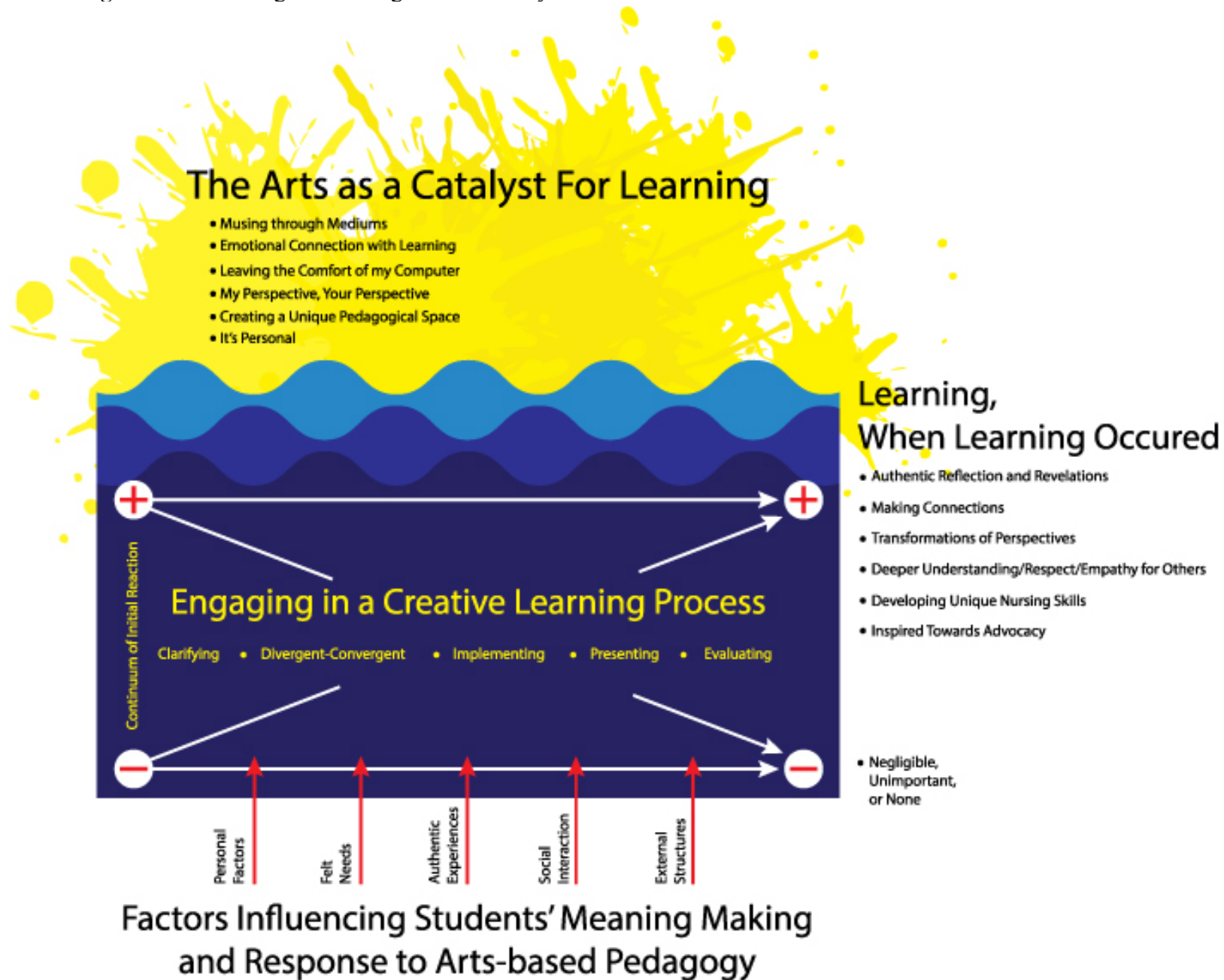
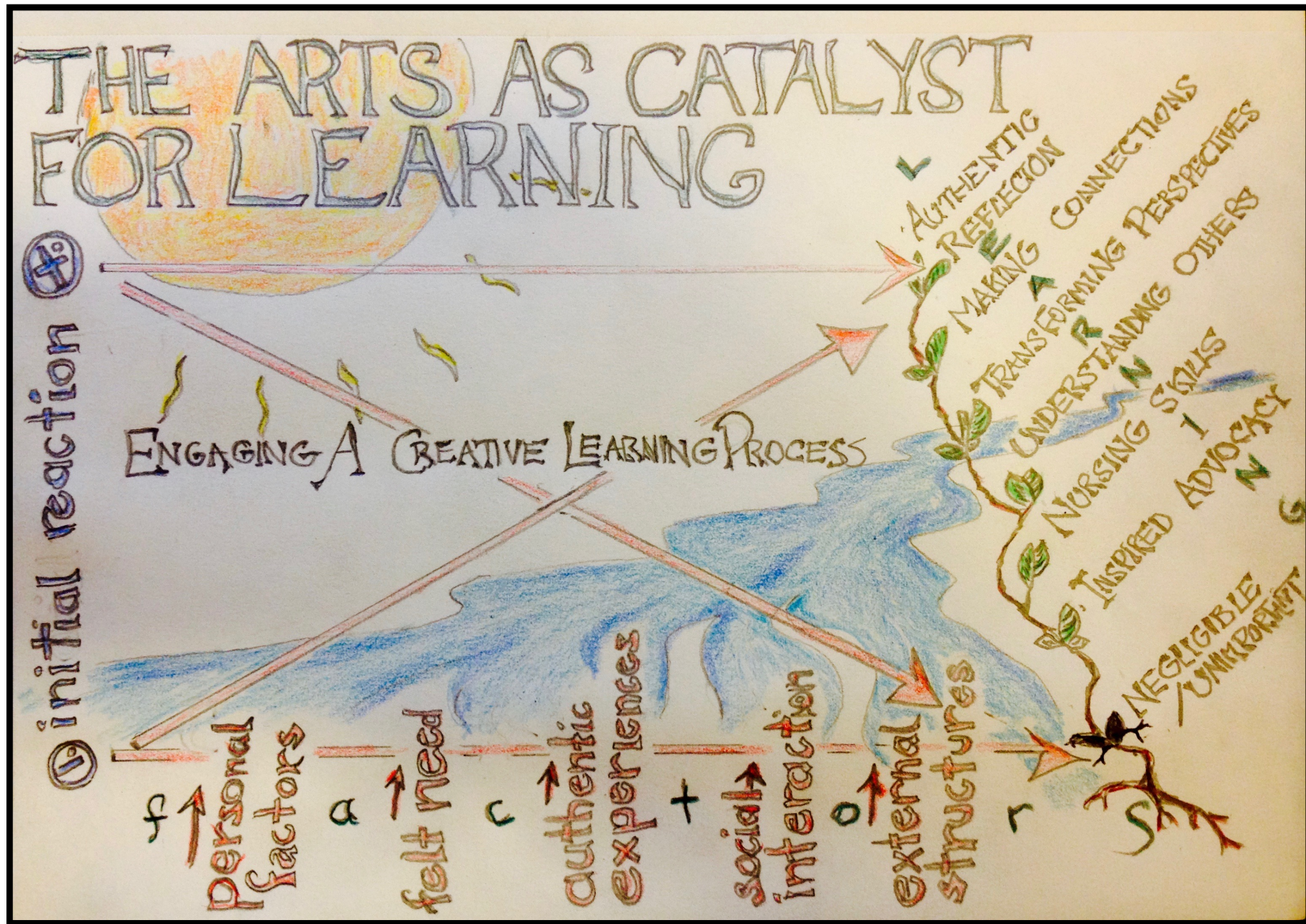


Figure 1. Sketch of the grounded theory



Chapter 7: Conclusion

The aim of this thesis was to advance the theoretical and empirical understanding of the use and impact of ABP in undergraduate nursing education. A paper-based thesis was employed to focus on a number of salient objectives for knowledge development concerning ABP. This multi-faceted inquiry included a concept analysis about arts-based learning (Rieger & Chernomas, 2013), a JBI systematic review protocol (Rieger et al., 2015) and report (Rieger et al., 2016) assessing the impact of ABP, a methodological paper analyzing three GT approaches, and a CGT research study exploring how undergraduate nursing students learn through ABP. Through these investigations, a deeper theoretical and empirical understanding of ABP in undergraduate nursing education emerged. The research revealed that the arts can be a powerful catalyst for learning and provided insight into why, how, and when nursing students learn through ABP, and what happens when they do.

Although the varied analyses were conducted in a segregated manner, they will be now be integrated in this concluding chapter with a narrative synthesis (Sandelowski, Voils, & Barraso, 2006), and research and practice/policy recommendations will be made based upon this analysis. The approach used to integrate the JBI systematic review qualitative and quantitative components will inform this analysis, and the thesis papers will be configured into a coherent whole in this discussion (Sandelowski et al., 2006). The purpose of this integration is “to ‘sum up’ what is known about a target phenomenon” (Sandelowski, 2006 et al., p. 1), such as ABP, in order to develop future research and practice recommendations. Integrating these different sources of knowledge can highlight the similarities and differences of the papers, thus providing a foundation for meaningful future inquiry and strengthening practice/policy recommendations. This integration will consist of summarizing the various papers and their contribution to the thesis, analyzing the strengths and limitations of the thesis, examining and discussing the findings

across manuscripts, discussing the integrated thesis findings, proposing future research ideas, identifying practice and policy recommendations, and describing knowledge translation strategies.

Summary of the Thesis Manuscripts

Each of the included papers addressed and met a specific identified objective. The objectives of this paper-based thesis were as follows:

1. To explicate a conceptual understanding of ABL, as presented in the literature.
2. To synthesize the current state of the science in regards to the impact of ABP in undergraduate nursing education.
3. To analyze the most appropriate methodology with which to study the learning processes involved in ABP.
4. To elucidate the process of ABP in undergraduate nursing education through conducting a primary research study.

Walker and Avant's (2011) method of concept analysis was used to examine and clarify the concept of ABL, thus providing a conceptual understanding of ABL as presented in the literature (Chapter 2). Exploring the uses of ABL in history, academic literature, and the grey literature demonstrated that ABL developed within the academic discipline of education, and is closely related to the concept of arts integration (Rieger & Chernomas, 2013). ABL has been adopted by various organizations and academic disciplines as an effective method of enhancing learning, and is a concept that numerous nurse educator-scholars have explored. The critical attributes, antecedents, and consequences of ABL were identified in order to facilitate the development and research of this concept within nursing education. The critical attributes of ABL which emerged from the analysis were: 1) a time and setting in which the active learning experience occurs, 2) learning is designed to occur through the use of one or more art form(s)

integrated with a subject matter from another academic discipline; and 3) active learner participation in the artistic process and/or reflective observation of an art form (Rieger & Chernomas, 2013, p. 6).

In order to synthesize the current state of the science in regard to the impact of ABP in undergraduate nursing education, a JBI mixed-methods systematic review (Rieger et al., 2016 (Chapter 4) was conducted based on a published JBI systematic review protocol (Rieger et al., 2015) (Chapter 3). Qualitative studies, which explored undergraduate nursing students' experiences of ABP, and quantitative studies, which evaluated ABP in undergraduate nursing education, were included. The two synthesized qualitative findings revealed that art forms can create meaning and inspire learning in undergraduate nursing education and ABP can develop important learner outcomes/competencies for professional nursing. The twenty-one qualitative studies provide a moderate level of evidence concerning the meaningfulness of ABP, which can guide educational practice. However, no GT studies were found exploring the process of learning through ABP. The narrative synthesis of the fifteen experimental/quasi-experimental studies suggest that ABP may be more effective than non-ABP for the following outcomes: knowledge acquisition, increased level of empathy, improved attitude towards others, improved emotional states, increased level of reflective practice, enhanced learning behaviours, and aspects of cognitive and ethical maturity. The five cross-sectional studies demonstrated that the majority of students had a positive perspective of ABP. Due to quality concerns, the quantitative research provides a very low level of evidence and was not robust in demonstrating improved outcomes. However, although limited, the quantitative component can inform future research work.

Through the analysis of three GT approaches in Chapter 5, CGT was identified as the most appropriate methodology with which to study how undergraduate nursing students learn through ABP. As discussed in the paper, GT has a distinct history and evolution which has

resulted in the development of numerous approaches that can be used in research investigations. In order to rationalize the selection of a specific GT approach, three commonly used GT variations were analyzed: classic grounded theory, Straussian grounded theory, and CGT (Charmaz, 2006; Charmaz, 2014; Corbin & Strauss, 2008; Corbin & Strauss, 2015; Glaser & Strauss, 1967; Glaser, 1978; Glaser, 1992; Strauss & Corbin, 1990; Strauss & Corbin, 1998). These GT approaches have key similarities. However, they also have differing philosophical assumptions that influence the ways in which GT strategies are implemented. Through this analysis of the similarities between the three GT approaches and their distinguishing characteristics, it became clear that CGT was the most appropriate choice for this study of ABP. This decision was informed by the author's ideas about the purpose of the research, the philosophical underpinnings of the study, and the pragmatic considerations of thesis work.

Lastly, a CGT research study was conducted to elucidate the students' learning process with ABP in undergraduate nursing education (Chapter 6). The research question for the primary research study was: how do nursing students learn through ABP in undergraduate nursing education? Four categories emerged about how nursing students learn through ABP: 1) *the arts as a catalyst for learning*, 2) *engaging in a creative learning process*, 3) *factors influencing students' meaning making and response to ABP*, and 4) *learning, when learning occurred*. These findings centre around the core category of *the arts as a catalyst for learning*. The four categories form a substantive GT that describes and accounts for the variation of student experience with ABP. If students engaged with ABP, there were characteristics of the arts that contributed to their ability to foster important learning. In order to learn through the arts, students navigated a creative learning process that unfolded within different phases. However, there was variation in the students' experiences of ABP, and notable factors that influenced the students' perspective of, and response to, arts-based assignments. Students' perceived value of and response towards ABP

determined if and how the arts become a catalyst for unique, powerful, and transformative learning. This substantive GT illuminates the variation of students' learning process with ABP as it describes why, how, and when ABP resulted in significant and transformative learning.

Strengths and Limitations of the Thesis

In order to understand the significance and impact of this body of work, it is important to consider both the strengths and limitations of the thesis.

Strengths of the Thesis

This thesis provides both a broad and a unique contribution to the knowledge about ABP in undergraduate nursing education. Employing a paper-based thesis allowed different approaches to knowledge development that contributed to the work as a whole, and strengthened the significance and implications of this body of work. Each thesis manuscript had notable strengths and advanced the knowledge about ABP in a distinct arena.

The concept analysis provided a broad multidisciplinary analysis of ABL and clarified the uses of ABL both in nursing education and beyond. This inquiry was guided by a widely used concept analysis framework (McEwen, & Wills, 2011; Walker & Avant, 2011). In this early work, the researcher started to define the concept under investigation, uncovered the various terminology used to describe the concept, and highlighted the emerging research about the arts in nursing education. The concept analysis addressed the lack of rigorous conceptual work, and initiated and inspired the researcher on her scholarly journey. This in-depth exploration of the literature addressing the meaning of ABL was foundational to the thesis research. The clarification of this concept significantly informed the definition of ABP which was used for the JBI systematic review and the CGT research study, although ABP clearly focuses on the arts as a teaching strategy.

In the systematic review, the research team used JBI's systematic peer-reviewed approach to conduct a rigorous review of the literature. A systematic review is considered the gold standard for research evidence on a topic, and this work incorporated a critical analysis and synthesis of the research studies concerning ABP in undergraduate nursing education (Polit & Beck, 2012). The JBI systematic review summarized and synthesized a diverse body of research about ABP which can act as a resource for nurse educators, offer a map of the state of the relevant science, and inform future nursing research and education.

The GT methodological paper has the potential to contribute to the literature about this methodology by comparing the similarities of three widely used GT approaches, classic grounded theory (Glaser & Strauss, 1967), Straussian grounded theory (Strauss & Corbin, 1990), and constructivist grounded theory (Charmaz, 2006), and then contrasting them with key distinguishing characteristics. This analysis builds on previous work concerning GT, primarily through integrating recent GT texts, and also by using a literature-informed framework to analyze the three approaches. This examination provided a useful vehicle for deciding on the best GT approach for this study. This manuscript can also act as a resource for other researchers who are contemplating conducting a GT study and enable methodological transparency of their work (Amsteus, 2014; Evans, 2013).

The CGT research study developed new knowledge about ABP as no GT studies were found that elucidated a theoretical understanding of how undergraduate students learn through ABP. Two of the GT categories in particular added new insight to the knowledge about ABP: *engaging in a creative learning process* and *factors influencing students' meaning making and response to ABP*. Some new perspectives emerged on the framing of ideas in the other two categories, *the arts as a catalyst for learning* and *learning, when learning occurred*. Another important aspect is that the GT provided insight into how one category influences another, and

this theoretical integration resulted in important practice implications. This research resulted in a substantive theory about how learning occurs. These findings can be particularly informative for educational practice and future research as the GT highlights potential modifiable factors that influence the learning process. The concepts in this substantive theory could also build towards a higher-level theory regarding the transformative potential of the arts in nursing and healthcare, and inform other disciplinary discourses about the arts and learning (Polit & Beck, 2012).

Limitations of the Thesis

There were also limitations in each research process delineated in the manuscripts that should be considered when looking at this body of work. For example, one limitation of the thesis overall was that it did not establish a cause and effect relationship between ABP and the reported learning outcomes, as there was no primary quantitative study conducted and the researchers were unable to perform a quantitative meta-analysis in the JBI systematic review. In this section, the key limitations of the conclusions drawn from this suite of research studies will be summarized and reflected upon in relation to the thesis as a whole.

The concept analysis has a number of limitations. One critique of Walker and Avant's widely used approach to concept analysis is that it is underpinned by realist ontology; therefore, the process decontextualizes the studied phenomenon in search for an abstracted truth that transcends context and time (Duncan, Cloutier, & Bailey, 2007). Another limitation was that the rigour of the literature review was not the same as one would find with a systematic review. Hence, some meanings and usages of the concept may not have been identified. In addition, there was not a standardized quality appraisal process of the included work, although this process is not a requirement of the concept analysis process (Walker & Avant, 2011). It is also important to note that the concept analysis was an early work, and that the phenomenon of interest for this thesis emerged and became further delineated when planning the JBI systematic review and the

CGT research study. Thus, the author transitioned from using the terminology of ABL to ABP, which could be confusing when looking at the work as a whole.

In the GT methodological paper, one perspective of the evolution of GT was highlighted. Although the author acknowledged other perspectives (Wuest, 2012), they are not expounded upon. As well, the paper did not explore how researchers sometimes draw on methods from multiple GT approaches, on how that integration occurs, or on the strengths and limitations of drawing on various GT approaches in one GT study. For the purpose of the analysis, there was a need to categorize and clearly delineate between the three GT approaches. However in research practice, sometimes more than one GT approach is cited when describing the research methodology of a study (Kelly & Ganon, 2011; Luhanga, Yonge, & Myrick, 2010; Mills, Francis, & Bonner, 2008). Furthermore, in the CGT research study described in this thesis, CGT was the chosen methodology but the researcher also drew on Corbin and Strauss' (2015) description of a core category, as well as their coding paradigm, to inform the data analysis.

The limitations of the JBI systematic review were thoroughly described in the review report. The key limitations included: the possibility of missed research studies in the literature search; the researchers may have assumed a questionable homogeneity as a wide spectrum of studies about ABP, encompassing many different art forms, were included; the decision to include papers in which all participants were undergraduate nursing students; the reviewers tallied but did not include non-English articles; the reviewers found that they needed to use 'not applicable' frequently during the quantitative quality appraisals; the reviewers used 'unsure' or 'not applicable' on some of the predetermined key criteria; the majority of studies took place in the United States; and a meta-analysis was not possible due to the significant heterogeneity and lack of appropriate data in the included quantitative studies. These limitations could have

impacted the findings of the review, and/or limited the transferability or generalizability of these findings.

In the CGT research study manuscript a number of study limitations were described, and the key limitations will be highlighted here. First, both of the arts-based assignments were evaluated, which may have impacted the students' ABP experiences. Second, most student participants were white, female, and under the age of 30; most nursing instructors were over the age of 44, white, and female; and all participants came from the third year of one nursing program. Thus, the findings may be unique to this group of participants. Third, there was not a wide range of ethnic diversity amongst participants; thus, we were not able to attend to cultural differences and their intersection with ABP experiences. Fourth, the study involved 30 students, and it is not known why other students did not volunteer for the study or how they experienced ABP. Fifth, SI is a theory that has a focus on individual action (Burbank & Martins, 2009) which could have restricted the exploration of external conditions. Sixth, one retrospective interview was used to illuminate a process, and key junctures may not be well remembered. Seventh, the study did not assess which clinical group students were in, and instructors clearly influenced students' experiences. Lastly, the researcher's previous relationships with participants may have been constraining if they desired to please the researcher with socially desirable answers. These limitations need to be considered when interpreting the work as part of the whole. For example, in both the JBI systematic review and the CGT research study, the lack of contextual diversity was noted as a limitation. Thus, the thesis implications may not be applicable to all settings and there is a notable need for research in diverse contexts.

Examination and Discussion of Findings Across Manuscripts

Each manuscript describes rich and distinct findings that contribute to the thesis. In order to build on this body of work, it is important to look at the findings as a whole and to note

the findings that are reiterated in the concept analysis, the JBI systematic review, and the CGT research study. The findings that are congruent across inquiries deserve special attention in future research studies in order to build on this body of work, and the integration of these findings can inform practice and policy decisions. It is also important to reflect on the use of CGT as the research methodology for the CGT research study, and on the use of theoretical perspectives in research about ABP. In order to facilitate the integration of the thesis manuscript, the findings from the concept analysis will be considered alongside the findings of the CGT research study, as well as the JBI systematic review. Then, the CGT research study findings will be analyzed in light of the JBI systematic review findings and the concept analysis findings. Next, the strengths and limitations of CGT as the research methodology will be reflected upon. Lastly, the use of theoretical perspectives within this body of work will be discussed.

Considering the Concept Analysis Alongside the Other Manuscripts

There was conceptual congruency between the concept analysis and the other manuscripts regarding the phenomenon of interest. The studies included in the JBI systematic review, and the two ABP assignments which students discussed in the CGT research study, all met each of the three key attributes of ABL as defined in the concept analysis. First, there was a time and place in which the arts-based activity occurred. Second, an art form was integrated with another subject matter, and of note, a large variation of art forms and subject matters were found in the studies included in the JBI systematic review. Third, there was active participation or reflective observation on an art form. Notably, the concept analysis was not limited to drawing on nursing education research studies alone as textual data. In contrast, the JBI systematic review and CGT research study focused specifically on developing research knowledge about ABP in a specific context: undergraduate nursing education.

There were, however, some notably similar findings between the works. Similar findings can be seen between the antecedents of ABL in the concept analysis and the *factors influencing students' meaning making of and response to ABP* in the CGT research study. These similarities will be further described in the next section. In the concept analysis, consequences of ABL were also identified such as increased engagement, improved holistic perspective, acknowledgement of multiple perspectives, increased self-awareness and understanding of others, enhanced self-expression through artistic means, improved self-confidence, and enhanced community of learners. These consequences have noteworthy similarities to the following categories in the two JBI systematic review meta-syntheses: enhancing learner engagement, interactive process, the arts as a form of communication and expression, developing relationality, learning about self, and reflecting on, with, or through the arts. Furthermore, these consequences have similarities to elements in the following categories in the CGT research study: *the arts as a catalyst for learning* and *learning, when learning occurred*. Interestingly, many of the concept analysis consequences of ABL are actually more about why learning occurs as opposed to what type of learning occurs. The concept analysis was more focused on learning behaviors and processes as opposed to learning outcomes. Learning behaviours are academic enablers, such as engagement, that make learning outcomes possible (DiPerna, 2006). For example, the concept analysis highlighted that when students feel engaged in ABP experiences they are able to learn. Thus, these consequences resonate more with the CGT research study category of *the arts as a catalyst for learning*, than with the category *learning, when learning occurred*. A comparison of the manuscripts also reveals a difference in focus; the CGT research study was more clearly concerned with delineating the learning process with ABP and the resultant learning outcomes of that process.

The Research Study Findings in Light of the Other Manuscripts

When looking at the overall similarities between the CGT research study and the JBI systematic review findings, ABP seemed to influence the learning process as described in the research study categories, *the arts as a catalyst for learning and engaging in a creative learning process*, and in the JBI systematic first meta-synthesis, *art forms can create meaning and inspire learning in undergraduate nursing education*. Further, in both the CGT research study and the JBI systematic review, ABP resulted in important learning as can be seen in the research study category, *learning, when learning occurred*; in the second JBI meta-synthesis, *important learner outcomes/competencies for professional nursing are developed through ABP*; and in the JBI quantitative narrative synthesis. These congruent findings, along with the aforementioned similarities with the concept analysis, will now be considered in more depth within the framework of the CGT research study's GT categories. Notable differences between the manuscripts will also be addressed.

The arts as a catalyst for learning. Both the CGT research study core category (research), *the arts as a catalyst for learning*, and the JBI systematic review synthesized finding one, *art forms can create meaning and inspire learning in undergraduate nursing education* (review), describe why the arts are pedagogically compelling. The JBI systematic review corroborates the findings from the research study: the arts enabled a connection with practice (review) and made this connection with practice more personal (research); the arts enhanced learner engagement (review) and created a unique and engaging pedagogical space (research); the arts fostered an interactive process (review) and connected learners with their learning community when they left the comfort of their computers (research); and the arts were a powerful form of communication/expression (research) as students mused through artistic mediums (research). The category of *the arts as a catalyst for learning* is corroborated by the following

consequences of ABL as described in the concept analysis: increased student engagement, improved holistic perspective, developed understanding of multiple perspectives, enriched self-expression through artistic means, and enhanced learning community.

Engaging in a creative learning process. The second CGT research study category, *engaging in a creative learning process* (research), is alluded to in the JBI systematic review synthesized finding one, *art forms can create meaning and inspire learning in undergraduate nursing education* (review). However, the JBI synthesized finding did not clarify the specific phases of the process. In the concept analysis, ABL is referred to as a learning process as opposed to a transfer of content, but once again, the process is not explicated. Thus, the CGT research study addresses a significant gap in the literature in providing insight into the processural phases of how learning actually occurs through the arts in undergraduate nursing education.

Factors influencing students' meaning making and response to ABP. In the CGT research study, there was significant variation in the students' experiences of ABP and this variation was explained by the third category, *factors influencing students' meaning making and response to ABP*. This category was not highlighted in the JBI systematic review meta-syntheses. Some of the concept analysis antecedents of ABL echoed a number of the influential factors found in the CGT research study: a willingness to engage in active, not highly prescribed learning, a relationship with an instructor as a facilitator, a belief in one's creativity, and the need for careful integration of the art form with the nursing subject. However, the CGT research study added a much broader explanation of the factors or 'antecedents' influencing students' engagement and response to ABP. One explanation for this difference may be that the CGT research study included undergraduate student voices more so than the literature analyzed in the concept analysis. Further, one identified limitation in the JBI systematic review was that only six

of the studies employed in-depth individual interviews which could be insightful in regard to the variation of students' experiences.

Interestingly, the JBI systematic quantitative cross-sectional descriptive study findings were congruent with the CGT research study findings in regard to the variation of students' experiences. There were a notably similar proportion of students who did not value ABP between the diverse works. For example, in the CGT research study, 20.6% of student participants rated the value of the ABP as having low or very low value in the course. In the JBI systematic review descriptive cross-sectional studies, 18% of nursing students found that the mask-making assignment did not engage them in learning or were ambivalent (Emmanuel et al., 2010), 20% of students did not believe that a drama helped them to learn about death and dying (Deeny et al., 1999), and 17.5% of students found that a digital learning object did not help them to understand the patient's experience of healthcare (Fenton, 2014)

Learning, when learning occurred. The last CGT research study category (research), *learning, when learning occurred*, revealed that important learning was reported by many students. This research finding was reflected in the JBI systematic review synthesized finding two (review), *important learner outcomes/competencies for professional nursing are developed through ABP*. See Table 2 below. In fact, most of the categories of the synthesized finding (review) were found in the sub-categories of *learning, when learning occurred* (research): developing relationality (review) in transformations of perspectives, deeper understanding/respect/empathy for others, and developing unique nursing skills (research); facilitating in-depth cognition (review) in making connections and transformations of perspectives (research); illuminating professional foundations (review) in transformations of perspectives and developing unique nursing skills (research); and learning about self (review) in authentic reflections and revelations, and transformations of perspective (research). Further, two

of the synthesized finding's categories were nearly identical to two of the research sub-categories: reflecting on, with or through the arts (review) and authentic reflections and revelations (research); and supporting metamorphosis/transformation (review) and transformations of perspectives (research).

Table 1

Similarities between the GT Category Learning, When Learning Occurred and the JBI systematic review synthesized finding two

Learning, When Learning Occurred Sub-Categories (CGT Research Study)	Important Learner Outcomes/Competencies for Professional Nursing are Developed Through ABP Categories (JBI Synthesized Finding Two)
Transformations of perspectives Deeper understanding/respect/empathy for others Developing unique nursing skills	Developing relationality
Making connections Transformations of perspective	Facilitating in-depth cognition
Transformations of perspectives Developing unique nursing skills	Illuminating professional foundations
Authentic reflections and revelations Transformations of perspective	Learning about self
Authentic reflections and revelations	Reflecting on, with or through the arts
Transformations of perspectives	Supporting metamorphosis/transformation

The following significant outcomes in the JBI systematic review quantitative narrative synthesis also resonate with the learning reported by the students in the CGT research study: increased level of empathy, improved attitudes towards others, and enhanced reflective practice. In the CGT research study, nursing students also alluded to learning in regard to knowledge acquisition (review) when they discussed transformations of perspectives (research), and

emotional states (review) when they discussed self-care and the potential therapeutic value of the arts (research). In regard to the concept analysis, an identified consequence of ABL was that it increased awareness of self or others, which resonates with elements of the CGT research study category, *learning, when learning occurred*. These learning outcomes that were reiterated in the CGT research study, the JBI systematic review, and the concept analysis deserve focused attention in future quantitative research studies.

Notable differences in findings across the manuscripts. Although there were numerous congruent findings, there were also some notable differences between the JBI systematic review qualitative component and CGT research study. For example, in the core category of *the arts as a catalyst for learning*, some of the sub-categories were delineated differently from the categories of the JBI systematic review synthesized finding one, *art forms can create meaning and inspire learning in undergraduate nursing education*. This diversity of findings about ABP may be a result of the breadth of contexts and ABP experiences explored in the JBI systematic review as compared to the two context-bound ABP experiences explored in the CGT research study. It is also possible that the different qualitative methodologies, and resultant findings, as integrated in the systematic review contributed to some differences. Furthermore in contrast to the other works, the CGT research study explicated the process of learning through ABP and the factors influencing that process. To the author's knowledge, the CGT research study was the first GT study about ABP, and the use of this methodology may have resulted in the discovery of new knowledge regarding this social process.

Researcher interpretation is also an accepted and valued characteristic of the qualitative paradigm (Polit & Beck, 2012). Although numerous strategies were implemented to promote trustworthiness and rigour, the perspective of the researchers influenced the interpretation of the participants' narratives (research) and the researchers' themes (review). As Mortari (2015) writes,

“no impartial observer can enter the research field without an interpretive frame of reference; on the contrary, what a researcher sees and hears depends upon his or her preunderstandings, which condition the reasoning process” (p. 2). In the JBI systematic review, there were multiple reviewers interpreting results from 21 different qualitative studies, and these studies were synthesized by a review team. In contrast, the CGT research study data analysis was conducted primarily by the author in consultation with her advisor. Furthermore in the CGT research study, two specific theoretical perspectives informed and guided the work. This variation of perspectives may have resulted in different perspectives being brought to the analysis and therefore, different interpretations of students’ experiences. For example, the CGT research study findings were not as focused on cognitive outcomes as were some of the findings in the JBI systematic review.

Reflecting on Constructivist Grounded Theory as the Research Methodology

In the manuscript about GT, the author selected CGT as the most appropriate methodological approach for the primary thesis research study based on the purpose of the research, the philosophical underpinnings of the study, and the pragmatic considerations of thesis work. After conducting the research, this conviction remains unchanged. CGT provided an excellent means with which to explore how nursing students learned through ABP in undergraduate nursing education. The research purpose was congruent with the goals of CGT, and the research resulted in a substantive GT concerning the social process in this particular context. The arts-based experiences in this study were more process-focused than content-focused (Dennhardt et al., 2016); thus, the students’ learning was explicated well with CGT which focuses on elucidating a process and is based on constructivist assumptions. One strength of this methodology is that abstract concepts have potential applicability in other settings

(Charmaz, 2014), and these study findings could provide a theoretical base to develop ABP initiatives, to inform nursing curriculum planning, and to guide future research.

The philosophical constructivist stance of CGT, and the resulting view of the researcher's role, proved to be important in the research study. The view of data collection and analysis as a co-construction between the researcher and the participants was valuable in this inquiry. As proposed, CGT (Charmaz, 2006; 2014) enabled the co-construction of data between the researcher and participants, and facilitated the reflexive integration of the literature, extant theories, and the researcher's nursing education background and experiences with the arts. Charmaz's guidance to ensure that these extant ideas earn their way into the analysis was key to this integration, and memo-writing and reflexivity facilitated this process. This aspect of CGT became especially important when the researcher realized the significance of her previous relationship with participants during the semi-structured interviews. Further, the arts have different meanings for different people, and working with the arts is complex, multi-faceted, and unpredictable. Thus, CGT and its constructivist perspective worked well to study the variation of the students' experiences. Through CGT procedures, such as in-depth interviews, probing, and acknowledging the researcher-participant relationship (Charmaz, 2006; 2014), multiple perspectives and liminal meanings were elicited, as evidenced in the variation of the experiences described by study participants. This methodology also helped to illuminate the factors which influenced this variation; thus, adding to the understanding of ABP in nursing education.

CGT was also a useful and pragmatic approach. CGT was found to be flexible yet systematic, with well-documented procedures in the seminal texts. These attributes were especially helpful to a novice researcher (Charmaz, 2006; 2014). For example, Charmaz (2014) provides guidance for line-by-line coding and questions to ask of the data to identify significant processes. Furthermore, the focus on abductive reasoning fostered researcher creativity within a

flexible yet rigorous structure. The clear and thoughtful procedures also enabled the novice researcher to manage a large amount of data without becoming overwhelmed through strategies such as focused coding and memo-writing. The use of memos to facilitate the writing of the research manuscript is recommended by Charmaz (2006; 2014), and the author found this advice extremely helpful in constructing the research manuscript.

Charmaz (2006; 2014) also encourages researchers to draw on others' GT tools if they are congruent with the emerging analysis. As focused codes were identified and theoretical integration transpired in this study, it became apparent that the process could be further developed with the lens of Corbin and Struass' (2015) coding paradigm. From this perspective, *engaging in a creative learning process* could be viewed as an action/interaction which describes how the participants responded to the situation; *factors influencing students' meaning making and response to ABP* could be viewed as the conditions which influenced why the participants experienced a phenomenon in a certain way and how they came to develop a particular perspective; and *learning, when learning occurred* could be viewed as the consequences of the participants' actions/interactions which describes what happened. Corbin and Strauss (2015), thorough definitive description of a core category, also informed the identification of such in this GT about ABP. As a novice researcher, the author of this thesis learned how the research process can be emergent and how different tools can become unexpectedly useful during data analysis. The guidance regarding the inclusion of others' GT tools in CGT (Charmaz, 2006; 2014), became another valuable aspect of this methodology.

Despite being an appropriate, useful, and gratifying methodology to utilize for this study, CGT also had some notable limitations, as would be true of any methodology (Polit & Beck, 2012). CGT is a methodology that highlights a certain type of knowledge. GT is a way of thinking about the data (Morse, 2001); thus, it privileged a theoretical understanding of a social

process and focused the researcher on certain aspects of the experience, especially once focused coding and theoretical integration began (Charmaz, 2006; 2014). As theoretical ideas emerged, some data needed to be trimmed (Wuest, 2012). Thus, CGT did not afford a full description of the data. For example, nursing instructors alluded to the barriers and facilitators of teaching with the arts in nursing education. As instructors were interviewed as part of theoretical sampling in order to understand the developing theoretical ideas about students' perspectives of ABP, this data was not key to the developing GT. Another example is that CGT did not focus on discovering the essences of the ABP experience for students, as phenomenology might. Although the essence of learning through the arts may be alluded to in various categories, such as *the arts as a catalyst for learning*, it was not the focus, and the lack of framing data in this manner likely left some meaningful essences unexplored.

Another limitation of CGT is that it focuses on personal meaning making and individual action. Thus, it does not necessitate a macro view of the phenomenon under study, which may be a result of the traditional micro focus of symbolic interactionism (Benzies & Allen, 2001; MacDonald, 2001). In contrast to a more critical theoretical stance, CGT did not guide the researcher to primarily investigate the macro issues (Morse, 2001) in education that may be influencing the students' experiences of ABP. Adele Clarke's (2005) situational maps and Strauss and Corbin's (1990; 1998) conditional/consequential matrix were developed in order to address this critique of GT. Although Charmaz (2014) argues that one can investigate macro issues with CGT, the methodology does not require a critical perspective.

There were additional challenges associated with CGT's view of the researcher and the co-construction of data, such as the potential for researcher bias from a priori knowledge and experiences (Charmaz, 2014). For example, maintaining the balance between performing an adequate literature search and still remaining open to the emergence of the GT from the

participants' experiences was challenging. There was potential for the literature review, the extant theoretical concepts, or the researcher's experience to have an unearned influence on, or to hide certain elements during, the research process (Charmaz, 2006; 2014). However, strategies were employed to ensure that the researcher's perspectives are helpful, rather than restrictive, during data collection and analysis (Charmaz, 2014; Corbin & Strauss, 2015). These strategies are described in the CGT research study manuscript under the discussion of trustworthiness, and included line-by-line coding, reflexivity through writing reflective memos, and discussing the study with her research supervisor (Polit & Beck, 2012).

Lastly, CGT (Charmaz, 2006; 2014) focuses on a theoretical interpretation of the studied phenomenon instead of on developing an abstract theory that explains in a linear fashion why certain outcomes occur. CGT researchers do not claim to render the data objective, as is the case with classic grounded theory (Charmaz, 2014). The knowledge developed in this study did not attain objective truth, nor did it offer an explanation for the exact cause and effect between variables, such as what specifically causes effective learning outcomes with ABP. However, this GT about ABP could be used to develop thoughtful hypotheses about variables which cause effective learning outcomes, and thus inform future quantitative work which purposes to investigate causality (Polit & Beck, 2012).

Reflecting on Theoretical Perspectives

The two theoretical perspectives of symbolic interactionism (SI) and transformative learning theory (TLT) provided important insights into the CGT research study design, analysis, and findings. Rationales for the selection of these theories were described in Chapter 1; however, reflections on the use of the theories after the completion of the research and in light of the study findings will now be discussed. These theoretical perspectives were useful for inspiring researcher questions and queries, as opposed to determining preconceived hypothesis that needed

to be proved or disproved (Charmaz, 2006; Ghezeljeh & Emami, 2009). This use of theoretical perspectives is consistent with how Charmaz frames sensitizing concepts from extant theories as “points of departure” to explore ideas (p. 30). However, it is important to be transparent about these frameworks, as “the process of inquiry always creates worlds through the questions posed by the researcher” (Mortari, 2015, p. 2). Thus, reflecting on the use of theoretical perspectives, and their influence on the research, is important for promoting transparency throughout the research process (Charmaz, 2014; Mortari, 2015; Streubert & Carpenter, 2011). This reflection is essential to ensure that one is not forcing the data into a pre-specified theoretical framework (Charmaz, 2006). Also, in the JBI systematic review, only 38.1% of researchers clearly demonstrated congruence between philosophical perspectives and the qualitative research methodologies. Thus, the need for increased philosophical transparency in research on ABP was highlighted and will be attended to here. The CGT research study will now be considered in regard to the two theoretical perspectives of SI and TLT.

As discussed in the introductory chapter of the thesis, SI is a theoretical perspective congruent with social constructivism and GT, and this perspective provided a number of useful insights for the CGT research study. According to SI, symbols are created and used socially to communicate and share understanding, and a piece of art can function as a symbol (Charon, 2010). Using a new symbol can provide a different perspective with which to develop meaning. The idea of ‘symbols’ was an identified sensitizing concept for the CGT research study, and this concept prompted the researcher to ask the following questions: What is the process of using art as a symbol for communication, and how is it different for the learner from using words alone? What perspective does it reveal or hide? What are the unique qualities of the arts for communicating with self (reflection) and others (dialogue)? How does ABP influence social interaction and symbolic communication with others? The concept of ‘symbols’ (Charon, 2010),

and these resultant questions, influenced the development of the semi-structured interview guide and also provided insight into the data analysis and findings, particularly for the core category, *the arts as a catalyst for learning*.

In addition to social interaction, SI asserts that people have the capacity for internalized conversations with the self (Burbank & Martins, 2009). Through interacting with themselves, people change their perspectives as they interpret situations (Crooks, 2001). Thus, two questions that arose about the research were: As a mode of reflection, are the arts similar or different than using words alone for reflection? How does ABP impact the students' internalized conversations with self and reflection on practice or practice issues? 'Taking the role of the other' is another important tenet of SI and is connected to empathy. As part of their internalized conversations, people try to understand the perspectives of those with whom they are interacting (Charon, 2010). This imaginative capacity enables humans to move past egocentric perspectives (Charon, 2010). Charon (2010) writes about taking the role of the other: "This is a skill that is necessary to cultivate; it is amazing to me that very little seems to be written about how to improve it" (Charon, 2010, p. 111). This prompted the researcher to ask: Can ABP cultivate this skill? If so, how does ABP facilitate 'taking the role of the other'? The concepts of 'internalized conversations with self' and 'taking the role of the other' influenced the development of the semi-structured interview questions, and the data analysis and findings. The categories, *the arts as a catalyst for learning*, *engaging in a creative learning process*, and *learning, when learning occurred* were particularly informed and influenced by these ideas.

Another SI concept that became important for understanding the findings was that of 'the definition of the situation'. From the perspective of SI, instead of responding directly to situations, human actions are based upon the definitions that the person has developed for a situation, and these meanings are derived from social interaction and interaction with self through

internal thought processes (Aldiabat & Le Navenec, 2011; Burbank & Martins, 2010; Charon, 2010). The ‘definition of the situation’ was identified as an initial sensitizing concept in this study, and was useful for understanding what the students’ initial attitudes were towards ABP, what influenced their meanings and response, and how their perspective changed over time. The theoretical lens of SI inspired questions and insights with which to identify the process of learning, and the factors that influenced students’ perspectives and responses within that process. These concepts prompted the researcher to ask the following questions: What are students’ initial attitudes towards ABP, what influences their perspectives, and how do their views change over time? How does a student define this assignment initially as well as at the end of the course? What influenced any change that they noticed? How does a student’s definition of the assignment impact their response to it or their resultant learning? Furthermore, from the perspective of SI, reference groups are the “society whose perspective the individual uses” (Charon, 2010, p. 36) and interaction with these groups can influence a person’s plans and actions towards a situation, such as an ABP assignment. The concept of ‘social interaction’ raised the following questions in this inquiry: How did interaction with instructors and/or peers influence students’ thoughts about this assignment? How did it influence the creation of the actual assignment? What discourses influenced students’ perspectives of the ABP assignment or of the arts as a way of communicating in nursing education? These questions about the students’ ‘definition of the situation’ and their ‘social interaction’ impacted the development of the semi-structured interview guide, and the data analysis and findings. The category, *factors which influence meaning of and response to ABP*, identifies numerous social and personal factors that influenced students’ perspectives of ABP and revealed that their perspectives changed over time.

The learning theory which guided the study, TLT, was useful to frame learning as a social constructivist process. The TLT definition of learning does not define learning as a transfer

of content but rather as a process of transformation (Mezirow, 2009). This view of learning focused this inquiry on a learning process. The focus complimented CGT, which aims to illuminate a social process (Charmaz, 2014), and the arts as a process-based way of learning (Dennhardt et al., 2016). TLT was developed from a GT study which explored women re-entering higher education, and revealed that perspective transformation was a key learning process with these women (Mezirow, 2000). The idea that learning is a process, and the concept of ‘transformative learning’ which was a sensitizing concept in this study, fostered the following inquiries: How do nursing students learn through ABP? Does ABP facilitate transformational learning? If so, how does ABP foster a transformative learning process? How does a varied medium, such as the arts, influence transformative learning in nursing education? What are the unique social and emotional aspects of the assignment which could foster transformational learning? What, if any, perspectives change as a result of the ABP assignment? These questions informed the primary research question, the semi-structured interview questions, and the data analysis and findings. For example, the findings revealed that learning occurred through *engaging with a creative learning process* that could result in important and transformative *learning, when learning occurred*. Additionally, the concept of ‘perspective transformation’ helped the researcher to identify instances of transformations of perspective reported by the nursing student participants.

Furthermore, TLT helped to identify important junctures in the students’ learning processes with ABP. Mezirow (1991; 2009) writes about how perspective transformation often involves some variation of ten identified phases (see Appendix B), and starts with a disorientating dilemma. The concept of a ‘disorientating dilemma’ was a sensitizing concept and gave rise to the following questions: What are the disorientating moments in the learning process with ABP? Is ABP a disorientating dilemma? Or does it help students to process a disorientating

dilemma? This concept helped the researcher to identify the sub-category, *clarifying: you want me to do what?* This sub-category alludes to the idea that in addition to processing a disorientating practice dilemma, for many students using the arts as a mode of expression was in itself a disorientating dilemma. Moreover, TLT frames reflection as an important part of learning. Two major elements of the phases of a perspective transformation are critical reflection on assumptions and reflective discourse (Merriam et al., 2007; Mezirow, 2009). The focus on reflection as an important part of learning inspired the researcher to ask: How does the use of the arts change the meaningfulness of reflection for nursing students? Numerous participants described how the creative process fostered meaningful reflection. Although there are identified levels of reflection (content, process, and premise (critical) reflection) in TLT (see Appendix C), the identification of these various levels of reflection in the students' accounts was not the focus of this study. However, these levels of reflection could guide future research endeavors about ABP (Mezirow, 2000).

According to TLT, there are also factors which facilitate or impede transformative learning such as the learning environment and the educators' strategies to encourage learners to engage in transformative learning (Mezirow, 2009). This view is congruent with the idea of the 'definition of the situation' described in SI, and contributed to understanding the *factors which influence students' meaning of and response to ABP*. The acknowledgment that there are factors that influence transformative learning prompted the researcher to ask: What are the factors influencing transformative learning with ABP? What or who helped the students to face the challenges of the arts-based assignment? Why might some students not engage in the assignment? TLT ideas also informed the discussion section and the implications section in the research report. For example, TLT informed the following research recommendations: moving towards viewing the educator's role as that of a facilitator, implementing strategies to foster

environments conducive to transformative learning, and accepting that transformative learning is at times an uncomfortable journey (Mezirow, 2000; Slavich & Zimbardo, 2012; Taylor & Cranton, 2012). In summary, SI and TLT were insightful theoretical frameworks to elucidate and make sense of the nursing students' learning process with ABP.

Discussion of the Integrated Thesis Findings

Through examining the findings across the thesis manuscripts, one can see that there are a number of salient points which invite further consideration within the relevant literature. There was variation in the students' perspectives with participants reporting both important and negligible learning, and ABP experiences incorporated multiple ways of knowing, elicited reflection, developed relationality, enabled collaboration, and fostered creative and critical thinking. These ideas will now be discussed in more depth. Within the individual manuscripts, one can find a discussion section related to each specific work. This discussion will focus on the purposively selected findings from the thesis as a whole. There will be a few notable redundancies with the individual manuscript discussion sections, as this section builds and expands on some of those key ideas.

Variation in the Students' Experiences: Important and Negligible Learning

This body of work highlighted that undergraduate nursing students experienced important learning for professional nursing through ABP. However, the learning reported in the CGT research study and the JBI systematic review is more about a way of being and relating, than about an effective transfer of content (Doane & Brown, 2011; Valiga, 2014). This learning is consistent with the TLT definition of learning which defines learning as a process of transformation (Mezirow, 2009). This type of learning is increasingly being valued for the development of professional nurses who will be caring for and interacting with diverse clients. Some nurse educators are calling for an ontological turn in nursing education in which the subject

becomes “the student as a developing person and nurse” (Doane & Brown, 2011, p. 22). Thus, epistemology serves the ontological focus on students’ personal transformations towards professional ways of being (Benner et al., 2010; Doane & Brown, 2011). In the JBI systematic review, only three of the 20 included quantitative studies measured knowledge acquisition through ABP. Dennhardt et al.’s (2016) framework of epistemic functions of the arts in medical education delineates a continuum from content-focused to process-focused approaches for the arts. It seems that in undergraduate nursing education, there has been a preponderance of process-focused ABP approaches.

The subjective and personal knowledge development, which can occur through ABP, is valuable to nursing practice (Brandon & All, 2010; Carper, 1978). The concept analysis identified that one of the key attributes of learning through the arts was that it was an active learning experience which fosters students’ ability to construct their own subjective and personal meaning. Further, Davis (2008) asserts that the arts are ambiguous representations of the artists’ lived experiences or thoughts. Thus, meanings are negotiable and the arts are imbued with the potential to elicit multiple subjective perspectives and interpretations. The arts can also trigger inquiry in learners which leads to self-directed learning (Archibald, Caine, & Scott, 2016). This subjective learning through ABP is well supported by constructivist/social-constructivist views on how individuals construct knowledge, and both have a subjective epistemology. From the constructivist perspective, the individual mind constructs reality within a relationship to the world, and from the social constructivist perspective, the mental processes of constructivism are also a social process (Appleton & King, 2002; Chen et al., 2011; Raskin, 2002; Talja et al., 2005). Thus, students are actively constructing meaning and integrating it with their previous knowledge. This perspective emphasizes process over content, and focuses on students’ learning how to learn (Snyder, 2001). However, the focus on subjective knowledge with ABP can be

controversial within the academic health sciences context. In their research about arts-based health research, Boydell and colleagues (2016) found that using the arts can produce tensions regarding academic legitimacy due to academics' focus on truth and accuracy, concerns regarding how to measure impact, and questions of legitimacy arising from the value of more traditional ways of knowing.

The experiential, active, participatory, engaging, and student-centered learning which occurred with ABP is also important as these qualities meet a number of recent demands for nursing curriculum change (Oermann, 2015a). In a literature review of meaningful and engaging teaching techniques in nursing education, researchers found that the arts were one of seven teaching techniques emerging amongst educators that could engage students and help them to link theory with practice (Crookes, Crookes, & Walsh, 2013). ABP may be particularly useful as a teaching strategy within a concept based curriculum (Giddens, Caputi, & Rodgers, 2015). In the CGT research study, the arts opened up a pedagogical space for process and demanded conceptual thinking.

An important, but somewhat concerning finding was that some students reported negligible, unimportant, or no learning. This finding was evident in the CGT research study categories, and in the JBI systematic quantitative cross-sectional descriptive study findings. The CGT research study findings about negative experiences with ABP add to the knowledge about ABP as this aspect has not been elucidated in previous qualitative work. In fact, the qualitative findings in the JBI systematic review meta-synthesis were overwhelmingly positive about the student experience of ABP. Of the 34 student interviews in the CGT research study, four students (11.8%) rated the value at 25 or under, and three students (8.8%) rated it between 26 and 50.

It is important to consider why some students felt negative or ambivalent about their ABP learning experiences, as learning is an important part of formal nursing education

(Oermann, 2015a). Furthermore, if students find educational experiences too stressful, it may detract from their learning (Chernomas & Shapiro, 2013). The factors influencing students' perspectives of ABP identified in the CGT research study provide insight into why some did not value their experience. Strong negative influences included: feeling uncreative; being externally motivated; finding ABP stressful; feeling survival needs were not being met or feeling vulnerable during presentations; worrying about their grade; feeling that they had faked or forced their project; having a negative group experience; finding the creative reflection too open-ended or the photo essay too restrictive; experiencing an unsupportive instructor relationship; or thinking that ABP is not congruent with nursing. As previously mentioned, some of the concept analysis antecedents of ABL resonated with these factors. Additionally, comparing the creative process of the undergraduate nursing students in the CGT research study with other creative processes revealed that it was constrained by the structure of an undergraduate nursing program and impacted by students' unfamiliarity with the ABP, yet required for their progress in the program.

Although negative student reactions were not highlighted in the JBI systematic review meta-syntheses findings, a number of authors provide possible explanations for negative student reactions in their discussion sections or papers. As reviewed in the introductory chapter, authors provided the following reasons: a focus on learning nursing skills and scientific knowledge (Casey, 2009; Duffin, 2009; McKie, 2012), insecurity about one's creativity (Lillyman et al., 2011; McGrath & Higgins, 2006), resentment regarding a time-consuming assignment which is not viewed as essential learning (Pavill, 2011), discomfort with a non-prescriptive approach (Casey, 2009; Cheng, 2010; Pohlman, 2013), and a felt need to prepare for licensure exams (Pavill, 2011). A number of these points resonate with the findings of the CGT research study.

There are clearly challenges to implementing innovative and creative approaches in nursing education. It is important for nurse educators to consider these diverse factors when

planning ABP activities, and to realize how they can impact students' perspectives about ABP which change over time. These findings corroborate that learning is not simply an acontextual transfer of information but that it is influenced by many individual and contextual factors.

According to SI, individuals' perspectives of the situation change in response to social interaction and personal interpretation (Charon, 2010), and some of these influential factors identified in the CGT research study are modifiable. These factors are the foundation for important policy and practitioner implications which are addressed in a following section. TLT also proposes that there are factors that facilitate or impede learning which should be considered by educators (Mezirow, 2009).

Incorporating Multiple Ways of Knowing

This body of work highlighted that ABP incorporates multiple ways of knowing. ABP fostered both cognitive and emotional learning, and often integrated thinking and feeling within the same learning experience. For example, the JBI systematic review meta-syntheses and the CGT research study both revealed that ABP fostered a deeper understanding of emotions and an emotional connection with learning. In the JBI systematic review, two quantitative studies investigated the impact of ABP on various aspects of nursing students' emotional states, and both researchers found significant findings (Bittman et al., 2004; Walsh et al., 2005). The JBI systematic review meta-syntheses also revealed that learning in the cognitive domain also occurred through the arts, and nursing students reported that ABP involved intense thinking and helped them gain empirical knowledge. Two of the three quantitative studies in the review demonstrated significant improvements in knowledge acquisition (Shieh, 2005; Wikström, 2001). In order to integrate the qualitative and quantitative JBI systematic review findings, they were interpreted with the three domains of learning proposed by educational theorists: cognitive, affective, and psychomotor (Krathwohl, 2002; Su & Osisek, 2011). A wide diversity of

pedagogical approaches incorporating different domains of learning are needed to develop essential competencies for professional nursing (McAllister, 2015). In this thesis, ABP was found to address both cognitive and affective domains.

The potential of ABP to emphasize the affective domain is important, as emotions are a key component of professional nursing. It is important to examine the emotional aspects of practice in order to cultivate relational practice and authentically engage in person-centred care (Lapum, Yau, Church, Ruttonsha, & David, 2015). Emotional learning and maturation is vital to professional competence (Akerjordet & Severinsson, 2007) as nurses experience powerful and difficult emotions in practice (Harrison & Fopman-Loy, 2010; Lapum et al., 2015). Lapum et al. (2015) write that “clinical encounters are interwoven with illness, suffering, and sometimes death...these encounters can result in emotional, embodied and psychological marks” (p. 172). Through the pedagogical space created by the arts, students may be able to uncover and process the difficult emotions that nurses and others experience. With artistic inquiry the world is experienced through the senses, which develops perception and attention to feelings (Eisner, 2002). Creating artistic work may enable students to express emotions or experiences that are too difficult to articulate through words alone (McBain et al., 2015).

Furthermore, Freshwater and Stickley (2004) argue that working creatively with the arts can teach emotional intelligence. Emotional intelligence is “the capacity for recognizing our own feelings and those of others, for monitoring ourselves, and for managing emotions in ourselves and in our relationships” (Goleman, 1998, p. 317). If students can develop emotional intelligence, and manage their emotions in emotionally complex situations, then they will also be able to work with others’ emotions in a competent way (Freshwater & Stickley, 2004). In a phenomenological study, researchers found that once undergraduate nursing students learned how to manage their fear and emotions, they were able to abandon their emotional detachment and to provide

compassionate care to HIV positive patients (Msiska, Smith, Fawcett, & Nyasulu, 2014). The researchers argue that emotional learning was key to moving from emotional detachment to emotional engagement with patients. In one arts-based assignment designed to foster emotional learning, nursing students created pictures of a time in nursing which had emotional significance to them (Jack, 2012). One student described creating a drawing of when he felt de-valued by his mentor, and his picture reflected his feelings of inadequacy. Through creating this work, he developed an awareness of how this incident made him feel, and reflected on how it was negatively affecting his patient care (Jack, 2012).

Furthermore, ABP is a form of aesthetic knowing. As discussed in the introductory chapter, authors refer to aesthetic inquiry, or aesthetic knowing, as a way to develop important nursing knowledge about the meaning of a lived experience (Archibald, 2012; Price et al., 2007). Aesthetic inquiry is a “a method of knowing that implies an ability to appreciate and comprehend the elements of an art form” (Price et al., 2007, p. 155). Archibald, Caine, and Scott (2016) write of how aesthetic knowing can occur in two ways: “knowing about” by art-viewing or “knowing through” by art-making (p. 1). In both modalities, the arts can create meaning and inspire inquiry; thus, changing the learning process. In the CGT research study and the JBI systematic review learners found that aesthetic inquiry helped them to muse through different mediums, connect emotionally with their learning, interact with others, acknowledge multiple perspectives, engage with their learning, incorporate personal aspects into their education, and connect concepts with practice.

Fingheld-Connett (2008) writes that in the nursing literature, aesthetic inquiry is conceptualized as part of the epistemological domain, whereas the art of nursing is conceptualized as part of the ontological domain. The findings of this thesis indicate that aesthetic learning with ABP experiences may produce knowledge which can especially inform

the art of nursing practice. The art of nursing includes attributes such as relationship-centred practice, meaningful connection with a client, interpretation and understanding of the patient's situation, metaphysical knowledge (personal, intuitive) of self and others, expert and skillful practice, and creative problem-solving (Fingheld-Connett, 2008; Johnson, 1994). In the CGT research study, students described how ABP fostered many of these competencies needed to practice the art of nursing such as fostering a deeper understanding/respect/empathy for others, developing creative abilities, and eliciting authentic reflections. In the JBI systematic review, these competencies were also identified. For example, findings revealed that ABP developed students' relationality, illuminated professional nursing foundations, and fostered learning about oneself.

Another possible explanation for the ability of the arts to foster learning is that they offer multiple modes for understanding. In the CGT research study, students represented their understandings through multiple modalities, such as text, music, and photographs with the photo-essay, or combining one or more art forms with a verbal reflection in the creative reflection. Students described musing through mediums as they created their projects. Drawing on theories about multimedia learning, which is defined as learning through words, sounds, and pictures, multiple representations about a concept can help create a comprehensive mental model in the learner's brain, which is integrated with previous learning (Ayres, 2015; Eitel, Scheiter, & Schüler, 2013; Mayer, 2014; Schnotz, 2014). Deeper learning occurs through the use of multiple representations more so than with one modality alone. Multiple representations engage learners, but can also lead to a deeper understanding through integrating complimentary cognitive processes of the multiple approaches, constraining possible mis-understandings of one modality, or helping the learner to see ideas in a new way through abstracting a set of common features between modalities, extending knowledge into new settings with different modalities, or

translating between modalities (Ainsworth, 1999). For example, Schnotz (2014) asserts that text and pictures have complimentary functions in that the text enables the conceptual processing of information, and the pictures represent the concept under study. Further, with multiple modalities, a dual coding in the memory occurs through the storage of visual and textual information; thus, developing a stronger mental representation (Ayres, 2015). Numerous researchers discuss the limitations of words alone to fully capture the beauty and pain of the lived experience (Foster, 2007; Rieger & Schultz, 2014). In art therapy, Morrell (2011) describes the benefit of “language switching” between artistic and verbal modalities for deeper exploration or for regulating emotional reactions when processing difficult experiences (p. 30). Groff’s (2013) work on whole-mindness highlights that educational experiences which integrate multiple processing systems (visual-object, visual-spatial, and verbal) are critical to students’ cognitive development and meaningful learning. ABP can activate and develop cognitive thinking modes; providing some learners with an opportunity to use their preferred ways of learning and others with an opportunity to develop their nondominant processing systems (Groff, 2013).

Reflective Practice and the Arts

In their accounts of their learning through ABP, CGT research study participants described how meaningful reflection was central to their learning. In the JBI systematic review, nursing students learned to reflect on, with, or through artistic modes, and this reflection fostered other important learning. In both works, students found that ABP offered an alternate reflective learning approach. This finding about the arts as a meaningful reflective mode is important, considering the eminence of reflection within nursing education and practice (Lapum et al., 2015; Scanlan & Chernomas, 1997). The power of reflective practice is well acknowledged in the literature, and scholars discuss how reflection can enable deep learning from experiences (Mann et al., 2009), develop professional identity (Mann et al., 2009), increase awareness of self and

others (Karpa & Chernomas, 2013), and foster caring practice as students reflect on patients' stories (White et al., 2010). Developing reflective capacities is clearly a concern of nurse educators, and the capacity of ABP as a mode of reflection is therefore notable.

There are a number of possible explanations for the arts as a meaningful method of reflection. The arts may enable the grasping of concepts and experiences through the process of transforming them into a tangible product which can be touched, viewed, or heard (Davis, 2008, 2012). Thus, it allows for a deeper, different, and more thorough inspection (Eisner, 2002). The sharing of a story through creative expressions can bring subjugated knowledge into view for personal and public contemplation (Rycroft-Malone et al., 2004). Cheng (2010) writes about how artistic approaches can unlock unconscious thoughts and tacit understandings; thus, enabling the learner's reflection upon these previously hidden ideas. Furthermore, the arts are unique for reflective practice in that they are languages which privilege the emotional aspects of life and make these aspects available for inspection (Lapum, et al., 2015). In the CGT research study, participants discussed how the creative process took time and this aspect of the arts may also enhance reflective practice, as it demands that students slow down in order to contemplate their own thoughts (McBain et al., 2015).

Additionally, the arts may be engaging for some students as they offer a new way of thinking about experiences compared to other more traditional reflective assignments. Thus, the arts may act as novel catalysts which are engaging, energizing, enjoyable (McBain et al., 2015), and which "spark further reflective practice" (Cheng, 2010, p. 496). Brett-MacLean et al. (2010) write that "engaging in different processes that can help to engender new insights and appreciation of experience...can facilitate more vital learning experiences and enhanced capacity for reflective practice" (p. 499). Thus, the arts hold potential to be one unique option among many reflective educational strategies in a program (Cheng, 2010). Having varied reflective

approaches in undergraduate nursing education may be more inclusive, as diverse students may find meaning in alternative methods (Newton & Plummer, 2009).

Developing Relationality: A Humanistic Lens

The thesis findings revealed that ABP can develop students' relationality with patients by offering a humanistic lens with which to view personal, clinical, and community experiences. In the JBI systematic review, ABP developed students' relational skills such as empathy, ability to collaborate, awareness of multiple perspectives, and understanding of a person's unique context. Doane and Varcoe (2007) argue that caring relationships are vital to enacting responsiveness to, and responsibility for, patients. ABP can privilege a "relational inquiry lens" (Doane & Varcoe, 2007, p. 198) which looks at the patient's and nurse's contexts, and in doing so, promote effective relational nursing practice, sound clinical judgment, and ethical care (Doane & Varcoe, 2007; Spadoni, Doane, Sevean, & Poole, 2015). Spadoni and colleagues (2015) used aesthetic approaches as a form of "relational inquiry" (p. 270) to foster nursing students' relational caring practice. Nursing students created painted masks. They painted the outside of the mask as they perceived the world to see them, and the inside of the mask as they saw themselves. Through this experience, along with a narrative paper about caring, students realized the importance of self-reflection in their relationships with clients. Participants shared their masks, and the story behind it, with their peers/instructors. In the group sharing, the facilitators focused on the responsibility of a listener when hearing a story. The researchers found that this arts-based inquiry created a space for deep meaningful learning, fostered relational caring practice with others, and cultivated personal/professional transformations.

Further, empathy is an essential component of relational nursing practice (Kelly, Lepo, & Frinzi, 2011), and is defined as the "ability to perceive the meaning and feelings of another and to communicate those feelings to the other person" (Brunero, Lamont, & Coates, 2010, p. 65).

The CGT research study and the JBI systematic review revealed that ABP could foster empathy. This finding may be explained by the fact that ABP helps students to imagine what it might be like to be in another's situation, to feel what another feels, to imagine what another is thinking, or to imitate another's actions (Kelley et al., 2011). These ideas resonate with the symbolic interactionism concept of taking the role of the other, which is an imaginative capacity used by people to understand the perspectives of those with whom they are interacting (Charon, 2010). Although there has been debate as to whether empathy is an innate trait or whether it can be learned (Richardson, Percy, & Hughes, 2015), researchers have found that empathy education can be effective. In a review of 17 studies, Brunero and colleagues (2010) found that 11 studies (64.7%) reported statistically improved empathy scores after educational interventions. Interestingly, eight of the 11 studies (72.7%) using experiential learning demonstrated significant results. In the JBI systematic review included in this thesis, three of the four studies measuring the effectiveness of ABP on nursing students' empathy levels had some significant findings (Briggs, Fox, & Abell, 2012; Özcan et al., 2011; Wilt, Evans, Muenchen, & Guegold, 1995).

In the CGT research study, ABP also influenced the learning to be more personal and many students engaged in meaningful self-reflection. Some scholars assert that arts-based approaches can foster personal learning and thus, person-centred care (Schwind et al, 2014). In an overview of reviews, researchers found that the six components of person-centred care were: "1) establishing a therapeutic relationship; 2) shared power and responsibility; 3) getting to know the person, 4) empowering the person; 5) trust and respect; and 6) communication" (Sharma, Bamford, & Dodman, 2015, p. 110). Schwind et al. (2014) write about attributes of the nurse which are key components of person-centred care such as interpersonal skills, the ability to clarify personal beliefs and values, and self-knowledge. They argue that personal knowing enables the development of therapeutic relationships and person-centred care. In their opinion,

arts-based approaches can foster personal knowing which “does not emerge from logical theoretical constructs”, but rather through creative and reflective experiences. They write that through creative self-expression, “knowing, too premature for words, can be brought to consciousness to inform who we are as persons and professionals” (Schwind et al., 2014, p. 344). Through artwork, students can also come to understand the personal knowledge of others.

Collaborating and Connecting with Others

In the JBI systematic review and CGT research study, ABP elicited interaction with others, which was a meaningful component of the learning process for many students. In the JBI systematic review, discussions with teachers and/or other students about the artwork became a valuable part of students’ learning processes. Participants in the CGT research study reported that ABP connected them with their learning community, practitioners, community agencies, and clients and populations. Other researchers have found that ABP developed a community of learners (Darbyshire, 1994), enhanced group trust (Davidson, 2004); stimulated dialogue about feelings and caring for others (Jonas-Simpson et al., 2012; Lillyman et al., 2011); and promoted effective group work (McCabe et al., 2013). The ability of ABP to promote collaboration, connection, and dialogue makes it a valuable educational strategy in nursing education. This idea is supported by the social constructivist perspective which assumes that knowledge is socially constructed through human interactions with others (Benson, 2001; Jacobson, 2007; McWilliam et al., 2009). The learning theory which guided the study, TLT, also frames learning as a social constructivist process which involves dialogue with others (Mezirow, 2009).

The arts can foster collaboration and connection in a number of ways including students working on arts-based projects together, incorporating aspects of the community into an art form, and using the arts as a impetus for disclosure and dialogue (Cueva, Kuhnley, Revels, & Echohawk, 2012). First, ABP fosters group learning and interaction when students create projects

together (Cueva et al., 2012), which is important in healthcare education as professional nurses need to be able to work interdependently with others. In group projects, such as the photo-essay assignment which was explored in the CGT research study, students need to work together to create a collaborative artistic project. The student participants reported learning to work with other group members. Chan (2013) found that when working on a group project, students shared their ideas and discovered new approaches; thus, developing their creativity. Hall and colleagues (2014) argue that integrating the humanities into interprofessional education can foster different professionals learning about collaborative teamwork together. This interprofessional collaboration can break down traditional power differentials between healthcare professionals and also help these diverse groups to find common ground surrounding shared values.

Second, through an artistic modality, cultural and social aspects of a community can be expressed and represented (Cueva et al., 2012). Educators write of how arts-based service learning can be used to engage higher education students with community members in collaborative art making to develop a deeper understanding of the community (Berman & Allen, 2012; Power & Bennet, 2015). Community engagement with the arts was prevalent in the CGT research study participants' narratives about the photo-essay assignment, although the photo-essay was created based on engagement with the community rather than from collaborative art making with community members.

Third, art forms can act as a symbolic representation of an idea, and function as an engaging way to share personal understandings. This shared understanding can act as a catalyst for dialogue (Cueva et al., 2012), as it gives a group something tangible to talk about and stimulates important connections (Davis, 2012). Potash and Chen (2014) describe how medical students' artwork was a useful vehicle not only for their own self-understanding but also for peer-to-peer learning about empathetic responses to patients' suffering. The students' artwork

educated other students when it was exhibited or shared. They write that the arts “became a structure for continuous dialogue” (p. 331) and connection, as students’ learning through their own artistic expression became the stimulus for other students’ learning through reflective observation of the creative piece. The CGT research study student participants reported this peer-to-peer learning occurring in both the photo-essay and the creative reflection presentations.

Creative and Critical Thinking in Professional Nursing

ABP demonstrates potential to promote both creative and critical thinking. Engaging in a creative learning process may foster creativity. In the CGT research study, students learned through a creative learning process that echoes elements of the creative process described by creativity theorists (Kelly, 2012; Kelly & Leggo, 2008; Wallas, 1926). The creative process is “the sequence of thoughts and actions that leads to novel, adaptive productions” (Lubart, 2001, p. 295). Another interesting finding was that the learning process with ABP developed some students’ creative abilities and creative self-efficacy, which is the “belief one has the ability to produce creative outcomes” (Tierney & Farmer, 2002, p. 1138). Many participants described how this type of learning was unusual in the nursing program; yet, everyday creativity is an important component of the art of nursing and can be used to solve real-life problems (Albarran, 2004; Carper, 1978; Doane, 2002; Fasnacht, 2003). One of the Canadian Institutes of Health Research’s (CIHR) (CIHR, 2016) strategic directions is to promote creativity in health research. There are calls for a focus on cultivating creativity in nursing students (Chan, 2013; Fasnacht, 2003). Ku and colleagues (2002) investigated the effectiveness of a creativity innovation with nursing students, and found certain aspects of creativity increased significantly, indicating that the skills necessary for creative development can be taught. In a systematic review of approaches that promoted nursing students’ creativity, one frequent strategy was the use of arts-based assignments that encouraged students to “think outside of the box” (Chan, 2013, p. 1383).

The learning process with ABP also resulted in critical thinking for some students. In both the CGT research study and the JBI systematic review, undergraduate nursing students experienced challenges to previously held assumptions and transformations of perspective. Critical thinking is important in professional nursing for examining assumptions, analyzing arguments supporting conclusions, and clinical judgment (Daly, 1998); yet, it can be challenging to teach (Staib, 2003). Davis (2008; 2012) writes about how in artistic learning processes, the student must move beyond content memorizing and towards a stance of inquiry to direct their learning (Booth, 2013; Bryant et al., 2003; Davis, 2008). Thus, the focus is not on teaching what to think, but on teaching how to think. In the CGT research study, students described needing to think critically about what the most salient points were to convey in their artistic project, and about how to best convey these thoughts through an alternative modality.

The reported ability of ABP to foster creative and critical thinking is notable. Seymour and colleagues (2003) write about how narrative and storytelling approaches can incorporate the art (creativity) and science (critical thinking) of nursing. Professional nurses need to use both creative and critical thinking skills for problem solving, innovative solutions (Oliver, 2010), clinical decision-making, and evidence-informed practice (Seymour, Kinn, & Sutherland, 2003). Critical thinking is the “process of analyzing and assessing thinking with a view to improve it” (Elder & Paul, 2010, p. 41), and is largely “retrospective, reflective, and evaluative” (Seymour et al., 2003, p. 290). Creative thinking is “generative in some way and can proceed initially from a blank slate” (Seymour et al., 2003, p. 290). Seymour et al. (2003) assert that both critical and creative thinking are imperative to narrow the research-practice gap in nursing. Evidence-informed nursing is the “ongoing process that incorporates evidence from research, clinical expertise, client preferences and other available resources to make nursing decisions about clients” (Canadian Nurses Association, 2016, para. 4). Seymour and colleagues (2003) write

about how nurses need to be able to think critically, in order to interpret and critically appraise research, but that they also need to think creatively and generatively, in order to meet individual patients' needs and make evidence-informed clinical decisions. Furthermore, Gendrop and Eisenhauer (1996) propose a transactional model of critical thinking which acknowledges contextual and personal characteristics as essential to nursing judgments in practice. They identify critical-creative thinking as an important component of critical thinking, and define it as "the reconfiguration of ideas or concepts in a manner previously unknown to the individual and results in personally inventive ideas or concepts" (p. 290). Daly (1998) describes a cycle of critical thinking and creativity in which the two converge. He writes that creativity is needed during the generation of alternative frames of reference in response to a critical evaluation of knowledge.

Recommendations for Future Research

This body of work synthesized the current state of the science in regard to ABP, and also expanded this knowledge with a study that explicated a theoretical understanding of how undergraduate nursing students learn through ABP. These investigations have significantly added to the empirical work regarding ABP, and future research studies can build upon these findings. As identified in the concept analysis, JBI systematic review, and primary GT research study, rigorous study of ABP is necessary to further understand participants' perspectives of arts-based experiences, and to investigate if ABP is an effective teaching strategy. There are significant gaps in both the qualitative and quantitative research about ABP. As described below, future research studies and a diversification of methodological approaches are needed to promote the inclusion and efficacious use of ABP in nursing education.

- The CGT research study elucidated a substantive GT about nursing students' learning process with ABP in this particular context. Further qualitative research is needed in other

settings to confirm, challenge, elaborate, develop, and/or extend the categories of this GT.

When theoretical ideas transfer across specific areas or settings they can be developed into a more formal theory which addresses a general topic and encompasses a higher level of abstraction (Charmaz, 2014; Glaser & Strauss, 1967).

- A longitudinal qualitative study, in which interviews are conducted at key junctures, could also provide insight into how certain factors impact particular phases of the learning process at specific times. Thus, longitudinal qualitative research could expand this GT.
- Continued qualitative exploration is needed of both students' and faculty members' perspectives of new and innovative ABP approaches. This expanded exploration could include different kinds of ABP experiences, such as art-observation experiences or non-evaluated ABP experiences, and multi-disciplinary contexts. Understanding more about those students who did not find value in arts-based learning experiences would be insightful, and these students' perspectives should be further explored in future qualitative work.
- To enhance our understanding of facilitating ABP, additional research is needed from nurse educators' perspectives. Although this study included interviews with nursing instructors, the delineation of the instructors' perspectives of ABP was not the focus. Studying faculty members' perspectives could provide insight into how educators can facilitate a positive and productive learning experience for students, as well as how to understand the barriers and facilitators to using ABP in nursing education. Understanding educators' perspectives is important, as practitioners' attitudes and knowledge are a key factor in the adoption of innovations (Wilson et al., 2016). It would also be helpful to

understand the differences between educators' and students' views and value of ABP, and reasons for any differences found.

- In-depth exploration of the contextual factors which impact learners' experiences of ABP, such as standardized testing, the recent incorporation of the National Council Licensure Examination into the Canadian context, and the structure of nursing programs, could provide insight in regard to students' responses to ABP.
- This study about ABP could also inform research on the use of the arts in other healthcare domains. For example, theoretical understanding about the arts and learning is needed in many related areas, i.e. arts-based knowledge translation.
- As highlighted in the JBI systematic review, a diversification of qualitative methodological approaches is needed to further understand students' experiences with ABP.
- Photo-elicitation proved to be a useful data collection approach in the CGT research study. This usefulness highlights the need to continue exploration of other arts-based data collection approaches with CGT, and other qualitative methodologies, when studying artistic processes. In future studies on ABP, it could also be insightful to analyze students' artwork as an additional source of data which could further elucidate the learning that occurs with ABP.
- As found in the JBI systematic review, there is a need for qualitative researchers to use in-depth interviews alongside other data collection methods in order to elicit the participant perspective of ABP. Increased philosophical and methodological transparency with future qualitative studies is also needed.

- More quantitative and/or mixed-methods research is necessary to determine the effectiveness of ABP. The JBI systematic review and CGT research study could provide the foundation for rigorous experimental/quasi-experimental intervention studies that investigate the impact of ABP on outcomes identified in the quantitative and qualitative findings of the review, and the sub-categories of the category, *learning, when learning occurred*, from the CGT research study. For example, the following reported outcomes could be measured in future intervention studies: empathy, person-centred care, relationality, cultural competence, creative self-efficacy, creative abilities, self-care, emotional states, understanding of professional foundations, transformative learning, critical thinking about assumptions, knowledge acquisition, and levels of reflection.
- Quantitative work should include replicable experimental/quasi-experimental studies that use reliable and valid measurement tools.
- In all future quantitative studies about ABP, researchers should report comprehensive and appropriate data that would enable the meta-analysis of quantitative studies on ABP in order to provide strong evidence concerning its effectiveness.
- The development and psychometric testing of measurement tools to gauge the effectiveness of ABP and measure students' satisfaction with ABP would be a worthwhile endeavor to promote the rigour of this body of work. The CGT findings could inform the development of measurement tools specific to the arts and learning, as important dimensions of the learning process and its reported outcomes were delineated from the participants' point of view.
- Longitudinal quantitative studies are also needed to determine the long-term effects of ABP, or of multiple ABP experiences integrated into the curriculum.

- Further work needs to be done to compare different ABP interventions in regard to specific outcomes and student experiences, and to determine what ABP strategies may be most effective for improving specific outcomes. It would also be interesting to compare evaluated versus non-evaluated ABP experiences.
- Different cultural groups may have differing perspectives on the arts and learning, but the CGT research study was limited in regard to exploring these varied perspectives. The JBI systematic review also revealed a need for investigations in diverse cultural contexts. Thus, qualitative and quantitative research about ABP in diverse countries and settings is needed, in order to understand the experiences and effectiveness of ABP across different contexts.
- Observational quantitative studies could provide insight into the significant factors associated with the valuing of, and learning from, ABP. The sub-categories found in the GT research study category, *factors influencing students' meaning making and response to ABP*, could be especially insightful for this type of research. For example, is the meaning or impact of ABP dependent on students' learning preferences? Researchers could also examine the association of students' gender, age, ethnicity, year in nursing program, GPA, attitudes/experiences with the arts, creative characteristics, value of reflection, level of self-awareness, level of creative self-efficacy, clinical group/course section membership, interpersonal relationships with instructors and peers, teaching styles, learning environment, evaluation methods, and internal motivation with students' value and experience of ABP. Examining the relationships between these variables could also provide insight into negative student experiences of ABP.

- Further work needs to be done that compares the differences between group and individual creativity with ABP. These differences were alluded to in the CGT research study, but were not fully explored as they were not the focus of the inquiry.
- Further qualitative and quantitative work about fostering creative development among nursing students is clearly needed, or a systematic review about creative development in healthcare students and/or practitioners.
- A qualitative systematic review about ABP that takes other perspectives into account such as nurse educators, or includes other types of students such as graduate students or other healthcare students, would be insightful.

There are a number of frameworks which have been developed to guide research about the arts and health, or ABP that could inform future research endeavors. Fancourt and Joss (2015) created the Aesop 1 framework for developing and researching arts initiatives in health programs. It is based on existing health research and arts research methodologies; health policy documents; and reporting guidelines. The framework consists of six stages: developing an arts intervention, developing a research study, designing a research study, running the research study, reporting the research study, and implementation.

Building on the Aesop framework, Public Health England (2016) commissioned and published a document entitled, *Arts for Health and Wellbeing: An Evaluation Framework*. The framework is based on public health evaluation frameworks which have been adapted for arts and health spheres. This framework provides guidance for evaluating the impact of the arts on health and wellbeing through diverse methodological approaches that range from small evaluation projects to larger research studies.

Katz-Buonincontro (2015) proposes eight questions to consider specifically when developing arts-based teaching approaches and their evaluations. Although these questions were developed to study ABP within management studies in higher education, they may be useful to consider in regard to future research studies regarding ABP in nursing education. The questions are:

- 1) Which art activities serve the course goal(s) (course learning goals)?
 - 2) When will the art activity be introduced (sequence of course activities)?
 - 3) What kinds of collaborators, art materials, and facilities are needed (course preparation)?
 - 4) What kinds of data can be collected on the artistic process itself, and the resulting works of art (data plan for learning in the arts)?
 - 5) What kind/s of qualitative for example, interviews, discussions, and essays, and quantitative data for example, assessments and course evaluations, can be collected, analyzed (data analysis plan for student learning)?
 - 6) How will the art activity loop back into the course and be triangulated (integration of types of learning)?
 - 7) What worked well and needs to be improved regarding integrating the arts into the courses (self-assessment)? What feedback do students, peers, and collaborators have for course improvement (student and peer assessment)?
 - 8) How will the art activity help foster workplace transfer of skills like empathy and creativity (workplace transfer)?
- (Katz-Buonincontro, 2015, p. 108).

Implications of the Research: Practice and Policy Recommendations

The thesis research findings have a number of important implications for nurse educators (practitioners), nursing education administrators, and curriculum planners (policy makers). In this section, the implications of the JBI systematic review and CGT research study findings will be integrated and expounded upon. However, there will be some notable redundancy with the thesis manuscripts (Chapters 4 and 6), as the key practice and policy

implications of these two empirical works were already thoroughly discussed in each of the respective stand-alone manuscripts, having been developed for independent publication.

In both the JBI systematic review and the CGT research study, many nursing students found that ABP resulted in important learning for their development as professional nurses. Nurse educators should consider ABP initiatives when planning courses as ABP offers a meaningful and engaging way of learning for undergraduate nursing students. There are a wide range of ABP approaches to choose from, as evidenced in the breadth of work reviewed in the JBI systematic review. The review can serve as a resource for nurse educators in regard to ABP initiatives.

This body of work has a number of implications for educational policy-makers in regard to the variation and layering of ABP experiences within nursing programs. Some CGT research study participants suggested that ABP should be integrated throughout nursing programs. Participants suggested planning at least one ABP experience in each year of a nursing program. Nursing students' creativity could be developed through thoughtful curriculum planning that integrates artistic assignments (Chan, 2013). This purposeful inclusion in curricula would also highlight the affective domain of learning in nursing education. However, Haidet and colleagues (2016) write that in medical education, arts-based pedagogies are idiosyncratic, and that they are "often dependent on the personal interests and enthusiasm of individual teachers" (p. 321). This sporadic integration of the arts seems to also be true in nursing education. To promote a more thoughtful integration of ABP, educational administrators or curriculum committees could strategically integrate ABP into the curriculum.

Hickey (2008) discusses closed-ended parameter creative tasks, with more rules and clearer directions, and open-ended parameter creative tasks, with fewer guidelines. To address the diversity of students and develop their creativity, a mix of open-ended and closed-ended

assignments could be incorporated. It is also important to provide appropriate alternatives and supports for students taking their first steps with artistic modes in nursing education. A good entry point may be an assignment with more guidelines and in which everyone works within the same modality; thus, decreasing the risk-taking aspect of the experience. For example, in the issues, politics, and public policy course, all student research participants completed the more closed-ended photo-essay assignment, so it involved less risk-taking than the open-ended creative reflection in which each person created their own expression with fewer guidelines. Although some may prefer closed-ended tasks, eventually an interplay of closed-ended and open-ended approaches allows creativity to grow (Hickey, 2008). Although not addressed in this study, consideration should also be given to developing both creative (art-making) and interpretive (art observation) modes (Rieger & Chernomas, 2013).

From the CGT research study findings, it also seems beneficial to alternate between group and individual creative experiences in a nursing program, as both offer valuable, but different, types of creative challenges and learning opportunities for students. As reported by participants, the creative process was affected by working together as a group in the creation of the photo-essay. Some students found group creativity restrictive and some found it helped them to develop a novel product. Harvey (2014) writes that group creativity occurs through a process of creative synthesis, or integration of various perspectives, to develop new and innovative ideas. Facilitators of this process included: developing a shared understanding of the dominant view of a problem and of new ideas about the problem; enacting ideas that arose from the groups' interactions and creating a physical object together; and recognizing similarities in diverse viewpoints. However, Harvey (2013) also studied the impact of substantial group diversity on divergent and convergent thinking, and found that participants in groups with considerable diversity were able to generate ideas, but found it challenging to recognize and select one creative

idea. Furthermore, Lovelace and colleagues (2001) found that heterogeneous groups often disagreed on tasks that needed to be accomplished, and that innovative outcomes were determined by whether this disagreement was communicated in a contentious or collaborative manner. Although group creativity offers both challenges and opportunities for students, collaboration is an important component of creative development (Kelly, 2016)

Another implication for nurse educators and curriculum planners is that there may be key places in nursing students' development where ABP may be especially valuable. Mezirow's (2009) concept of a disorientating dilemma can provide insight into planning effective ABP experiences. These are periods of uncertainty, or situations that challenge students' assumptions, which may be fertile ground for transformative learning through the arts, such as the beginning or end of their nursing education program (Spadoni et al., 2015). In the CGT research study, a number of students used creative reflection to look back on their development as nurses. Further, certain courses might be more congruent with ABP, as participants described the importance of reflecting on aesthetic content. Thus, nurse educators need to carefully consider the match of the course content or experiences, and the arts-based assignment. Student participants suggested mental health or palliative care courses as places in the curriculum where they would find ABP meaningful, as they dealt with difficult emotions in those contexts.

Another example of a particularly appropriate use for ABP is to incorporate a critical pedagogical approach that can unveil hidden experiences, critique dominant technical-rational approaches in healthcare (Lake et al., 2015), and foster critical thinking skills. In the JBI systematic review and the CGT research study, nursing students' views and perspectives were transformed through the ABP learning experiences; thus, nurse educators should consider ABP experiences to challenge students' assumptions and values, provide new insights into patient experiences, alter students' expectations of practice, and foster personal change. These findings

demonstrate the ability of ABP to foster inquiry and critical thinking as students consider alternative ways of framing healthcare and social issues (Ghanbari, 2015; McBain et al., 2015).

There were a number of other notable suggestions from CGT research study participants regarding important epistemological functions for ABP. ABP could be used to elicit personal sharing in order to build the learning community. Research participants suggested that having more vulnerable ABP experiences, like the creative reflection, throughout the program could develop the community of learners. ABP can be used to enhance social learning in nursing education as it encourages interaction between students and their learning community. Although, some research study participants warned that having ABP experiences too soon, and before they had some level of trust amongst group members, could feel unsafe. Additionally, for a number of students, ABP built on previous learning, and thus can be used to reinforce previously introduced concepts with an approach that integrates the affective and cognitive domains of learning. Addressing important content with multiple domains may result in students' learning at a deeper level and in remembering important content. Another suggestion brought forward by student participants was to have an arts-based option for writing academic papers or reflections in order to democratize the learning process for the diversity of students with varied learning preferences.

In the JBI systematic review qualitative component, additional places in the curriculum were identified for potentially meaningful ABP experiences. The arts can be used to promote situated learning for nursing students, as ABP situates concepts in a story which gives them relevance and meaning. ABP approaches can make difficult learning more accessible for some students, and could be considered for teaching complex or abstract content. ABP initiatives could also be used to develop students' relational skills such as empathy, cultural competence, ability to collaborate, awareness of multiple perspectives, and understanding of an individual's unique context. ABP can illuminate key aspects of professional nursing for nursing students, and could

be used for teaching foundational concepts such as the characteristics of a nurse, ethics, advocating for a client, values, holism in nursing care, person-centered care, philosophy of nursing, and artistry within nursing. ABP should be used to develop reflective capacities in nursing students through reflection on, or creation of, artwork. ABP can help nursing students to learn about themselves, and reflect on their own perspectives, judgments, fears, values, previous clinical and life experiences, and emotional life.

From the perspectives of participants involved in the CGT research study, there were a number of other important considerations for educational practitioners to keep in mind in order to develop effective ABP assignments. It seems to be important to encourage active art-making or performing, unless the activity is meant to be an arts observation or listening experience. Group presentations and the surrounding discourse were also a key component of positive ABP experiences, and some level of sharing with the community of learning should be incorporated in ABP initiatives. Other educators have also discussed the relevance of group dialogue for important learning through arts-based approaches (McAndrew & Roberts, 2015).

The CGT research findings also revealed variation in the students' experiences of ABP. There is, therefore, a need for nurse educators to consider if and how ABP could be more meaningful and less stressful for those who did not engage with, or learn from, the experience. Nurse educators should expect that a proportion of students will respond in a negative way to ABP, and offer more attention and support to these students. Based on their systematic review of the arts in medical education, Haidet and colleagues (2016) developed a conceptual model to guide educators when implementing arts-based approaches, and proposed three considerations to enhance the impact of ABP. First, they write how educators should consider engagement strategies to connect learners with the unique qualities of the arts such as addressing learner discomfort with a new form of pedagogy and participating in the arts-based activity as a co-

learner. Second, they assert that educators should implement meaning-making strategies to increase learners' awareness of their own and others' perspectives, and ability to tolerate ambiguity. These meaning-making strategies could include the provision of opportunities for reflection and the creation of a safe environment for sharing with others. Lastly, they write about the importance of translational strategies in providing learners with an opportunity for reflection on how new learning could impact practice or how to apply new knowledge in clinical contexts (Haidet et al., 2016).

In a review of ABP in management education, Katz-Buonincontro (2015) identified important recommendations for effective teaching with the arts that can inform this discussion. First, it is important for educators to foster a change from an authoritarian style of teaching to a more democratic and constructivist approach. Part of this journey involves finding the right balance between providing assignment constraints and facilitating students' freedom of expression. Second, there is a need for collaboration with artists and/or arts faculty to develop meaningful and impactful ABP initiatives. Educators may also want to consider experimenting with the artistic medium they are asking their students to use. Lastly, implementing strategies to promote active student participation for those with no art experience is important. Many adult students need to move from being art consumers to reflexive participants, in order to learn through ABP. Katz-Buonincontro (2015) recommends the following strategies with students: addressing the 'artsy-fartsy' (sentimental and irrelevant) stereotype of arts-based learning, sharing research findings about the arts and learning, fostering safe learning and sharing environments, and facilitating effective communication.

In the CGT research study, there were times in the creative process that were especially stressful for students, and nurse educators should focus on these key junctures. Many students were initially disorientated as they did not see the congruence of ABP with nursing or they had

doubts about their creativity. Thus, nurse educators need to frame ABP thoughtfully. A clear link needs to be made between ABP and important learning outcomes for nursing (De la Croix, Rose, Wildig, & Willson, 2011), such as the ability of ABP to highlight the relational components of practice or to nurture creative habits of the mind (Pavill, 2011). Nurse educators could facilitate nursing students' understandings of creative necessity in professional nursing, and of the necessary development of creative abilities to positively impact their future nursing practice (Carper, 1978). For example, professional nurses frequently need to reach creative solutions for complex clinical situations (Chan, 2013). To address students' creativity concerns and encourage students to take new risks, educators could discuss how all individuals are creative (Pavill, 2011). Explaining the differences between the creativity of exceptional artists, which pertains to only a few people with widespread impact, and the everyday creativity used for daily living may also help to frame the assignment for students (Kelly & Leggo, 2008). Vincent van Gogh is cited as offering this relevant advice: "If you hear a voice within you saying, 'I am not a painter,' then, by all means paint...and that voice will be silenced" (Vincent van Gogh quotes, n.d., para. 1). Educators can foster students' self-efficacy for creative assignments with strategies such as encouraging ideas through brainstorming, showing exemplars, modeling creativity, and introducing the assignment early to allow time for creative planning.

Deciding on an art form or concept was very stressful for some students. Describing the creative process to students, and guiding them to look for an experience in which they had a personal or emotional connection may help with this process. It is also important to realize that periods of idea generation are key to the creative process. In order to overcome a lack of creative stimuli, nurse educators could foster a collaborative brainstorming session amongst students to increase learners' repertoire of ideas. Kelly (2016) suggests an idea exchange which involves a rotating succession of one-on-one conversations in which no idea is criticized. Through this

collaboration, students collect, gather, and record many ideas before they select one to develop more fully. This strategy fosters collective innovation, and collaborative development is a key component of creative development (Kelly, 2016). Students may also need support to develop their ideas to work with artistic modes. Nurse educators could provide exemplars of potential art forms, and web resources of accessible art-making approaches. It is important to provide varied resources that are sensitive to students' levels of creative self-efficacy, creative characteristics, and personal values such as that of vulnerability. As well, if students are concerned about costs, nurse educators could suggest using recycled materials, or identify where students can find free materials for creative projects.

Time and energy are needed for the creative process. Nurse educators should consider the assignment load and exam dates of the course in which the ABP experience is located, and of the other courses the students are involved with. Ensuring a feasible assignment load, and offering students choice, could decrease feelings of resentment (Lillyman et al., 2011). In regard to the group creative process, participants in this CGT study highly valued being able to select their own groups and working in smaller groups.

Additionally, some students felt nervous about the risk-taking aspect of sharing their creation in a group presentation. This personal self-disclosure can be uncomfortable and risky (Cleary et al., 2013; Stacey & Hardy, 2011). Students may have concerns regarding the risk of alienation from peers or teachers or about feeling exposed (Yonge & Myrick, 2005).

Furthermore, this concern can be heightened if a student feels that their creative piece is inferior (Jack, 2015). A transformative learning environment, in which students feel safe enough to share and authentically engage in critical reflection and reflective discourse, encompasses an environment characterized by trust, esteem for individual students goals, empathetic active listening, and respect for diverse viewpoints (Mezirow, 1995; Morris & Faulk, 2012; Taylor,

2008). The following educator strategies could be employed to promote conducive contexts: providing instructor support and availability to listen to student concerns (McAllister, Tower, & Walker, 2007; Ruth-Sahd, 2003); establishing rapport within the group (Lillyman et al., 2011); and fostering a safe trusting context (Yonge & Myrick, 2005) through nurturing diversity and encouraging discussion (McAllister et al., 2007). Other strategies to address this reaction include incorporating ice breakers (McGrath & Higgins, 2006), implementing an intentional orientation to offset fear and intimidation (Beischel, 2013), and consultation with an artist/art-teacher as to how to approach this student concern (Hermann, 2004; Smilan & Miraglia, 2009). As well, it is imperative to give students control over when and what to share, so that they have a choice in the amount of risk they take (McGrath & Higgins, 2006). The CGT research study participants' suggestions included having a smaller group size for class presentations, ensuring that there is enough time for each presenter to feel heard, and sitting in a circle for more vulnerable assignments. One alternative to decrease the group size could be to have a gallery exhibit in addition to the sharing time. Half of the group could visit the gallery exhibit while the other half shares about their work, and then the groups could switch.

Placing an arts-based reflective assignment after experiences with more traditional reflective approaches may also help students to feel more comfortable with this new risk (Cheng, 2010). Another option is framing an arts-based reflection as an alternative approach to a more traditional mode of reflection. McBain and colleagues (2015) used arts-based reflection as an alternative approach to written reflections with medical students. In their study, 64% of students chose an artistic mode for reflection when given the option, and the researchers believe that this choice provided safety for students as it was not mandatory to reflect through an unfamiliar medium. However, some students who may benefit from an arts-based approach may not select it due to unfamiliarity.

Summative evaluation was stressful for some students, and some student participants questioned grading ABP assignments. Hickey (2008) suggests that with a closed-ended task, such as the photo essay, higher stakes evaluation such as grades may be appropriate to avoid students seeing the assignment as busywork. With more open-ended tasks, such as the creative assignment, lower stakes or formative evaluation is more appropriate and offers the most potential for creative growth. In nursing, the focus is not on evaluating if the art was skillful (McBain et al, 2015). A clear rubric that evaluates if learning outcomes were met, combined with formative feedback, could provide rewarding and sensitive assessment (Deci, Koestner, & Ryan, 2001; Hickey, 2008; Oermann, 2015b). The learning outcomes assessed could include those associated with creative development (Kelly, 2016). One option could be to design a rubric in collaboration with students to encompass criteria that both the instructors and students value. Although not all ABP experiences are evaluated, ABP can provide an alternative mode of assessment when used appropriately. Incorporating multiple forms of assessment is important (Oermann, 2015b), as students might be able to share what they know in one medium more so than another. This diversity offers the educator an opportunity to triangulate different forms of assessment and may be a more democratic educational approach. Another important consideration is to draw out the students' internal motivation rather than highlighting their external motivation. Ensuring personal choice and clearly linking ABP to nursing is important, as is considering how summative evaluation affects students' motivation (Deci et al., 2001). Hickey (2008) asserts that there is an interaction between task parameters and evaluation methods, and that grades for highly creative assignments can be detrimental to internal motivation and the creative process.

Supportive relationships between students and nurse educators are vital for positive ABP experiences. Nurse educators need to balance clearly communicating flexible guidelines and

supporting students in their freedom of expression (Casey, 2009; Chan, 2013). In the arts-based assignments experienced by the CGT study participants, instructors offered prompts to foster students' thinking and reflection. Further, nursing students are adjusting to a new way of learning with ABP. According to TLT, students need to have a disorientating dilemma for initiating learning; thus, educators need to be secure in supporting students through a potentially uncomfortable educational journey (Taylor, 2007). Accordingly, the educator needs to purposefully move towards the role of a facilitator (Bryant et al., 2003). Educators also need to be aware of the importance of their own non-verbal behaviors when students are presenting their artistic creations to others in a classroom setting and of the impact of formative evaluation. If a student has lower creative self-efficacy, they may need more feedback throughout the process. It is also important to remember that even with exemplary instruction and planning, not all students will engage with ABP, and that some will value it more than others because of various factors. These findings could also inform the developmental continuum of teaching practice for nurse educators. Teaching with ABP approaches may be viewed as further along a continuum of teaching practice and as a sophisticated, advanced, and productive pedagogy that needs to be fostered intentionally with interested nurse educators. Highlighting that teaching is a creative activity (Kelly, 2016), and discussing how educators also go through a creative problem-solving process when designing courses and ABP learning experiences may be helpful. Thus, professional development opportunities are important to empower nurse educators to facilitate effective ABP experiences (Begoray & Morin, 2002), and should be considered by nursing education administrators in order to support educators in their creative endeavors.

Knowledge Translation Strategies

In order to ensure that the thesis findings will actually impact practice and policy in nursing education, it is vital to carefully consider the knowledge translation (KT) strategies for

this body of work (Hopp & Rittenmeyer, 2012). Without effective KT approaches, significant and important findings could become irrelevant and ineffectual. An integrated knowledge translation (iKT) strategy was used for the CGT research study to increase the usability of the findings, and the author will also use an intensive end-of-project dissemination plan for this paper-based thesis (Canadian Institutes of Health Research, 2012). Through the involvement of end-users at key junctures of the research process, the iKT approach provides valuable insight into the end-of-grant dissemination plans. The author met with three nurse educators before the commencement of data collection to discuss the research project (an individual meeting) and during data collection/analysis to elicit their input into data analysis (group meeting) and end-of-grant dissemination plans. After the completion of this project, the author will meet with the group members in order to discuss the dissemination plans again (group or individual meetings/phone calls).

Intensive dissemination to researchers and practitioners will include conference presentations and academic journal publications. This plan has already started to become a reality. The author has given numerous presentations about the concept analysis, JBI systematic review, GT methodological paper, and CGT research study. The concept analysis is published in a peer-reviewed academic journal, as is the JBI systematic review protocol and report. After the thesis is complete, the GT methodological paper and CGT research study will be submitted for publication to peer-reviewed academic journals. The author plans to submit the GT methodological paper to a journal focused on qualitative methodology, and the CGT research report to a journal focused on healthcare education or on the arts and health. Local, national, and international opportunities will also be sought to continue presenting this work at a range of conferences. In order to make this information accessible for practitioners, an evidence summary of the JBI systematic review and a lay summary of CGT research findings will be developed. As

well, the author may produce a short YouTube video or digital story, which communicates the CGT research study findings.

According to the Knowledge-to-Action Cycle (Graham et al., 2006), it is also crucial to consider initiatives for sustaining knowledge use. Two initiatives are currently underway to address this need. While the author was in doctoral studies, she started and now co-facilitates an Arts in Healthcare Education Interest Group with a nursing colleague. The purpose of this group is to facilitate healthcare educators' exploration and understanding of ABP, arts-based research, and expressive arts therapy. The co-leaders plan to continue facilitating and expanding this group to include other healthcare educators and possibly designing a research project as a group. The author is also planning on creating a resource for nurse/healthcare educators which compiles various resources, discovered while working on this thesis, for those wishing to integrate ABP into their teaching practice.

Concluding Reflections

Innovative and creative teaching approaches are needed to develop the wide range of competencies required for professional nursing practice, and to meet current curriculum demands. ABP is one such pedagogical approach. This body of work advanced theoretical and empirical understandings regarding the use and impact of ABP in undergraduate nursing education. Each of the inquiry processes documented in the manuscripts contributed in a unique way to the objectives of the thesis. The concept analysis clarified the conceptual understanding of the phenomenon under study, the JBI systematic review synthesized the research literature about ABP in undergraduate nursing education, the GT methodological paper elucidated the most appropriate methodology to advance the current state of the science, and the CGT research paper explicated the undergraduate nursing students' learning process with ABP.

Through this work, it became apparent that the arts have unique characteristics which can foster meaningful ways of knowing and expressing in undergraduate nursing education. ABP can provide fresh pedagogical perspectives for nurse educators and nursing students. As Eisner (1998a) writes, “The arts inform as well as stimulate; they challenge as well as satisfy. Their location is not limited to galleries, concert halls and theatres. Their home can be found wherever humans choose to have attentive and vital intercourse with life itself” (p. 56). The findings also revealed important implications for nurse educators and policy-makers to promote meaningful ABP experiences for more students. This work can provide nurse educators with evidence to affect current curriculum reform, and facilitate the efficacious development and implementation of ABP in nursing education.

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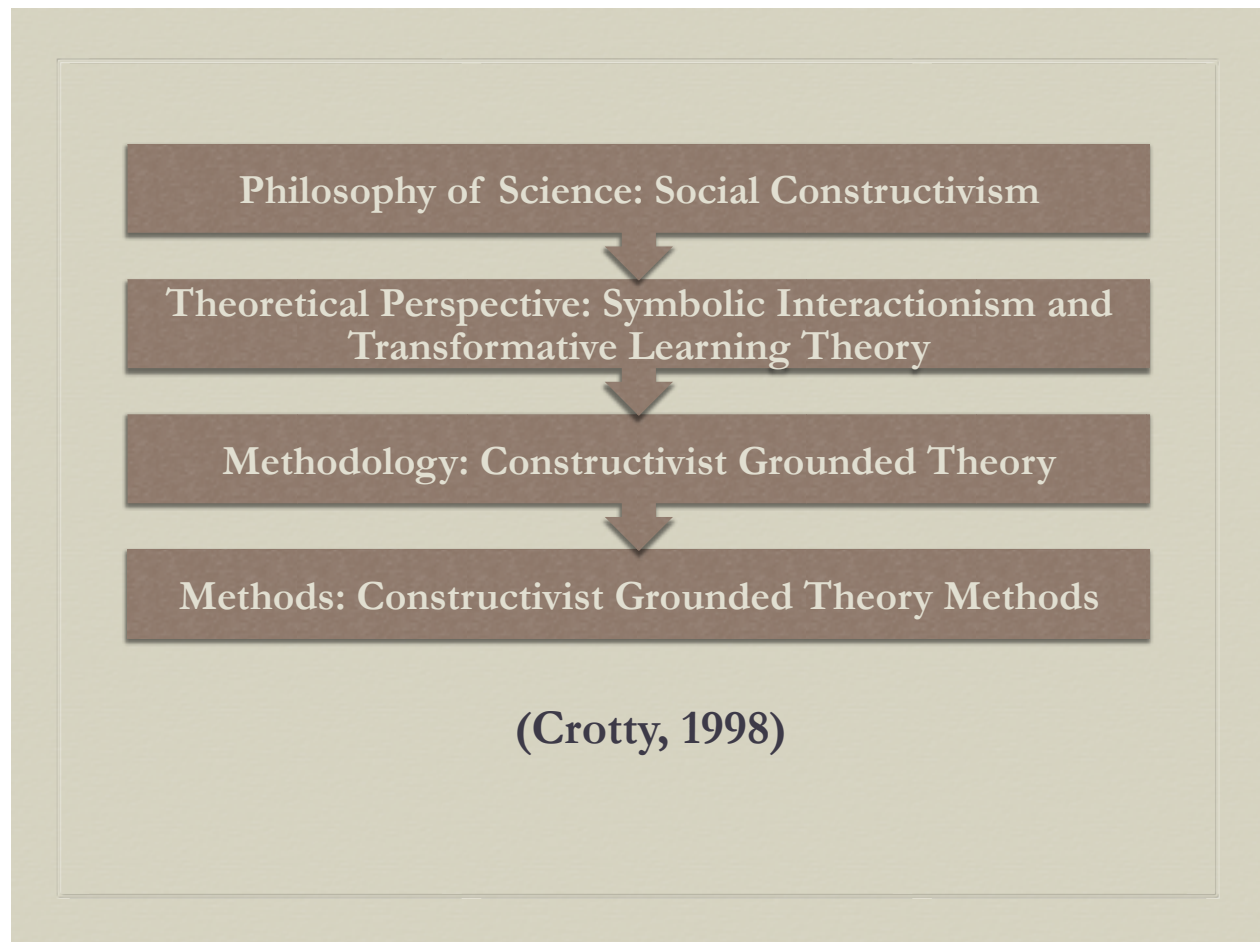
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Appendix A: Research Scaffold

Appendix B: Phases of a Perspective Transformation

1. The occurrence of a disorienting dilemma.
2. Self-examination with feelings of guilt and shame.
3. A critical assessment of personal, professional, or cultural assumptions.
4. Recognition of one's discontent, and that the process of transformation can be shared with others who have negotiated similar changes.
5. Exploration of options regarding new roles, behaviours, and relationships.
6. Planning a strategy for a course of action.
7. Acquiring necessary knowledge and skills for implementing the course of action.
8. Trying new roles and behaviours.
9. Developing competence and confidence in new roles and relationships.
10. Incorporating and integrating new perspectives into one's life.

(Mezirow, 1991)

Appendix C: Transformative Learning Theory: Types of Reflection/Transformations

Types of Reflections:

1. Reflection on content: thinking back on the experience and examining the content of the event or describing a problem. The learner may develop new meaning schemes (Kitchenham, 2008; Mezirow, 1991; Mezirow, 1995).
2. Reflection on process: examining one's problem-solving strategies used in an experience, and considering if there are other factors to be considered. The learner may develop new meaning schemes (Kitchenham, 2008; Mezirow, 1991; Mezirow, 1995).
3. Reflection on premises: checking on one's problem-solving strategies, or assessing them in light of one's larger value systems. Thus, the problem itself is actually critically examined. This type of critical reflection leads to a transformation of a meaning perspective (Kitchenham, 2008; Mezirow, 1991; Mezirow, 1995).

Types of Transformations:

1. Elaborating existing frames of reference.
2. Learning new frames of reference.
3. Transforming habits of mind.
4. Transforming points of view.

(Mezirow, 2000)

Further, perspective transformations can be sudden or cumulative (Morris & Faulk, 2012); thus, they may be epochal transformations in habits of the mind or incremental changes in points of view which eventually change a habit of the mind (Mezirow, 2000)



Appendix D: Letter Requesting Access to RRC Nursing Student Participants

College of Nursing

Dear (Name of Chair of Nursing Program),

I am a doctoral student in the College of Nursing at the University of Manitoba. I am writing to request access to nursing students enrolled at Red River College for research purposes. I am in the process of recruiting participants for my thesis research which will focus on the integration of the arts with nursing education. My research supervisor is Dr. Wanda Chernomas, and my committee members are Dr. Diana McMillan and Dr. Francine Morin.

The title of my study is “Nursing Students’ Experiences with Arts-based Pedagogy: A Constructivist Grounded Theory Study”. The purpose of my study is to explore the process of student learning through arts-based pedagogy in nursing education. Arts-based pedagogy [ABP] is a creative teaching strategy in which an art form is integrated with another subject matter to facilitate deep and meaningful student learning. If you would like, I could provide you with a summary of my research proposal. This study is part of my doctoral thesis, and would fulfill a partial requirement for a doctoral degree in nursing.

I am requesting permission to contact nursing course leaders and recruit nursing student research participants from two nursing courses at your educational institution. Each of the courses includes an arts-based student experience that I believe could provide rich data to assist me in answering my research question. The two courses are Issues, Politics, Public Policy and Professional Nursing (NRS 3005), in which the student create a photo-essay, and Community Clinical Nursing Practice 2 (NRS 3821), in which the students develop a creative reflection. I would like to conduct both in-class and email recruitment with the nursing students in these courses. For email recruitment, I am requesting that the course leader would send an invitation to the students through their Red River College email addresses.

The student participants would be invited to complete a socio-demographic questionnaire, participate in a 30-90 minute digitally recorded interview, and bring a photo(s) of their creative work to facilitate photo elicitation. The interview and photo elicitation conversations would be transcribed and anonymized in order to protect the students’ privacy. The socio-demographic data, interview data, photo elicitation data, and field notes will be stored on a password protected computer and will not contain the participant’s name. The University of Manitoba Education and Nursing Research Ethics Board, and Red River College Research Ethics Board have approved the ethics protocol, and a copy of their approval is attached.

I believe that the theoretical understanding developed in this study will provide insight into how nursing students learn through ABP, and will facilitate the implementation of ABP into nursing education. On completion of this project, I plan to disseminate the results through publications, presentations, and possibly a short video in order to share my findings with other nursing educators and researchers. I would be happy to provide any additional information about my work. Thank you for considering my request.

Sincerely,
Kendra Rieger, RN, BN, PhD (c)
Doctoral Student, University of Manitoba
Nursing Instructor, Red River College
Kendra.Rieger@umanitoba.ca

Research Supervisor:
Wanda Chernomas, RN, PhD
College of Nursing, University of Manitoba
Wanda.Chernomas@umanitoba.ca

Appendix E: Recruitment Script for the Red River College

Hello my name is _____, and I am a research assistant for a doctoral student at the University of Manitoba.

I am here to let you know about an upcoming study called: “Nursing Students’ Experiences with Arts-based Pedagogy: A Constructivist Grounded Theory Study”. The purpose of the study is to learn about how undergraduate students experience learning through the arts in nursing education.

I am inviting you to take part in this study by sharing about your own experience of the arts-based assignment that you completed in this course. If you choose to participate in this study, your involvement would include one interview with the researcher. The interview would be digitally recorded, and would take approximately 30-90 minutes of your time. The interview will be held at a time and place that is private and convenient for you and the researcher. You will be asked questions about your socio-demographic characteristics, and your experience of creating and presenting your arts-based assignment.

If you developed a creative reflection, the researcher will also ask you to bring a picture of your creative assignment to the interview, and will ask you a few questions about the photograph(s). This photo can simply be taken with your cell-phone camera or by a digital camera provided by the researcher. If you developed a photo-essay, the researcher will also ask you to bring your photo-essay to the interview, and will ask you a few questions about the photographs in your assignment.

Your interview will be audio-recorded and transcribed into a written document, and you will also have the opportunity to review your interview transcript, which can be emailed to you and would take about 15 minutes to review.

The researcher’s name is Kendra Rieger, who currently teaches in the Red River College nursing program but will not be teaching in any of your remaining courses in the program. She has designed the study to ensure that your confidentiality is protected at all times – before, during, and after this study. No faculty will have access to your responses if you choose to participate. You can also withdraw from the study at any time and there will be no repercussions for not participating.

In order to reimburse you for your time, \$25 will be offered to all participants. You will also be reimbursed if you have any costs related to parking. Remember, your involvement in this study is completely voluntary.

The study has been approved by the University of Manitoba Education and Nursing Research Ethics Board and the Red River College Research Ethics Board. If you have any concerns or complaints about this project you may contact Maggie Bowman, who is the Human Ethics Coordinator at the University of Manitoba. Her phone number and email are on the handouts that I will be distributing.

If you'd like to participate, you will have the opportunity to volunteer today. I will be handing out a response sheet and study information handout. If you are interested, please fill in your name and provide an email or phone number at which the researcher can contact you. If you choose to

participate, the researcher will contact you to schedule a time to meet with you to discuss the study and to ask you about your perspective of the assignment. You can still decline to participate when the researcher calls you to make an appointment. As you are deciding, I will leave the room and ask one student to circulate this envelope. Please return your response sheet to the envelope when it is passed around, even if you choose not to participate. You can keep the study information handout if you would like to do so. Could one student please volunteer to circulate and bring the envelope to me? Thank you. I will wait just outside the room. You will also be receiving a reminder invitation through your Red River email account which will contain the study information. If you need more time to decide if you would like to participate, you can respond to the follow-up email.

I hope you will consider participating. Do you have any questions for me at this time? Thank you so much.



College of Nursing

Appendix F: Response Form and Study Information for RRC Student Participants

Are you interested in participating?

Please check the appropriate box below to indicate if you would like to participate in this study. Thank you. I would like to participate in Kendra Rieger's study entitled:

**“Nursing Students’ Experiences with Arts-based Pedagogy:
A Constructivist Grounded Theory Study”**

YES _____

NO _____

If yes, please provide your name and phone number and/or email address.

My name is:

My signature:

My phone number is:

My email address is:

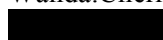
My preferred method of contact is:

The researcher will first attempt to contact you at your preferred method of contact. If you provide alternate contact information, she may also use that information to contact you about your involvement in the study.

Thank-you for your time and consideration,

Kendra Rieger
Primary Investigator
Doctoral Student, University of Manitoba
Kendra.Rieger@umanitoba.ca

Research Supervisor:
Wanda Chernomas, RN, PhD
College of Nursing, University of Manitoba
Wanda.Chernomas@umanitoba.ca



The research has been approved by the Education and Nursing Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons or the University of Manitoba's Human Ethics Coordinator (HEC) at 474-7122 or at margaret.bowman@umanitoba.ca.

If you would like to know more about the research study please read the following information.

Title: Nursing Students' Experiences with Arts-based Pedagogy: A Constructivist Grounded Theory Study

Researcher Contact Information:

Primary Investigator:

Kendra Rieger, RN, BN, PhD (c)

College of Nursing, University of Manitoba

email: Kendra.Rieger@umanitoba.ca

phone: [REDACTED]

Research Supervisor:

Wanda Chernomas, RN, PhD

College of Nursing, University of Manitoba

email: Wanda.Chernomas@umanitoba.ca

phone: [REDACTED]

The principal investigator (Kendra Rieger) is a doctoral student in the Ph.D. in Nursing program at the University of Manitoba. Kendra Rieger is also a nursing instructor at Red River College. This study is being conducted by the principal investigator in partial fulfillment of the degree requirements for a doctoral degree in nursing. Her research supervisor is Dr. Wanda Chernomas (College of Nursing), and her committee members are Dr. Diana McMillan (College of Nursing) and Dr. Francine Morin (Faculty of Education).

Sponsor: The primary investigator has received funding from a Canadian Institutes of Health Research Frederick Banting and Charles Best Canada Doctoral Graduate Scholarship, and a Faculty of Nursing Endowment Fund Graduate Student Research Grant.

Research Purpose

You are being asked to participate in a research study. The purpose of this study is to understand what it is like to learn through the arts in nursing education. The researchers would like to learn about this process through listening to participant's share their experiences of creating and presenting an arts-based assignment.

What would I have to do if I agree to participate?

If you agree to participate in this study you will meet with the primary investigator for a 30 to 90 minute interview to talk about your experience of participating in an arts-based assignment. The location for the interview will be one which is agreeable to you and the researcher, such as a private place at your educational institution, at a clinical facility, or at your home. Although the interviewer will ask you questions, it will be up to you to decide what you would like to share about your own experience. You may also refuse to answer a question if you like. Additionally, you will be invited to bring a digital picture(s) of your creative assignment, or to bring your photo-essay assignment, to discuss with the researcher. The picture(s) will be stored in an electronic format and linked to your interview transcript. You will also be asked information about your socio-demographic characteristics. This interview will be digitally recorded and then transcribed into a written document (transcript) at a later time by a transcriptionist. If you would like, the transcript from your interview can be emailed to you for review.

The transcript would take about 15 minutes to review and you could correct errors, clarify information, and delete/add information. You will be given one week to send the reviewed transcript back to the researcher, and if you do not send it back it will be assumed that you do not want any changes.

Are there any risks if I take part?

No serious adverse effects are expected to take place. Participation in the study involves a time commitment, and may also include potential costs associated with travel and parking. If you find the interview stressful or difficult, you will have a choice of either taking a break or ending the interview.

What are the benefits?

If you choose to participate in this study there may or may not be a direct benefit to you. Some studies show that participants find sharing their story helpful, as it helps them to make sense of what they have experienced and also to feel supported by another person. Also, study participants often feel grateful for the opportunity to contribute to knowledge development through a scientific study. You may also develop a deeper understanding of the nursing practice experience/issue that you reflected upon in your assignment and also learn more about the research process through your involvement in this study.

Will I be paid for participating in this study?

You will be given \$25 to thank you for your time for participating in this study. As well, any costs associated with parking will be reimbursed.

Will my records be kept private?

Only the primary investigator and her supervisor will have access to the confidential information that you provide. Her committee members will have access to the anonymized data only. The transcriptionist will have access to the digital recordings of the interviews which may contain identifying information. Thus, the transcriptionist will be instructed about confidentiality in research and will sign a confidentiality pledge. The transcriptionist will not keep any digital recordings or transcripts after they have been given to the primary investigator. The transcriptionist will work in a private space and/or use headphones when transcribing your recorded interview. The written record of your participation will be kept confidential by storing it in a locked cabinet in the home office of the researcher. The recording of your interview will be kept in a password-protected computer program on a password-protected laptop computer and on the password protected network drive at the University of Manitoba. Any photographs of your assignment will be kept in a password-protected computer program on a password-protected computer and linked to your transcript. This information will be stored for seven years after the research is completed, and the written data will be disposed as confidential waste and the electronic data will be deleted within seven years of the completion of the research. The data will be kept for this time period in order to enable manuscript publication, presentations, and future grant applications which build upon this study. Your name will only be on the informed consent form and a separate document which lists participants' names and assigned codes. All other documentation will only contain that code, and your name will not appear in the transcript.

The findings of this study may be published in an academic journal and presentations will be given both locally and nationally. In any publications or presentations about the study findings, the researchers will ensure that your identity remains confidential. Your name will not be used. Care will be taken to ensure that any quotes used from the data to present the study findings contain no identifying information in order to protect your privacy.

The researcher has asked you to bring a photograph, or your photo-essay to the interview. It is possible that the researcher may want to use the photograph(s) that you provide in a publication, presentation, or video. Diligent care will be taken to ensure that the photographs do not contain any details through which you or another individual could be identified. If it does, the photographs could be anonymized with strategies such as pixilation or blurring. Of note even with these strategies, your classmates or instructors may be able to recognize the photograph(s) of your creative work if you give consent for it to be used in publications and presentations. Thus, you will be able to indicate if you are willing to have these photographs used in publications, presentations, and/or videos.

Will I be able to talk about the interview after it is finished?

At the end of the interview you will be asked how you are feeling and how you found the interview. This will give you the opportunity to talk about your feelings, thoughts, and/or concerns about the interview with the primary investigator immediately following the interview.

Can I withdraw from the study?

Participation in this study is completely voluntary, and you may refuse to participate or withdraw from the study at any time, with no repercussions. To withdraw from participating in this research, you just have to let the primary investigator know about your decision by telephone or email. Withdrawing from the study, or declining to answer a certain question, will in no way affect your standing as a nursing student. If you withdraw from the study, all of your data will be destroyed and you will still receive the \$25 honorarium and the reimbursement for your parking costs.

Who do I contact if I have questions?

If you have questions about the study, either during or after the study is completed you can contact the primary investigator, Kendra Rieger, on her phone ([REDACTED]) or by email (Kendra.Rieger@umanitoba.ca), or her research supervisor, Wanda Chernomas, on her phone ([REDACTED]) or by email (Wanda.Chernomas@umanitoba.ca).

Additional Information

The research has been approved by the Education and Nursing Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons or the University of Manitoba's Human Ethics Coordinator (HEC) at 474-7122 or at margaret.bowman@umanitoba.ca.

Appendix G: Follow-up Email for Red River College Nursing Students

Dear Student,

You may have already indicated your interest in participating in the study “Nursing Students’ Experiences with Arts-based Pedagogy: A Constructivist Grounded Theory Study”. If not, this message reminder is being sent to you to ask you to consider participating in this study. If you are interested in participating, please follow this link to review the information presented in-class, indicate your interest, and provide your contact information: (Link inserted here to the response form and study information in Appendix G).

Thank you for considering this request.

Kendra Rieger
Primary Investigator
Doctoral Student, University of Manitoba



Would you like to participate in a research study?

This study is investigating the experiences of nursing students with arts-based assignments in nursing education. You will be asked to share about your experience in one 30-90 minutes interview at a mutually convenient location, and you will be offered \$25 in compensation for your time.

Recently you received an in-class invitation to participate in the study “Nursing Students’ Experiences with Arts-based Pedagogy: A Constructivist Grounded Theory Study”. You may have already indicated your interest in participating in this study. If not, this message reminder is being sent to you to ask you to consider participating in this study.

If you are interested in participating, please follow the link provided to review the information presented in-class, indicate your interest, and provide your contact information.

The Education Nursing Research Ethics Board has approved this study. If you have any concerns or complaints about this project you may contact the Human Ethics Coordinator at 204.474.7122 or at margaret.bowman@umanitoba.ca.

If you would have questions about this study, please contact
Kendra Rieger at Kendra.Rieger@umanitoba.ca



Appendix H: University of Manitoba Email Recruitment



Would you like to participate in a research study?

Nursing Students' Experiences with
Arts-based Pedagogy:
A Constructivist Grounded Theory
Study



My name is Kendra Rieger and I am a doctoral student from the University of Manitoba. I am writing to invite you to participate in my research study about the use of the arts in nursing education. The purpose of the study is to learn how undergraduate students experience learning through the arts in nursing education. You are eligible to be in this study because you are a nursing student who has created an arts-based project.

If you decide to participate in this study, you will be asked to come to a face-to-face meeting with myself, the researcher. At this meeting you will be asked to complete a socio-demographic questionnaire, and engage in a 30 to 90 minute interview in which we discuss your experience of participating in this assignment. You will also be asked to bring a photograph(s) of your creative work to the interview and will be asked questions about the photograph(s).

The interview will be held at a time and place that is private and convenient for you and the researcher. In order to reimburse you for your time, \$25 will be offered to all participants. You will also be reimbursed if you have any costs related to parking. Remember, your involvement in this study is completely voluntary.

I have designed the study to ensure that your confidentiality is protected at all times – before, during, and after this study. The Manitoba Centre for Nursing and Health Research staff will manage the recruitment to ensure your privacy and confidentiality. The Education Nursing Research Ethics Board has approved this study. If you have any concerns or complaints about this project you may contact the Human Ethics Coordinator at 204.474.7122 or at margaret.bowman@umanitoba.ca.



If you are interested in participating, please follow this link for more study information and to indicate your interest (Link through [Fluidsurveys.com](https://fluidsurveys.com) to Appendix G)

Appendix I: Letter Requesting Access to RRC Nursing Instructor Participants



(date)

Chair of Nursing, Red River College

Dear Ms. [REDACTED],

I am a doctoral student in the College of Nursing at the University of Manitoba. I previously requested access to nursing students enrolled at Red River College for research purposes. I would like to now request your permission to interview nursing instructors. As described in my previous email, my thesis research will focus on the integration of the arts with nursing education. My research supervisor is Dr. Wanda Chernomas, and my committee members are Dr. Diana McMillan and Dr. Francine Morin. The purpose of my study is to explore the process of student learning through arts-based pedagogy in nursing education. This study is part of my doctoral thesis, and will fulfill a partial requirement for a doctoral degree in nursing.

I am requesting permission to contact course leaders/nursing instructors from the two courses from which I have recruited the nursing student participants. The two courses are Issues, Politics, Public Policy and Professional Nursing (NRSG 3005), in which the student create a photo-essay, and Community Clinical Nursing Practice 2 (NRSG 3821), in which the students develop a creative reflection. I would like to conduct both email and mail recruitment with the course leaders/nursing instructors. For email recruitment, I am requesting that you would send the attached letter of invitation (Appendix K, L, and M) to the course leaders/nursing instructors through their Red River College email addresses. Could you please send this email from your administrative assistant's email account, instead of from your own email address, in order to avoid any perceived coercion to participate in the study? Additionally, I would like to leave a letter of invitation in the course leaders/nursing instructors' mailboxes. The course leaders/nursing instructors will be able to respond to the invitation by following a link to a Fluidsurvey online response form (managed by the Manitoba Centre for Nursing and Health Research), emailing me, or returning their paper response to my Red River College mail box. Please find the email and mail recruitment documents attached for your reference (Appendices K, L, M, and N).

The course leader/nursing instructor participants would be invited to complete a socio-demographic questionnaire and participate in a 60-90 minute digitally recorded interview. The interview would be transcribed and anonymized in order to protect the participants' privacy. The socio-demographic data, interview data, and field notes will be stored on a password protected computer and will not contain the participant's name. The University of Manitoba Education and Nursing Research Ethics Board and Red River College Research Ethics Board have approved the

original ethics protocol, and the amendment requesting interviews with nursing instructors, and a copy of their approval is attached.

I believe that the theoretical understanding developed in this study will provide insight into how nursing students learn through ABP, and will facilitate the implementation of ABP into nursing education. On completion of this project, I plan to share my findings with other nursing educators and researchers. I would be happy to provide any additional information about my work. Could you please email me to let me know if you are willing to grant my request to interview course leaders/nursing instructors? Thank you for considering my request.

Sincerely,
Kendra Rieger, RN, BN, PhD (c)
Doctoral Student, University of Manitoba
Nursing Instructor, Red River College
Kendra.Rieger@umanitoba.ca
[REDACTED]

Research Supervisor:
Wanda Chernomas, RN, PhD
College of Nursing, University of Manitoba
Wanda.Chernomas@umanitoba.ca
[REDACTED]

Appendix J: Email Letter of Invitation for Nursing Instructors

Dear Faculty Member,

I am emailing to invite you to participate in my research study entitled, “Nursing Students’ Experiences with Arts-based Pedagogy: A Constructivist Grounded Theory Study”. The purpose of my qualitative study is to explore how undergraduate students experience learning through the arts in nursing education. This study is part of my doctoral thesis, and would fulfill a partial requirement for a doctoral degree in nursing at the University of Manitoba.

I am inviting you to participate because you are involved with an arts-based assignment at RRC, either the creative reflection (NRSB 3821) or the photo-essay (NRSB 3005). If you decide to participate in this study, your involvement would include one 60 to 90 minute interview with me in which we would discuss your perspective of the arts-based assignment and the student experience of it. The interview will be held at a time and place that is private and convenient for you. In order to reimburse you for your time, \$25 will be offered to all participants. More information about the study is available in the attached document (the study information in Appendix L will be attached to this email).

If you are interested in participating, please email me at krieger@rrc.ca or Kendra.Rieger@umanitoba.ca, or follow this link to indicate your interest: (link to Fluidsurvey which will contain the participant response form in Appendix M and the study information in Appendix L). I will also be leaving an invitation in your RRC mailbox, in case you prefer to respond in writing. If you indicate interest, I will contact you to answer any questions you may have and to schedule the interview. Please remember that your participation is voluntary and you are under no obligation to participate. Thank you for considering my request.

Sincerely,
Kendra

Kendra Rieger, RN, BN, PhD (c)
Doctoral Student, University of Manitoba
Nursing Instructor, Red River College
Kendra.Rieger@umanitoba.ca
[REDACTED]

Research Supervisor:
Wanda Chernomas, RN, PhD
College of Nursing, University of Manitoba
Wanda.Chernomas@umanitoba.ca
[REDACTED]

The research has been approved by the Education and Nursing Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons or the University of Manitoba’s Human Ethics Coordinator (HEC) at 474-7122 or at margaret.bowman@umanitoba.ca.

Appendix K: Additional Study Information for RRC Nursing Instructors



College of Nursing

If you would like to know more about the research study please read the following information.

Title: Nursing Students' Experiences with Arts-based Pedagogy: A Constructivist Grounded Theory Study

Researcher Contact Information:

Primary Investigator:

Kendra Rieger, RN, BN, PhD (c)

College of Nursing, University of Manitoba

email: Kendra.Rieger@umanitoba.ca

phone: [REDACTED]

Research Supervisor:

Wanda Chernomas, RN, PhD

College of Nursing, University of Manitoba

email: Wanda.Chernomas@umanitoba.ca

phone: [REDACTED]

The principal investigator (Kendra Rieger) is a doctoral student in the Ph.D. in Nursing program at the University of Manitoba. Kendra Rieger is also a nursing instructor at Red River College. This study is being conducted by the principal investigator in partial fulfillment of the degree requirements for a doctoral degree in nursing. Her research supervisor is Dr. Wanda Chernomas (College of Nursing), and her committee members are Dr. Diana McMillan (College of Nursing) and Dr. Francine Morin (Faculty of Education).

Sponsor: The primary investigator has received funding from a Canadian Institutes of Health Research Frederick Banting and Charles Best Canada Doctoral Graduate Scholarship, and a Faculty of Nursing Endowment Fund Graduate Student Research Grant.

Research Purpose

You are being asked to participate in a research study. The purpose of this study is to understand what it is like to learn through the arts in nursing education. The researchers would like to learn about this process through listening to students and educators share about the experience of creating and presenting an arts-based assignment.

What would I have to do if I agree to participate?

If you agree to participate in this study you will meet with the primary investigator for a 60 to 90 minute interview to talk about your perspective of the student learning process with arts-based pedagogy [ABP] and of the ABP assignment. The location for the interview will be one which is agreeable to you and the researcher, such as a private place at your educational institution, at a clinical facility, or at your home.

During the interview the primary investigator will ask you a number of open-ended questions. For example, you will be asked about your perspective of the students' experience of participating in an arts-based assignment, your thoughts and feelings about the assignment, and the challenges you encountered in using this assignment as an educator. Although the interviewer will ask you questions, it will be up to you to decide what you would like to share. You may also refuse to answer a question if you like. You will also be asked information about your socio-demographic characteristics such as your age, gender, and years of teaching in the nursing program. This interview will be digitally recorded and then transcribed into a written document (transcript) at a later time by a transcriptionist. If you would like, the transcript from your interview can be emailed to you for review. The transcript would take about 15 minutes to review and you could correct errors, clarify information, and delete/add information. You will be given one week to send the reviewed transcript back to the researcher, and if you do not send it back it will be assumed that you do not want any changes. The primary investigator will also take notes about the interview and the environment in which it took place, and these field notes will be stored and analyzed along with your interview transcript.

Are there any risks if I take part?

No serious adverse effects are expected to take place. Participation in the study involves a time commitment, and may also include potential costs associated with travel and parking. If you find the interview stressful or difficult, you will have a choice of either taking a break or ending the interview.

What are the benefits?

If you choose to participate in this study there may or may not be a direct benefit to you. Some studies show that participants find sharing their story helpful, as it helps them to make sense of what they have experienced and also to feel supported by another person. Also, study participants often feel grateful for the opportunity to contribute to knowledge development through a scientific study.

Will I be paid for participating in this study?

You will be given \$25 to thank you for your time for participating in this study. As well, any costs associated with parking will be reimbursed.

Will my records be kept private?

Only the primary investigator and her supervisor will have access to the confidential information that you provide. Her committee members will have access to the anonymized data only. The transcriptionist will have access to the digital recordings of the interviews which may contain identifying information. Thus, the transcriptionist will be instructed about confidentiality in research and will sign a confidentiality pledge. The transcriptionist will not keep any digital recordings or transcripts after they have been given to the primary investigator. The transcriptionist will work in a private space and/or use headphones when transcribing your recorded interview. The written record of your participation will be kept confidential by storing it in a locked cabinet in the home office of the researcher. The recording of your interview will be kept in a password-protected computer program on a password-protected laptop computer and on the password protected network drive at the University of Manitoba. This information will be stored for seven years after the research is completed, and the written data will be disposed as confidential waste and the electronic data will be deleted within seven years of the completion of the research. The data will be kept for this time period in order to enable manuscript publication, presentations, and future grant applications which build upon this study. Additionally, the researcher may conduct a secondary analysis of the data about a related, yet slightly different, research question. One example of a secondary analysis which could be conducted is: "What are the challenges of implementing arts-based pedagogy from educators"

perspectives?” Your name will only be on the informed consent form and a separate document which lists participants’ names and assigned codes. All other documentation will only contain that code, and your name will not appear in the transcript.

The findings of this study may be published in an academic journal and presentations will be given both locally and nationally. In any publications or presentations about the study findings, the researchers will ensure that your identity remains confidential. Your name will not be used. Care will be taken to ensure that any quotes used from the data to present the study findings contain no identifying information in order to protect your privacy.

Will I be able to talk about the interview after it is finished?

At the end of the interview you will be asked how you are feeling and how you found the interview. This will give you the opportunity to talk about your feelings, thoughts, and/or concerns about the interview with the primary investigator immediately following the interview.

Can I withdraw from the study?

Participation in this study is completely voluntary, and you may refuse to participate or withdraw from the study at any time, with no repercussions. To withdraw from participating in this research, you just have to let the primary investigator know about your decision by telephone or email. Withdrawing from the study, or declining to answer a certain question, will in no way affect your standing as a nursing instructor. If you withdraw from the study, all of your data will be destroyed and you will still receive the \$25 honorarium and the reimbursement for your parking costs.

Who do I contact if I have questions?

If you have questions about the study, either during or after the study is completed you can contact the primary investigator, Kendra Rieger, on her phone ([REDACTED]) or by email (Kendra.Rieger@umanitoba.ca), or her research supervisor, Wanda Chernomas, on her phone ([REDACTED]) or by email (Wanda.Chernomas@umanitoba.ca).

Additional Information

The research has been approved by the Education and Nursing Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons or the University of Manitoba’s Human Ethics Coordinator (HEC) at 474-7122 or at margaret.bowman@umanitoba.ca.



College of Nursing

Appendix L: Participant Response Form for RRC Nursing Instructor Participants

Are you interested in participating?

Please check the appropriate box below to indicate if you would like to participate in this study. Thank you. I would like to participate in Kendra Rieger's study entitled:

“Nursing Students’ Experiences with Arts-based Pedagogy: A Constructivist Grounded Theory Study”

YES _____

NO _____

If yes, please provide your name and phone number and/or email address.

My name is:

My signature:

My phone number is:

My email address is:

My preferred method of contact is:

The researcher will first attempt to contact you at your preferred method of contact. If you provide alternate contact information, she may also use that information to contact you about your involvement in the study.

Thank-you for your time and consideration,

Kendra Rieger
Primary Investigator
Doctoral Student, University of Manitoba
Kendra.Rieger@umanitoba.ca

Research Supervisor:
Wanda Chernomas, RN, PhD
College of Nursing, University of Manitoba
Wanda.Chernomas@umanitoba.ca



The research has been approved by the Education and Nursing Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons or the University of Manitoba's Human Ethics Coordinator (HEC) at 474-7122 or at margaret.bowman@umanitoba.ca



Appendix M: Mailbox Letter of Invitation for Nursing Instructors

College of Nursing

Dear Faculty Member,

I am inviting you to participate in my research study entitled, “Nursing Students’ Experiences with Arts-based Pedagogy: A Constructivist Grounded Theory Study”. The purpose of my qualitative study is to explore how undergraduate students experience learning through the arts in nursing education. This study is part of my doctoral thesis, and would fulfill a partial requirement for a doctoral degree in nursing at the University of Manitoba.

I am inviting you to participate because you are involved with an arts-based assignment at RRC, either the creative reflection (NRSG 3821) or the photo-essay (NRSG 3005). If you decide to participate in this study, your involvement would include one 60 to 90 minute interview with me in which we would discuss your perspective of the arts-based assignment and the student experience of it. The interview will be held at a time and place that is private and convenient for you. In order to reimburse you for your time, \$25 will be offered to all participants. More information about the study is available in the attached document (the study information in Appendix L will be attached to this letter of invitation).

If you are interested in participating, please fill out the participant response (the participant response form in Appendix M will be attached to this letter) and return it to my RRC mailbox in the enclosed envelope. Alternatively, you can email me at krieger@rrc.ca or Kendra.Rieger@umanitoba.ca. If you indicate interest, I will contact you to answer any questions you may have and to schedule the interview. Please remember that your participation is voluntary and you are under no obligation to participate. Thank you for considering my request.

Sincerely,
Kendra

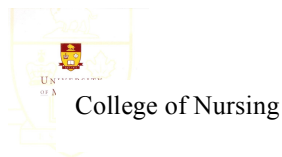
Kendra Rieger, RN, BN, PhD (c)
Doctoral Student, University of Manitoba
Nursing Instructor, Red River College
Kendra.Rieger@umanitoba.ca

Research Supervisor:
Wanda Chernomas, RN, PhD
College of Nursing, University of Manitoba
Wanda.Chernomas@umanitoba.ca

The research has been approved by the Education and Nursing Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons or the University of Manitoba’s Human Ethics Coordinator (HEC) at 474-7122 or at margaret.bowman@umanitoba.ca

Appendix N: Summary of Recruitment and Interview Process

Recruitment Date/ ABP Experience/ Volunteers/ (Potential Pool of Participants)	Interviews and Dates	Photo Essay (n) PS: purposive sampling TS: theoretical sampling			Creative Reflection (n) PS: purposive sampling TS: theoretical sampling			Instructors (n)	Total (N)
		PS	TS	Total	PS	TS	Total	Total	
February 4, 2015 photo essay 13 volunteers (43 students in course)	5 interviews in Feb/2015 1 interview in June/2015	5	1	6	0	0	0		6
February 18, 2015 creative reflection 16 volunteers (48 students in course)	6 interviews in March/2015 3 interviews in May/2015	5	1	6	6	3	9		15
May 6, 2015 photo essay 5 volunteers (47 students in course)	5 interviews in May/June, 2015	5	6	11	6	5	11		22
May 20, 2015 creative reflection 9 volunteers (45 students in course)	7 interviews in June/July, 2015	5	6	11	6	13	19		30
October 14, 2015 photo essay 15 volunteers (51 students in course)	4 interviews in October 2015	5	10	15	6	13	19		34
October/November 2015 instructor interviews 9 volunteers (2 photo essay and 8 creative reflection instructors)	2 interviews in October, 3 in November, and 3 in December.							8	42



Appendix O: Socio-demographic Form for Nursing Students

1. Please tell me your age in years.

2. What do you identify as your gender?

3. Which of the following best describes your population group?

___ Arab/West Asian

___ Asian

___ Black

___ First Nations

___ Inuit

___ Métis

___ Latin American

___ White (Caucasian)

___ Other (please specify) _____

(Statistics Canada, 2014)

4. How many years of post-secondary education did you have before starting the nursing program?

5. How many years have you been in the nursing program (including the current year)?

6. How many arts-based assignments have you participated in during your nursing education?

7. Which is the most recent arts-based assignment that you have participated in?

8. Please indicate your view on the value of this assignment in this nursing course:

not valuable _____ extremely valuable

9. In this study, participants will be identified by a pseudonym of their own choosing in order to protect their identity. What would you prefer to be called in this study?

Participant's code number _____



Appendix P: Socio-demographic Form for Nursing Instructors

College of Nursing

1. Please tell me your age in years.

2. What do you identify as your gender?

3. Which of the following best describes your population group?

☐ Arab/West Asian

☐ Asian

☐ Black

☐ First Nations

☐ Inuit

☐ Métis

☐ Latin American

☐ White (Caucasian)

☐ Other (please specify) _____

4. How many years have you been a nurse?

5. How many years have you been a nursing educator in total (including the current year)?

6. How many years have you been teaching in the Red River College nursing program (including the current year)?

7. How many arts-based assignments or experiences have you worked with in your teaching practice?

8. Which arts-based assignment is in your present course?

9. Please indicate your view on the value of the assignment in this nursing course:

not valuable _____ extremely valuable

10. In this study, participants will be identified by a pseudonym of their own choosing in order to protect their identity. What would you prefer to be called in this study?

Participant's code number _____

Appendix Q: Semi-structured Interview Questions and Prompts for Nursing Students



College of Nursing

This interview guide provides a listing of broad questions with prompts that are more focused. After posing the initial question, the interviewer will pose subsequent questions based on how the interviewee responds.

Date: _____
 Start time: _____
 End time: _____
 Duration of interview: _____
 Participant's code number: _____

I would like to begin by inviting you to describe your experience of participating in this assignment.
 Clarify which ABP assignment we are discussing.

Tell me about the thoughts and feelings you had when you learned about this assignment.
 What influenced your initial thoughts about the assignment?
 How do you think that your view of the arts influenced this initial reaction?
 How did your initial thoughts impact your attitude or effort towards this assignment?

Can you explain your assignment that is in the photograph(s) to me?

How did you go about creating this assignment (refer to photograph)?
 Why did you choose the particular art form/pictures/music that you did?
 As you look back on the work you have done, what stands out to you?
 What were the most challenging points in the development of this assignment?

What, if anything, did you learn through this assignment?
 Can you describe something that changed in the way you think about nursing or nursing practice?
 Can you describe any changes of perspective that you have had as a result of this assignment? The group presentation?

What was challenging for you about this assignment?
 What was the most challenging aspect of this assignment?
 How did you deal with this challenge?
 What or who helped you to face the challenges of this assignment?
 Why do you think some students might not like this assignment?

How has your view of the assignment changed over the course?
 How did interaction with your instructor and/peers influence your thoughts about this assignment? Influence the creation of your assignment?
 How have your thoughts and feelings changed about ABP as you have worked on this project?

If they have changed, what influenced this change?

How was creating this assignment different than a written assignment/reflection?

How did using an art form impact your ability to reflect on nursing issues or nursing practice?

Can you describe how the arts changed your reflection on nursing practice?

How was it similar to a written reflection or assignment?

How did this assignment compare to other creative assignments in the nursing program?

How did sharing your assignment with others affect you?

What did you learn from other's comments about your assignment?

What was your experience of listening to others share about their creative assignment?

What stood out to you about the group presentation/seminar?

Do you think this experience will impact your future nursing care? If so, how?

How did creating this assignment influence how you see yourself as a nurse?

How did this assignment impact your perspective on nursing practice?

Who has been the most helpful to you while working on this project?

How have they been helpful?

Who has been the least helpful?

How were they unhelpful?

What has your experience been with your nursing instructor throughout this process?

How did you experience the evaluative component of the assignment?

Overall, what do you think about using the arts in nursing education?

Please describe any other time during this course when your instructor used the arts in their teaching or in the class/seminar discussions.

How have your instructors used the arts in any of their interactions with you?

What other experiences have you had with the arts in your nursing program?

What advice would you give to a nursing student just starting their artistic assignment?

Is there anything else you would like to tell me?

Appendix R: Revised Semi-structured Interview Questions and Prompts for Nursing Students



College of Nursing

This interview guide provides a listing of broad questions with prompts that are more focused. After posing the initial question, the interviewer will pose subsequent questions based on how the interviewee responds.

Date: _____
 Start time: _____
 End time: _____
 Duration of interview: _____
 Participant's code number: _____

I would like to begin by inviting you to describe your overall experience of participating in this assignment.

What were your initial thoughts and feelings, when you first learned about this assignment?
 What do you think influenced your initial thoughts about the assignment?

How do you think that your view of the arts influenced your initial reaction?
 What is your personal experience with the arts?
 Do you view yourself as a creative person? Why or why not?

Can you explain your assignment that is in the photograph(s) to me?

How did you go about creating this assignment (refer to photograph)?
 Why did you choose the particular topic/art form/pictures/music that you did?
 (photo essay) How did you go about finding or taking the pictures?
 (photo essay) What was your experience of creating with a group of people?
 As you look back on the work you have done, how do you feel about it?

What, if anything, did you learn through this assignment?
 Can you describe any changes of perspective that you have had as a result of this assignment?
 Can you identify any skills that you developed which will help you in your future nursing practice?
 What, if any, conversations helped you to reflect or learn during this process?
 Do you think this experience will impact your future nursing care? If so, how?

What was challenging for you about this assignment?
 Can you describe any negative impact from participating in this assignment?

What was most stressful for you about this assignment?
 (photo essay) What were the challenges of creating with a group of people?
 How did you deal with this challenge?

Why do you think some students might not like this assignment?
 Why do you think some students prefer arts-based assignments?

How has your view of the assignment changed over the course?
 When did you notice your view changing?
 What do you think caused the change?
 What was happening at that time?
 How did interaction with your instructor and/peers influence your thoughts about this assignment?

How was creating this assignment different than a written assignment/reflection?
 How did using an art form impact your ability to reflect on nursing issues or nursing practice?
 Can you describe how the arts changed your reflection on nursing practice?
 How was it similar to a written reflection or assignment?

How did sharing your assignment with others in the seminar affect you?
 What did you learn from other's comments about your assignment?
 What was your experience of listening to others share about their creative assignment?
 What stood out to you about the group presentation/seminar?

What has your experience been with your nursing instructor throughout this process?
 What did she/he do that was helpful? Not helpful?
 How did you experience the evaluative component of the assignment?
 How would you assess your own ABP assignment?

How did this assignment compare to other creative assignments in the nursing program?
 Which one did you value more, and why?
 How did your learning compare between the assignments?
 How are the assignments different? Similar?

Overall, what do you think about using the arts in nursing education?
 What do you think the arts bring to nursing education? To the development of nursing students?
 Do you have any concerns about the use of the arts in nursing education?

What advice would you give to a nursing student just starting their artistic assignment?
 What advice would you give to a student about working with an art form?
 What advice would you give to nursing instructors about supporting students in this assignment?

Can you tell me about your interest in participating in this study?

Is there anything else you would like to tell me?

Appendix S: Semi-structured Interview Questions and Prompts for Nursing Instructors

This interview guide provides a listing of broad questions with prompts that are more focused. After posing the initial question, the interviewer will pose subsequent questions based on how the interviewee responds.

Date: _____
 Start time: _____
 End time: _____
 Duration of interview: _____
 Participant's code number: _____

I would like to begin by inviting you to describe your overall perspective of how students experience the ABP assignment.

Can you describe one assignment which stood out to you as a strong assignment? Weak assignment?

What do you observe about students' initial thoughts and feelings when they learn about this assignment?
 What do you think influences their initial thoughts about the assignment?

What, if anything, do you think students learn through this assignment?
 Can you describe any changes of perspective that students have as a result of this assignment?
 Do you think this experience impacts the students' future nursing care? If so, how?

What do you see as the key stages/junctures in the student process of creating and sharing this ABP assignment?

What do you think students find challenging about this assignment?
 Can you describe any negative impact from participating in this assignment?
 What is the most stressful aspect of this assignment for students?

Why do you think some students might not like this assignment?
 Why do you think some students prefer arts-based assignments?

How do you think that the students' view of the assignment changes over the course?
 When did you notice their view changing?
 What was happening at the time?
 What do you think caused this change?

How did you think students' interaction with their peers influences their thoughts about this assignment?

How do you think creating this assignment is different than a written assignment/reflection?
 How does using an art form impact the students' ability to reflect on nursing issues or nursing practice?

How do you think the students find the seminar/presentation?
 What do you think they learn from the group seminar/presentation?
 What stands out to you about the group presentation/seminar?

Here is a visual diagram that represents the preliminary findings from the student interviews (show and explain visual diagram). What are your thoughts about these findings?

What do you see as the most influential factors affecting students' experience of the assignment?
What surprises you about these findings?
What do you especially agree with and why?

Can you describe how you support students through this assignment?
What do you think is the most helpful for students?
What are your thoughts on the evaluative component of the assignment?

What is challenging about this assignment for the educator?

What, if anything, do you value about this assignment as an educator?

Overall, what do you think about using the arts in nursing education?
What do you think the arts bring to nursing education? To the development of nursing students?
Do you have any concerns about the use of the arts in nursing education?

What advice would you give to a nursing student just starting their artistic assignment?
What advice would you give to a student about working with an art form?
What advice would you give to nursing instructors about supporting students in this assignment?

Can you tell me about your interest in participating in this study?

Is there anything else you would like to tell me?

Appendix T: Constructivist Grounded Theory Evaluation Criteria and Questions

Credibility

- Has your research achieved intimate familiarity with the setting or topic?
- Are the data sufficient to merit your claims? Consider the range, number, and depth of observations contained in the data.
- Have you made systematic comparisons between observations and between categories?
- Do the categories cover a wide range of empirical observations?
- Are there strong logical links between the gathered data and your argument and analysis?
- Has your research provided enough evidence for your claims to allow the reader to form an independent assessment – and agree with your claims?

Originality

- Are your categories fresh? Do they offer new insights?
- Does your analysis provide a new conceptual rendering of the data?
- What is the social and theoretical significance of this work?
- How does your grounded theory challenge, extend, or refine current ideas, concepts, and practices?

Resonance

- Do the categories portray the fullness of the studied experience?
- Have you revealed both liminal and unstable taken-for-granted meanings?
- Have you drawn links between larger collectivities or institutions and individual lives, when the data so indicate?
- Does your grounded theory make sense to your participants or people who share their circumstances? Does your analysis offer them deeper insights about their lives and worlds?

Usefulness

- Does your analysis offer interpretations that people can use in their everyday worlds?
- Do your analytic categories suggest any generic processes?
- If so, have you examined these generic processes for tacit implications?
- Can the analysis spark further research in other substantive areas?
- How does your work contribute to knowledge? How does it contribute to making a better world?

(Charmaz, 2014, p. 337-338)



Appendix U: Informed Consent Form for Nursing Students

College of Nursing

Research Project Title: Nursing Students' Experiences with Arts-based Pedagogy: A Constructivist Grounded Theory Study

Researcher Contact Information:

Primary Investigator:

Kendra Rieger, RN, BN, PhD (c)

College of Nursing, University of Manitoba

email: Kendra.Rieger@umanitoba.ca

phone: [REDACTED]

Research Supervisor:

Wanda Chernomas, RN, PhD

College of Nursing, University of Manitoba

email: Wanda.Chernomas@umanitoba.ca

phone: [REDACTED]

The principal investigator (Kendra Rieger) is a doctoral student in the Ph.D. in Nursing program at the University of Manitoba. Kendra Rieger is also a nursing instructor at Red River College. This study is being conducted by the principal investigator in partial fulfillment of the degree requirements for a doctoral degree in nursing. Her research supervisor is Dr. Wanda Chernomas (College of Nursing), and her committee members are Dr. Diana McMillan (College of Nursing) and Dr. Francine Morin (Faculty of Education).

Sponsor: The primary investigator has received funding from a Canadian Institutes of Health Research Frederick Banting and Charles Best Canada Doctoral Graduate Scholarship, and a Faculty of Nursing Endowment Fund Graduate Student Research Grant.

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

Research Purpose

You are being asked to participate in a research study. The purpose of this study is to understand what it is like to learn through the arts in nursing education. The researchers would like to learn about this process through listening to participant's share their experiences of creating and presenting an arts-based assignment.

What would I have to do if I agree to participate?

If you agree to participate in this study you will meet with the primary investigator for a 30 to 90 minute interview to talk about your experience of participating in an arts-based assignment. The location for the interview will be one which is agreeable to you and the researcher, such as a private place at your educational institution, at a clinical facility, or at your home. During the interview the primary investigator will ask you a number of open-ended questions. For example, you will be asked about your experience of participating in an arts-based assignment, your thoughts and feelings about the assignment, the challenges you encountered in creating the work, and your perspective of learning through the experience. Although the interviewer will ask you questions, it will be up to you to decide what you would like to share about your own experience. You may also refuse to answer a question if you like. Additionally, you will be invited to bring a digital picture(s) of your creative assignment, or to bring your photo-essay assignment, to discuss with the researcher. You will be asked to describe your creative work that is in the photograph(s), or describe your photo-essay, and explain how you went about creating it. The picture(s) will be stored in an electronic format and linked to your interview transcript. You will also be asked information about your socio-demographic characteristics such as your age, gender, and years in the nursing program. This interview will be digitally recorded and then transcribed into a written document (transcript) at a later time by a transcriptionist. If you would like, the transcript from your interview can be emailed to you for review. The transcript would take about 15 minutes to review and you could correct errors, clarify information, and delete/add information. You will be given one week to send the reviewed transcript back to the researcher, and if you do not send it back it will be assumed that you do not want any changes.

What email would you prefer your interview transcript to be emailed to?

_____ I would like my interview transcript to be emailed to the following email address:

_____ I prefer NOT to review a copy of my interview transcript.

The primary investigator will also take notes about the interview and the environment in which it took place, and these field notes will be stored and analyzed along with your interview transcript.

Are there any risks if I take part?

No serious adverse effects are expected to take place. Participation in the study involves a time commitment, and may also include potential costs associated with travel and parking. If you find the interview stressful or difficult, you will have a choice of either taking a break or ending the interview.

What are the benefits?

If you choose to participate in this study there may or may not be a direct benefit to you. Some studies show that participants find sharing their story helpful, as it helps them to make sense of what they have experienced and also to feel supported by another person. Also, study participants often feel grateful for the opportunity to contribute to knowledge development through a scientific study. You may also develop a deeper understanding of the nursing practice experience/issue that you reflected upon in your assignment and also learn more about the research process through your involvement in this study.

Will I be paid for participating in this study?

You will be given \$25 to thank you for your time for participating in this study. As well, any costs associated with parking will be reimbursed.

Will my records be kept private?

Only the primary investigator and her supervisor will have access to the confidential information that you provide. Her committee members will have access to the anonymized data only. The transcriptionist will have access to the digital recordings of the interviews which may contain identifying information. Thus, the transcriptionist will be instructed about confidentiality in research and will sign a confidentiality pledge. The transcriptionist will not keep any digital recordings or transcripts after they have been given back to the primary investigator. The transcriptionist will work in a private space and/or use headphones when transcribing your recorded interview. The written record of your participation will be kept confidential by storing it in a locked cabinet in the home office of the researcher. The recording of your interview will be kept in a password-protected computer program on a password-protected laptop computer and on the password protected network drive at the University of Manitoba. Any photographs of your assignment and the primary investigator's field notes will be kept in a password-protected computer program on a password-protected computer and linked to your transcript. This information will be stored for seven years after the research is completed, and the written data will be disposed as confidential waste and the electronic data will be deleted within seven years of the completion of the research. The data will be kept for this time period in order to enable manuscript publication, presentations, and future grant applications which build upon this study. Your name will only be on the informed consent form and a separate document which lists participants' names and assigned codes. All other documentation will only contain that code, and your name will not appear in the transcript.

The findings of this study may be published in an academic journal and presentations will be given both locally and nationally. In any publications or presentations about the study findings, the researchers will ensure that your identity remains confidential. Your name will not be used. Care will be taken to ensure that any quotes used from the data to present the study findings contain no identifying information in order to protect your privacy.

The researcher has asked you to bring a photograph, or your photo-essay to the interview. It is possible that the researcher may want to use the photograph(s) that you provide in a publication, presentation, or video. Diligent care will be taken to ensure that the photographs do not contain any details through which you or another individual could be identified. If it does, the photographs could be anonymized with strategies such as pixilation or blurring. Of note even with these strategies, your classmates or instructors may be able to recognize the photograph(s) of your creative work if you give consent for it to be used in publications and presentations. Please indicate if you are willing to have these photographs used in publications, presentations, and/or videos. Please select one of the following two options:

_____ YES, I am willing to have the photograph(s) of/from my assignment be used in publications, presentations, or videos in order to report the research findings.

_____ NO, I am NOT willing to have the photograph(s) of/from my assignment be used in publications, presentations, or videos in order to report the research findings.

Will I be able to talk about the interview after it is finished?

At the end of the interview you will be asked how you are feeling and how you found the interview. This will give you the opportunity to talk about your feelings, thoughts, and/or concerns about the interview with the primary investigator immediately following the interview.

Can I withdraw from the study?

Participation in this study is completely voluntary, and you may refuse to participate or withdraw from the study at any time, with no repercussions. To withdraw from participating in this research, you just have to let the primary investigator know about your decision by telephone or email. Withdrawing from the study, or declining to answer a certain question, will in no way affect your standing as a nursing student. If you withdraw from the study, all of your data will be destroyed and you will still receive the \$25 honorarium and the reimbursement for your parking costs.

Who do I contact if I have questions?

If you have questions about the study, either during or after the study is completed you can contact the primary investigator, Kendra Rieger, on her phone (██████████) or by email (Kendra.Rieger@umanitoba.ca), or her research supervisor, Wanda Chernomas, on her phone (██████████) or by email (Wanda.Chernomas@umanitoba.ca).

Additional Information

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and /or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

The University of Manitoba may look at your research records to see that the research is being done in a safe and proper way.

The research has been approved by the Education and Nursing Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons or the University of Manitoba's Human Ethics Coordinator (HEC) at 474-7122 or at margaret.bowman@umanitoba.ca. A copy of this consent form has been given to you to keep for your records and reference.

Research records that contain your identity will be treated as confidential in accordance with the Personal Health Information Act of Manitoba. All records will be kept in a locked secure area and only those persons identified as requiring access to your records will have opportunity to review or copy your research records.

Signatures

Participant's Signature _____ Date _____

Printed Name:

Code:

Researcher and/or Delegate's Signature _____ Date _____

How can I find out about the findings of the study?

If you would like, a brief summary of the research findings can be sent to you after the study is completed. This summary will be sent to you approximately one to two years after completing your interview. You can also contact the researcher at any time if you would like more information about the study findings. How would you prefer to receive the brief summary of the study findings?

_____ I would like the summary mailed to the following mailing address:

_____ I would like summary emailed to the following email address:

_____ I prefer to NOT receive this summary.

Appendix V: Informed Consent Form for Nursing Instructors



College of Nursing

Research Project Title: Nursing Students' Experiences with Arts-based Pedagogy: A Constructivist Grounded Theory Study

Researcher Contact Information:

Primary Investigator:

Kendra Rieger, RN, BN, PhD (c)

College of Nursing, University of Manitoba

email: Kendra.Rieger@umanitoba.ca

phone: [REDACTED]

Research Supervisor:

Wanda Chernomas, RN, PhD

College of Nursing, University of Manitoba

email: Wanda.Chernomas@umanitoba.ca

phone: [REDACTED]

The principal investigator (Kendra Rieger) is a doctoral student in the Ph.D. in Nursing program at the University of Manitoba. Kendra Rieger is also a nursing instructor at Red River College. This study is being conducted by the principal investigator in partial fulfillment of the degree requirements for a doctoral degree in nursing. Her research supervisor is Dr. Wanda Chernomas (College of Nursing), and her committee members are Dr. Diana McMillan (College of Nursing) and Dr. Francine Morin (Faculty of Education).

Sponsor: The primary investigator has received funding from a Canadian Institutes of Health Research Frederick Banting and Charles Best Canada Doctoral Graduate Scholarship, and a Faculty of Nursing Endowment Fund Graduate Student Research Grant.

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

Research Purpose

You are being asked to participate in a research study. The purpose of this study is to understand what it is like to learn through the arts in nursing education. The researchers would like to learn about this process through listening to students and educators share about the experience of creating and presenting an arts-based assignment.

What would I have to do if I agree to participate?

If you agree to participate in this study you will meet with the primary investigator for a 60 to 90 minute interview to talk about your perspective of the student learning process with arts-based pedagogy [ABP] and of the ABP assignment. The location for the interview will be one which is agreeable to you and the researcher, such as a private place at your educational institution, at a clinical facility, or at your home. During the interview the primary investigator will ask you a number of open-ended questions. For example, you will be asked about the students' experience of participating in an arts-based assignment, your thoughts and feelings about the assignment, and the challenges you encountered in using this assignment as an educator. Although the interviewer will ask you questions, it will be up to you to decide what you would like to share. You may also refuse to answer a question if you like. You will also be asked information about your socio-demographic characteristics such as your age, gender, and years teaching in the nursing program. This interview will be digitally recorded and then transcribed into a written document (transcript) at a later time by a transcriptionist. If you would like, the transcript from your interview can be emailed to you for review. The transcript would take about 15 minutes to review and you could correct errors, clarify information, and delete/add information. You will be given one week to send the reviewed transcript back to the researcher, and if you do not send it back it will be assumed that you do not want any changes.

What email would you prefer your interview transcript to be emailed to?

_____ I would like my interview transcript to be emailed to the following email address:

_____ I prefer NOT to review a copy of my interview transcript.

The primary investigator will also take notes about the interview and the environment in which it took place, and these field notes will be stored and analyzed along with your interview transcript.

Are there any risks if I take part?

No serious adverse effects are expected to take place. Participation in the study involves a time commitment, and may also include potential costs associated with travel and parking. If you find the interview stressful or difficult, you will have a choice of either taking a break or ending the interview.

What are the benefits?

If you choose to participate in this study there may or may not be a direct benefit to you. Some studies show that participants find sharing their story helpful, as it helps them to make sense of what they have experienced and also to feel supported by another person. Also, study participants often feel grateful for the opportunity to contribute to knowledge development through a scientific study.

Will I be paid for participating in this study?

You will be given \$25 to thank you for your time for participating in this study. As well, any costs associated with parking will be reimbursed.

Will my records be kept private?

Only the primary investigator and her supervisor will have access to the confidential information that you provide. Her committee members will have access to the anonymized data only. The transcriptionist will have access to the digital recordings of the interviews which may contain identifying information. Thus,

the transcriptionist will be instructed about confidentiality in research and will sign a confidentiality pledge. The transcriptionist will not keep any digital recordings or transcripts after they have been given back to the primary investigator. The transcriptionist will work in a private space and/or use headphones when transcribing your recorded interview. The written record of your participation will be kept confidential by storing it in a locked cabinet in the home office of the researcher. The recording of your interview will be kept in a password-protected computer program on a password-protected laptop computer and on the password protected network drive at the University of Manitoba. This information will be stored for seven years after the research is completed, and the written data will be disposed as confidential waste and the electronic data will be deleted within seven years of the completion of the research. The data will be kept for this time period in order to enable manuscript publication, presentations, and future grant applications which build upon this study. Additionally, the researcher may conduct a secondary analysis of the data about a related, yet slightly different, research question. One example of a secondary analysis that could be conducted is: “What are the challenges of implementing arts-based pedagogy from educators’ perspectives?” Your name will only be on the informed consent form and a separate document which lists participants’ names and assigned codes. All other documentation will only contain that code, and your name will not appear in the transcript.

The findings of this study may be published in an academic journal and presentations will be given both locally and nationally. In any publications or presentations about the study findings, the researchers will ensure that your identity remains confidential. Your name will not be used. Care will be taken to ensure that any quotes used from the data to present the study findings contain no identifying information in order to protect your privacy.

Will I be able to talk about the interview after it is finished?

At the end of the interview you will be asked how you are feeling and how you found the interview. This will give you the opportunity to talk about your feelings, thoughts, and/or concerns about the interview with the primary investigator immediately following the interview.

Can I withdraw from the study?

Participation in this study is completely voluntary, and you may refuse to participate or withdraw from the study at any time, with no repercussions. To withdraw from participating in this research, you just have to let the primary investigator know about your decision by telephone or email. Withdrawing from the study, or declining to answer a certain question, will in no way affect your standing as a nursing instructor. If you withdraw from the study, all of your data will be destroyed and you will still receive the \$25 honorarium and the reimbursement for your parking costs.

Who do I contact if I have questions?

If you have questions about the study, either during or after the study is completed you can contact the primary investigator, Kendra Rieger, on her phone ([REDACTED]) or by email (Kendra.Rieger@umanitoba.ca), or her research supervisor, Wanda Chernomas, on her phone ([REDACTED]) or by email (Wanda.Chernomas@umanitoba.ca).

Additional Information

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and /or refrain from

answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

The University of Manitoba may look at your research records to see that the research is being done in a safe and proper way.

The research has been approved by the Education and Nursing Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons or the University of Manitoba's Human Ethics Coordinator (HEC) at 474-7122 or at margaret.bowman@umanitoba.ca. A copy of this consent form has been given to you to keep for your records and reference.

Research records that contain your identity will be treated as confidential in accordance with the Personal Health Information Act of Manitoba. All records will be kept in a locked secure area and only those persons identified as requiring access to your records will have opportunity to review or copy your research records.

Signatures

Participant's Signature _____ Date _____

Printed Name:

Code:

Researcher and/or Delegate's Signature _____ Date _____

How can I find out about the findings of the study?

If you would like, a brief summary of the research findings can be sent to you after the study is completed. This summary will be sent to you approximately one to two years after completing your interview. You can also contact the researcher at any time if you would like more information about the study findings. How would you prefer to receive the brief summary of the study findings?

_____ I would like the summary mailed to the following mailing address:

_____ I would like summary emailed to the following email address:

_____ I prefer to NOT receive this summary.

Appendix W: Confidentiality Agreement for Transcriptionist



College of Nursing

I, _____, transcriptionist, agree to maintain full confidentiality in regards to any and all audiotapes and documentations received from Kendra Rieger, or her supervisor Dr. Wanda Chernomas, related to her research study entitled “Nursing Students’ Experiences with Arts-based Pedagogy: A Constructivist Grounded Theory Study”.

Furthermore, I agree:

1. To hold in strictest confidence the identification of any individual that may be inadvertently revealed during the transcription of digitally recorded interviews, or in any associated documents.
2. To not make copies of any audiotapes or computerized titles of the transcribed interviews texts, unless specifically requested to do so by the researcher, Kendra Rieger, or her supervisor, Dr. Chernomas.
3. To store all study-related digital recordings and materials in a safe, secure location as long as they are in my possession.
4. To return all digital recordings and study-related materials to Kendra Rieger or Dr. Chernomas in a complete and timely manner.
5. To delete all electronic files containing study-related documents from my computer hard drive and any back-up devices.

I am aware that I can be held legally responsible for any breach of this confidentiality agreement, and for any harm incurred by individuals if I disclose identifiable information contained in the audiotapes and/or files to which I will have access.

Transcriber’s name (printed) _____

Transcriber's signature _____

Date _____

This agreement was retrieved from the University of Chicago website:
<http://sbsirb.uchicago.edu/page/confidentiality-agreement-transcription>