An Exploratory Study of Self-Assessment in the

Teaching and Learning of Employability Skills in

Interdisciplinary Health Science Programs

By

Jo-Anne Shay

Faculty of Graduate Studies – Education (Post-Secondary Studies)
University of Manitoba
Winnipeg, Manitoba

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Abstract

The lack of preparedness of graduates from postsecondary educational institutions for the work force has gained increased attention from government and educators. Increasingly, employers are demanding graduates that not only possess discipline-specific knowledge and skills but also critical employability skills. Consequently, integrating employability skills into the curriculum is becoming a priority for postsecondary educators. To illustrate one approach to the integration of employability skills, this study investigated the experiences of students and faculty involved in the integration of a self-assessment tool designed to enhance the teaching and learning of employability skills in two interdisciplinary health science programs.

Activity theory as situated learning provided the conceptual framework to organize the methodology and data analysis for the study. The methodology followed a qualitative exploratory research approach that utilized a series of 12 focus group interviews conducted at three different points in time with both faculty and students involved in two different programs. In addition, examples of students' use of the tool were requested as a secondary data source. Based on the student focus group data, the results are presented using the following themes: criteria for marking of the tool; structure and format of the tool; process of external evaluation; value of the tool; personal growth; and value of goal setting. The faculty focus group data are presented using similar themes, with the exception of goal setting.

The findings suggest there are three areas that must be considered prior to the implementation of such learning tools. These include the design of the self-assessment

tool itself, preparation of students and faculty to use the tool, and implications for

programs.

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Chapter 1: Introduction

The lack of preparedness of graduates entering the workforce has become a concern for government and educators (Foley, 1999; Krahn & Bowlby, 1999; Leveson, 2000; Saterfiel & McLarty, 1995; Whitston, 1998). Changing demographics (Imel, 1989), technological advancements (Imel, 1989; Whitston, 1998), increasing employee autonomy (Custer & Claiborne, 1992), cultural diversity (Lankard, 1996), and the need to maintain a globally competitive position (Carenevale, Garner, & Mietzer, as cited in Saterfiel & McLarty, 1995) have led to the need for a more multifaceted workforce (Imel, 1989). The demand for higher-order intellectual skills, technical capabilities, and personal skills reflects the change in the occupational competencies required of graduates to adapt and respond within a complex and evolving work environment (Lankard, 1990). Harvey, Moon, and Geal (as cited in Davies, 2000) state that:

> Employers and their representatives consistently say that to succeed at work, most people in future must develop a range of personal and intellectual attributes beyond those traditionally made explicit in programmes of study in higher education institutions. The need for developing a range of personal and intellectual attributes beyond specific expertise in a disciplinary field is becoming increasingly important and is likely to be more pressing in the working world of the twenty-first century. (p. 436)

In response, the term "employability skills" has evolved to encompass not only the foundational academic and technical skills, but also personal attributes, such as attitudes and behaviours (Saterfiel & McLarty, 1995). Research conducted by the

Conference Board of Canada in 1992 found there was a need for greater emphasis on the

critical abilities that employers are seeking of graduates. The critical abilities identified

fall under academic, personal management, and teamwork skills.

Table 1

Employability Skills Profile: The Critical Skills Required of the Canadian Workforce

Academic Skills	Personal Management Skills	Teamwork Skills
Those skills which provide the basic foundation to get, keep and progress on a job and to achieve the best results.	The combination of skills, attitudes and behaviours required to get, keep and progress on a job and to achieve the best results.	Those skills needed to work with others on a job and to achieve the best results.
Canadian employers need a person who can: **Communicate** • Understand and speak the languages in which business is conducted • Listen to understand and learn • Read, comprehend and use written materials, including graphs, charts and displays • Write effectively in the languages in which business is conducted **Think** • Think critically and act logically to evaluate situations, solve problems and make decisions • Understand and solve problems involving mathematics and use the results • Use technology, instruments, tools and information systems effectively • Access and apply specialized knowledge from various fields (e.g., skills trades, technology, physical sciences, arts and social sciences) **Learn** • Continue to learn for life	Canadian employers need a person who can demonstrate: **Positive Attitudes and Behaviours** • Self-esteem and confidence • Honesty, integrity and personal ethics • A positive attitude toward learning, growth and personal health • Initiative, energy and persistence to get the job done **Responsibility** • The ability to set goals and priorities in work and personal life • The ability to plan and manage time, money and other resources to achieve goals • Accountability for actions taken **Adaptability** • A positive attitude toward change • Recognition of and respect for people's diversity and individual differences • The ability to identify and suggest new ideas to get the job done – creativity	Canadian employers need a person who can: **Work with Others** • Understand and contribute to the organization's goals • Understand and work within the culture of the group • Plan and make decisions with others and support the outcomes • Respect the thoughts and opinions of others in the group • Exercise "give and take" to achieve group results • Seek a team approach as appropriate • Lead when appropriate, mobilizing the group for high performance

Employability Skills 2000+ Brochure 2000 E/F (Ottawa: The Conference Board of Canada, 2000)

The Employability Skills Profile identifies the "skills, qualities, competencies, attitudes, and behaviours that form the foundation of a high-quality Canadian workforce both today and tomorrow" (McLaughlin, 1992, p. 3). The need for a highly skilled Canadian workforce requires graduates to possess employability skills regardless of occupation, position, or time (McLaughlin, 1995). These skills are not only essential to competent job performance but also to successful employment (Imel, 1999; McLaughlin, 1995; Saterfiel & McLarty, 1995). Employers expect graduates to demonstrate those attributes that will enhance employability and their personal capability in meeting the demands of the present and future workplace (Holter & Kopka, 2001) and increase the likelihood of career success (Leroux & Lafleur, 1995).

Defining Graduatedness

Increasingly, the personal attributes of graduates beyond academic and technical skills are becoming more important in acquiring employment than discipline-specific knowledge (Harvey, 1999). In particular, employers as key stakeholders, want to know what graduates know, understand, and can do (Wollard, 1995). The focus is shifting to "what people need to do with what they learn not on the acquisition of skill or knowledge" (Paulson, 2001, p. 42).

Similarly, graduates themselves require a broader and more complex skill set. Wollard (1995) contends that the goal of education is to produce "graduates who know their own strengths and weaknesses, can set and pursue goals, who monitor their own progress and learn from experience" (p. 317). Consequently, graduates need to possess the skills necessary to engage in the process of critical self-assessment.

In postsecondary education, the need to define the characteristics of "graduatedness" has recently gained a great deal of attention (Foley, 1999; Wollard, 1995). Graduatedness refers to "what students are expected to know and be able to do to achieve a degree" (Whitston, 1998, p. 315). One of the major challenges that confronts postsecondary institutions in determining graduatedness is to identify a level of employability skills that can be implemented across disciplines and programs (Foley, 1999; Voorhees, 2001).

In part, these increasing expectations demanded of graduates derive from the fact that postsecondary education "is both a product of society and a servant of society" (Leroux & LaFleur, 1995, p. 191). It is widely held that postsecondary institutions have a responsibility to contribute to both economic and social development (Tight, 1995). Government, professional associations, and employers are increasing their expectations and pressuring the educational system to ensure graduates possess the skills for career success (Lowe, as cited in Harris, Adamson & Hunt, 1998) as well as a foundation for life-long learning (Pickles, 2000).

The issue of accountability in postsecondary educational institutions has also brought employability skills to the forefront. Accountability has recently broadened to include the role of postsecondary education in the preparation of graduates for the workplace (Brennan, as cited in Harris et al., 1998; Krahn & Bowlby, 1999). The evaluation of postsecondary institutions is shifting from the assessment of education and training for specific occupations to encompass the development of employability skills (Krahn & Bowlby, 1999). To meet these assessment criteria, postsecondary educational institutions must ensure that both their curricula and teaching and learning practices

reflect and embrace the value of employability skills as an explicit component of the learning process (Harvey, 1999; Whitston, 1998).

Changing workplace demands and employer dissatisfaction have provided the impetus for re-examining the teaching and learning of employability skills in post-secondary education. It has been argued that adult education must incorporate not only vocational needs and economic growth but also the broader context of work, education, and life (Tight, 1995). Lankard (1996) addresses the need to bring together the vocational and academic divide. Vocational education has typically focused on the preparation of students for job-specific skills (Paulson, 2001). Significant changes in the workplace are challenging the viability of vocational education to continue to emphasize job-specific skills rather than the acquisition of the personal attributes necessary to achieve competent performance. Lynch (1997) stated the role of vocational education is to "facilitate construction of knowledge through experiential, contextual, and social methods in real-world environments" (p. 27). Paulson (2001) suggested that employability skills need to be explicitly addressed within such a curriculum. Students must understand these skills are required as essential outcomes of their learning experience (Paulson, 2001). "The end product is self-directed learners who make connections to workplaces" ("What is Unique," 2002, p. 27).

Self-directed learning is an underlying concept in adult education (Garrison, 1997). To achieve self-directed learning, learners need to acquire the skills necessary for self-assessment (Ley & Young, 2001). Self-assessment provides a mechanism for students to engage in critical analysis of their performance (Kitsantas, Baylor, & Hu, 2001). The ability to engage in a self-critical approach is essential for the acquisition of

independence in self-directed learning (Daniels & Magarey, 2000; Merriam, 2001) and achieving valued and meaningful learning. The integration of cognitive and social processes defines learning outcomes as both "personally meaningful and socially acceptable" (Garrison, 1997, p. 19).

The changing workplace presents challenges and opportunities for postsecondary curriculum development. Educational, political, and social pressures have led to increased attention to the teaching, integration, and assessment of employability skills (Foley, 1999). For success, graduates need to acquire discipline-specific knowledge and skills, but also the personal attributes that are transferable to the workplace (Leckey & McGuigan, 1997). Educators play a key role in the preparation of learners for involvement in a changing workplace and to the development of potential career success (Giddens & Stacz, 1999) by integrating employability skills in the curriculum.

Research Focus

Nowhere are these observations more relevant than in health care. Graduates entering into health care professions are expected to perform within a dynamic and diverse environment with an ever increasing knowledge base, fluctuating resources, changing practice roles, and policies. Graduates are expected not only to possess basic academic knowledge and technical skills, but also to demonstrate those characteristics that define the professional and personal attributes expected of a competent health care provider (Harris et al., 1998).

The challenge for educators is to incorporate teaching and learning practices that provide students with the necessary skills for learning through experience and the development of the attitudes and behaviours to function in a competent manner in the

practice environment. Gordon (1992) suggested that the use of self-assessment activities in health professional education is essential to competent practice. However, the need to understand the role of self-assessment in the teaching and learning of employability skills within the educational process is evident. To this end, the aim of the study was to gain an understanding of the role of self-assessment in the teaching and learning of employability skills from the particular perspectives of those involved – students and faculty in interdisciplinary health science education.

Chapter 2: Literature Review

The importance of ensuring that graduates possess the critical employability skills for success in the work environment has gained increased attention. Pressure from employers and government to address these skills in graduates challenges postsecondary educational institutions to re-examine current approaches to teaching and learning. A literature review was conducted to develop a framework for investigating one particular approach to teaching and learning employability skills. The review begins with a brief discussion of the factors that have influenced the evolution of employability skills. Next, the literature defining employability skills and the concepts of competency and professionalism are addressed to set the context for the conceptual framework. Based on a critical analysis of selected literature, activity theory and situated learning were used to provide the conceptual framework for understanding and integrating employability skills in the curriculum. Because self-assessment is critical to the acquisition of employability skills, the literature review concluded with an examination of the process of self-assessment as a mechanism to promote the teaching and learning of employability skills.

Employability Skills

Employers have come to recognize the need to increase the skills of workers. Technological advancements and increasing global competitiveness have changed the workplace. Today the work environment demands skills beyond academic ability and basic job task performance. Discipline-specific knowledge, skills, and the ability to perform technical tasks are no longer sufficient (Askov & Gordon, 1999; O'Neil, 1997; Queeny, 1997; Steven & Fallows, 1998). Workers who demonstrate academic, technical and personal attributes have come to be viewed by employers as their major asset

(Overtoom, 2000a). The competent employee is one who demonstrates a balance between academic and technical capabilities and personal attributes (Overtoom, 2000a).

Expectations of Employers

Differences in the expectations of graduates and the requirements of employers is well documented (Leveson, 2000; Tight, 1995). In large part, a shift in job classification has also had a significant impact on the needs of employers. In 1959, 20% of jobs were professional, 20% skilled and 60% unskilled. By 1997, 60% were skilled and only 20% were unskilled (21st Century Skills for the 21st Century Jobs, as cited in Imel, 1999). These statistics reflect the increased need for workers to possess increasingly complex skills and training.

In a study that examined employer expectations, Custer and Claiborne (1992) found that employers place a high value on employability and academic skills compared to what is typically perceived to be the "overt focus and mission of vocational education ie. the development of technical skills" (p. 29). This shift has resulted in gaps between the expectations of employers and the public. The Commission on the Skills of the American Workforce noted "the primary concern of more than 80% of employers was finding workers with a good work ethic and appropriate social behavior" (as cited in Custer & Claiborne, 1992, p. 17). Furthermore, a number of studies have indicated the dissatisfaction of employers in relation to these skills (Alpern, 1997; Holter & Kopka, 2001; Leckey & McGuigan, 1997). These emerging expectations on the part of employers for a broader skill set have contributed to the conceptualization of "employability skills".

Towards a Definition

Employability skills have evolved to become the essential competencies required to obtain employment and succeed in the workplace (Foley, 1999; Leveson, 2000). The significance of employability skills is evidenced in the literature by the number of studies undertaken to identify and describe these skills (Lankard, 1990; Overtoom, 2000b; Whitston, 1998).

A plethora of terminology and classification structures to characterize core skills, key skills, basic, generic, workplace skills, and transferable skills have been used interchangeably to describe these skills. Hillage and Pollard (1998) and Bennett, Dune and Carre (1999) suggest that these terms have been used in a variety of contexts reflecting differences in definition and interpretation in their significance. Consequently, these terms are vague and lack definitiveness as measurable outcomes.

The term "employability" has evolved from a term used to refer to those skills considered primarily of vocational or job-specific tasks to describe "the preparation of foundational skills upon which a person must build job-specific skills (Saterfiel & McLarty, 1995 p. 1). Lankard (1990) summarizes employability skills as those that focus on personal image, attitudes, behaviors, communication, problem-solving, decision making, management and organizational processes. More recently, Overtoom (2000b) defined employability skills

> as a holistic constellation of transferable core skill groups that represent
>
> essential functional and enabling knowledge, skills, and attitudes required
>
> by the 21st century workplace. They are necessary for entry-level

employment, further education, upward mobility of incumbent workers,

and for lifelong success. (p. 4)

Similarly, the term "generic" has been used to refer to a more complex set of

skills that are practiced in social settings and occupations (Bridges, 1993). The use of the

term "generic" implies a generality that may have implications regarding expectations

and outcomes. Without an explicit definition, the identification and assessment of these

skills is vague. The term "generic" also suggests a transfer of these skills between

contexts – "the transfer of an acknowledged skill in a particular context (i.e., education)

and holding promise in another (i.e., work)" (Leveson, 2000, p. 162). Although not

clearly stated, generic skills and employability skills are similar in their meaning and in

terms of transferability.

Finally, the term "transferable skills" tends to be used when referring to the

application of skills across situations and contexts (Bridges, 1993; Whitston, 1998).

Shepherd and Gardiner (1998) contend that the research literature is uncertain regarding

the transfer of knowledge or skills. However, the assumption of the transferability of

skills remains largely unproven.

Mottershead and Suggitt (1996) define transferable skills "as those skills which

are independent of the disciplinary context" (p. 76). In contrast, Kemp and Seagraves

(1995) define transferable skills as "a set of general skills which are necessary in both

education and workplace" (p. 316). They further distinguish their definition by stating

"research in cognitive development and related cognitive skills suggests that these are

discipline-related" (p. 316).

Bridges (1993) suggests that it may be pointless to differentiate between employability, generic, and transferable skills. An examination of the literature suggested the commonality of these terms refers to their use and that these represent a definable set of skills that form employability skills. Wolf (1991) suggested "these skills are by definition inseparable from the contexts in which they are developed and displayed, and that they only make sense (or rather the same sense) to those who have the same recognition and understanding of those contexts" (p. 194). Once the necessary skill sets have been identified the challenge for educators becomes how to teach these skills in ways that optimize transferability.

Defining Employability Skills in Health Care Occupations

The concepts of professionalism and competence are terms often used to characterize the attributes essential to the success of health care graduates in the practice setting (Clanchy & Ballard, 1995). Epstein and Hundert (2002) define professional competence as "the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community served" (p. 226). The relationship between knowledge, skills, and performance reflects the characteristics of a competent professional (Smith & Wilson, 1992).

A competent practitioner is expected to be adaptable, reflective, and creative, as well as one who demonstrates the attitudes and desire to act skillfully and ethically (Hager & Butler, 1996). Jessup defines competent as "performing to professional or occupational standards" (as cited in Allan, 1996, p. 102). Messick (as cited in Norris, 1991) further made a distinction between competence and performance. Competence

refers to potential, whereas performance relates to what is actually done in the context of the situation.

Professional competence is an integral component of the broader concept of professionalism. VanZandt (1990) defined professionalism as "an attitude that motivates individuals to be attentive to the image and ideals of their particular profession" (p. 243). The term "professionalism" reflects the ideals of the profession and the standards to ensure integrity and competent performance. The attributes of a professional must become internalized and reflected in one's attitudes and behaviours (Martin & Reigeluth, 1999). Many of the dimensions of professionalism fall into the affective domain.

The affective domain encompasses one's attitudes, beliefs, and values. Affective behaviours are defined as "internal states that influence the individual's choice of actions" (Gagne, as cited in Wager, 1998, p. 15) and in turn influenced by the present context, past experience, and needs (Wager, 1998). The meaning one gives to their experience influences individual choices and behaviours (Williams, 1999).

According to Palomba and Banta (as cited in Hatfield, 2001), learning outcomes in the affective domain include

> being sensitive to the values of others, becoming aware of one's own
> talents and abilities, and developing an appreciation for lifelong learning.
> Practicing ethical behavior, exhibiting personal discipline, and providing
> leadership are other examples of intended outcomes that address attitudes
> and values. (p. 27)

Internalization of these values, attitudes, and behaviours is essential for the attainment of professionalism and for successful employment.

Employability skills have been characterized as the objective measures that underlie work ethic (Hill & Petty, 1995). Work ethic refers to the desirable attributes of a potential employee (Custer & Claiborne, 1992). Custer and Claiborne indicate that employer concerns focus on employability skills, such as work ethic and social skills, rather than technical performance. Work ethic encompasses the attitudes and behaviours that are essential to the preparation of learners for the workplace (Hill & Petty, 1995). The importance of understanding affective variables in determining attitudes and behaviours is paramount (Popham, 1994). However, traditional academic assessment models place little emphasis on the assessment of attitudes and behaviours (Hager & Butler, 1996). This may be in part due to the controversy regarding the role of educators in addressing affective learning outcomes (Popham, 1994).

Employability skills in health care occupations are entrenched in the concepts of professionalism and competence. Based on the employability skills literature and the characteristics defining a competent health care practitioner, specific skills to be addressed in the study were identified. These skills include academic, personal management, and teamwork skills.

The Transfer Issue

A particular challenge in the teaching and learning of employability skills is the issue of transfer. The research on transfer is relatively new and therefore the literature to date has primarily focused on defining the phenomenon. A multiplicity of definitions has led to a lack of conceptual clarity and understanding. Oates (1992) suggested that the definition of transfer includes the diversity of every situation, therefore, requires continuous change in an individual's skills. Transfer is not only dependent on the

characteristics of a situation but also on the: (a) relationship between the demands of past performance and the demands of the new situation; (b) recognition of competent performance in a previous situation and the relationship to the new situation; and (c) affective attributes, such as ethical behaviour and personal discipline (Wolf, as cited in Oates, 1992). Considerations of these aspects of transfer provide direction for designing learning activities which increase transfer and assessment (Oates, 1992).

Two important themes emerge from the transfer literature. First, within the literature there is a lack of evidence supporting transferability. In part, the debate questions the ability to assess employability skills outside the context of a specific occupation (Grummon, 1997). Eraut (as cited in Atkins, 1999) suggests the transfer of skills is not a separate event but a learning process. Atkins (1999) contends that the (a) extent of the similarity between the contexts and (b) demands in the type of and nature of learning required (Gibbs, as cited in Atkins, 1999) will influence transferability. The question that arises is whether the transfer of specific skills is unconscious or whether transfer of learning is a process (Whitston, 1998). A second issue is in the lack of definitive terminology and classification systems used to describe employability skills. This has made it difficult to identify the particular skills that are to be transferred and has contributed to the confusion evident in the literature.

Incorporating Employability Skills in the Curriculum

A particular challenge related to employability skills is the lack of research that has addressed the development, integration, and assessment of employability skills in the curriculum (Harvey, as cited in Leckey & McGuigan, 1997; O'Neil, 1997). The majority of literature addresses issues related to the classification of employability skills (Lankard,

1990; Overtoom, 2000b; Whitston, 1998), the importance of teaching employability skills (Poole & Zahn, 1993), implications for curricular reform (Kelly, 2001; Whitston, 1998), transferability of skills (Smith & Wilson, 1992), and employer expectations (Imel, 1989; Leveson, 2000; Poole & Zahn, 1993). The obvious gaps in the literature are found in the lack of research related to the integration and assessment of employability skills within the postsecondary curriculum (O'Neil, 1997; Overtoom, 2000a).

Activity Theory as a Conceptual Framework

To provide a conceptual framework for investigating one particular approach to integrating and assessing employability skills in college-level curricula, the concept of activity theory was selected to guide the framework for the study, the plan for data collection, and the approach for data analysis. Activity theory approaches learning and cognitive development as a process mediated by social factors and the interaction of learners with and within their environments. As such, activity theory provides a framework for learners to engage in activities that reflect real-world practices (Hung & Wong, 2000) and assimilate discipline values (Jenlick & Kinnucan-Welsch, 1999). Activity theory plays a critical role in shaping learning by integrating individual and social communities within a learning context. Therefore, learners can effectively "adjust to the socially mediated expectations of different groups" (Jonassen & Rohrer-Murphy, 1999, p. 64). This integration is important to the process of acquiring practical knowledge in the classroom as well as professional knowledge in practice (Jenlick & Kinnucan-Welsch, 1999).

Activity theory suggests that learners engage in activities to achieve a desired outcome, such as competent professional practice. Learning through such activities is

shaped by the context, culture, and tools in the learning situation. Activities are socially and contextually created and influenced by the purpose or motive of the community. The motive is critical to the purpose of the activity because the activities within a discipline are determined by its culture (Engestrom, 2000). Meaning and purpose occur through negotiation and socially created understanding in which learning is influenced by the learner and altered by engaging in the activity (Jonassen & Rohrer-Murphy, 1999). Learner activities evolve to demonstrate the practices of the broader discipline community (Brown, Collins, & Duguid, 1989). For example, within a discipline, activities are guided by the standards of practice and code of ethics.

Activities are undertaken within the social environment of the community. The community consists of different individuals who share the same purpose. Herrington (as cited in Spinuzzi, 1996) states "each classroom presents a community in its own right, situated at once in two larger communities: a school and disciplinary community" (p. 300). The larger community negotiates and mediates the rules and customs that define the community and that regulate individual behaviours (Jenlick & Kinnucan-Welsch, 1999). Consequently, meaning and direction are socially described within the community and intended to reflect the accepted practices within the discipline culture (Brown et al., 1989).

The relationship of the learner to the community is determined by rules. Rules reflect the explicit and implicit norms, standards, and social relations of the broader discipline community. Rules form the parameters that regulate the activities and interactions within the community. The interaction between the learner and community reflects the rules of the broader discipline community and is negotiated through the use of

a tool (Hasan, 1998; Jonassen & Rohrer-Murphy, 1999). For example, in practice, the rules are reflected in the standards which identify the behaviourial expectations for competent performance. Rules guide the activities that individuals engage in and provide a measure by which the learner has internalized the characteristics of the profession.

The concept of using a tool to facilitate learning is an integral component of activity theory. Tools are used to guide activities and include classroom practices and teaching and learning strategies. Activities encompass the interaction of the learner within the community through the use of a tool as a means to achieve a learning outcome (Spinuzzi, 1996). The classroom provides the context in which one learns how to use a tool and supports the activity. When used in this way, a tool becomes the instrument by which to achieve a desired outcome (Jonassen & Rohrer-Murphy, 1999) and creates a common social meaning in the community in which the learning takes place (Hansman, 2001).

Another aspect that influences learning is the division of labor within the community. The relationship between the student, the instructor, and the activity is influenced by the division of labor (Hasan, 1998). The division of labor refers to the function and roles of students and faculty within the classroom. This may include what the student does, expectations for assignments, and interaction with other members of the community.

In summary, activity theory is a goal-directed process in which knowledge and behaviour are integrated, guided by goals, and directed by learning tools (Bedny, Seglin, & Meister, 2000). Learning is self-regulated in that knowledge and understanding evolve from engaging in activities and personal reflection on activities (Jonassen & Rohrer-

Murphy, 1999). Activities are influenced by individual factors, social context, and performance expectations established within the classroom community (Rogers & Scaife, 1997; Wertz, as cited in Hung & Wong, 2000). For example, the activities of learners are guided by personal attitudes and behaviours. These in turn are influenced by the social norms, practices, and standards for competent performance expectations of the broader discipline community. Providing opportunities for learners to actively participate in activities of the community that reflect the practice context and culture increases the learners awareness and assimilation into the broader discipline community (Lave & Wenger, 1991).

Situated Learning – A Contextual Teaching and Learning Practice

Activity theory is related to the concept of situated learning and the conceptual framework for this study integrates these two concepts. Situated learning suggests that "knowledge is created and made meaningful by the context in which it is acquired" (Farmer, Buckmaster, & LeGrand, 1992, p. 46). Four assumptions underlie the teaching and learning practices: (a) learning is acquired through the actions of everyday situations, (b) knowledge is acquired in context and transfers only to similar situations, (c) learning occurs as a result of social process, and (d) learning occurs within social environments (Stein, 1998). These assumptions illustrate some of the links between learning and activity theory.

In situated learning, the learning environment symbolizes the community of practice: real-world activities, application of knowledge, access to professional community, and a social context in which the learner participates in knowledge

acquisition (Kerka, 1997). Situated learning is a learner-centered process which integrates content, context, community, and participation (Stein, 1998).

Learning in context refers to creating an environment which emphasizes the tasks learners must accomplish (Stein, 1998) and in which context and activity are inherent to the learning process (Jenlick & Kinnucan-Welsch, 1999). Used in this sense, context encompasses the situations, environment, values, and beliefs through which the learner acquires and understands the content (Stein, 1998). Learning situated in the context of practice influences knowledge, practice, and understanding of reality (Fosnot, 1996).

Community provides learners with the opportunity to interpret and reflect on the meaning of their experiences. Within a community, learners participate and gain an understanding of the beliefs, values, and rules (Lave & Wenger, 1991). Community provides the structure for the learning activity and for shaping learning (Stein, 1998). Eckert and McConnell-Ginet define a community of practice as "an aggregate of people who come together around mutual engagement in an endeavor. Ways of doing things, ways of talking, beliefs, values, power relations – in short, practices – emerge from their mutual endeavor" (as cited in Henning, 1998, p. 89). The meaning attributed to one's experiences is derived and understood within the context of the community (Henning, 1998). Within the community the learner begins to understand the basis for acceptable practice. Learning occurs through the process of interaction and connected learning through participation in the community (Hansman, 2001).

Assessment Model

The shift from didactic instruction to learning in context requires a re-examination of traditional assessment models (Granello, 2000). Traditional assessment strategies have

been based on the assessment of knowledge and skill performance by external measures. Katz (1993) suggests that learners have not been provided with the opportunity to assume responsibility for their own learning and the development of highly valued transferable skills (Race, 1995). As a result, the passive role of students and learning outcomes measured solely on the basis of final grade is being challenged (Wolf, Bixby, Glenn, & Gardener, 1991).

As an alternative, authentic assessment models provide an approach to assessment that "are designed to correspond as closely as possible to 'real world' student experiences" (Custer, 1994, p. 66). Assessment strategies that parallel workplace demands must emphasize self-directed learning and individual responsibility for career development (Borthwick, 1995; Jones, 1994). Authentic assessment strategies provide a broad approach to assessment that views the learner as an active participant in the learning process, one who shares responsibility and engages in self-assessment (Dochy, Segers, & Sluijsmans, 1999).

Authentic assessment methods are consistent with activity theory and situated learning in that they have personal value beyond the assessment of learner competence alone. Authentic assessment strategies are performance-based and require that the learner demonstrate the acquisition of knowledge and understanding through performance in an authentic practice setting (Williams, 1999). "The effectiveness of the assessment is dependent on the degree to which learners understand the criteria by which their performance will be assessed" ("What is Unique," 2002, p. 27).

Performance measures have been of particular concern in authentic assessment. The subjectivity inherent in authentic assessment has been raised. Valid assessment

measures of attitudinal and behavioural variables, such as those included in employability skills, require multiple sources of data: direct observation, peer assessment, and self-assessment. Hager, Gonczi, and Athanasou (1994) suggested that identifying performance measures and incorporating a variety of data sources may enhance the reliability assessment of affective values.

The assessment process involves the comparison of the collected evidence measured against the performance criteria to establish a framework for competent performance. Performance assessment is defined as "the process of gathering data by systematic observation for making decisions about an individual" (Berk, as cited in Hager et al., 1994, p. 10). Hager et al. (1994) suggest that assessment of performance is more reliable when it occurs within the context of practice. However, evidence can be gathered through workplace simulations, competency testing, and skill performance. The value of authentic assessment is that it incorporates multiple perspectives of learning. Including both learners and faculty in the assessment process is critical. Learners need to be prepared to exercise self-regulation and to engage in self-assessment (Jones, 1994; "What is Unique", 2002).

<p align="center">*Self-Assessment*</p>

The emergence of self-assessment as an alternative form of assessment is gaining increased attention (Dochy et al., 1999). The value of self-assessment lies in an individual's ability to reflect and learn to evaluate and self-regulate performance (Klenowski, 1995; Marienau, 1999;). Self-assessment involves "reflecting critically on one's experience, assessing the quality of one's work, and incorporating feedback from others" (School for New Learning, as cited in Marienau, 1999, p. 137). The ability to

engage in critical analysis is essential to the learning process (Anderson, 1998). Boud and Lublin (as cited in Humphreys & Greenan, 1997) state "one of the most important processes that can occur in education is the growth in students of the ability to be realistic judges of their own performance and the ability to monitor their own learning" (p. 63).

Utilizing self-assessment follows the assumptions that underlie social constructivist approaches to teaching and learning such as activity theory and situated learning. Providing an environment that encourages personal responsibility for learning (Daniels & Magarey, 2000) necessitates self-regulation and the construction of meaning through reflection (Murphy, 1997). Central to the learning process is "self as the interpreter of experience and the agent of future actions" (Marienau, 1999, p. 136). Self-assessment also addresses the increasing emphasis on implementing strategies to facilitate motivation and depth of learning (Daniels & Magarey, 2000). Student motivation for learning is enhanced by shaping an environment where self-assessment is an integral component of the learning process (Dochy et al., 1999).

The practice of self-assessment is not only an expectation but essential in the workplace (Adams & King, 1995). Expectations for the practice environment require the ability and commitment to engage in reflective practice, which is based on the ability to self-assess (Daniels & Magarey, 2000). Incorporating self-assessment provides a bridge between employer-based approaches and traditional assessment techniques.

The literature cautions against making the assumption that students have acquired the skills essential to engage in self-assessment (Fazey, 1993). Traditional assessment models have not supported the skills or abilities of students to engage in the process of self-assessment. In part, this has been due to the prevalence of external assessment

models. Students have traditionally been assessed within an educational system that has

relied on external evaluation (Falchinov, as cited in Humphreys & Greenan, 1997).

Integrating self-assessment into the curriculum parallels the expectations of the

workplace (Humphreys & Greenan, 1997). The need to prepare students to engage in

effective, objective and critical assessment of performance is essential.

"Critical reflection does not focus on understanding the how or how to of action

but understanding the rationale and consequences of actions" (Mezirow, as cited in

Prayer, 1993, p. 47). Consequently, educators need to encourage learners to critically

analyze their values, beliefs, and assumptions. Facilitating students' understanding of the

knowledge, skills, practices, and ethics of the workplace provides insight and encourages

active involvement in the learning process (Prayer, 1993).

The need to explicitly address the acquisition of self-assessment has been

documented (Fazey, 1993; Gordon, 1991). The ability to engage in self-assessment

empowers learners to assume greater responsibility for their own learning (Gordon, 1992;

Taylor & Marienau, 1993), facilitates personal growth and change (Taylor & Marienau,

1993) and encourages accurate and valid assessment of performance (Gordon, 1992).

These attributes are critical to the practice of a health care professional. However,

Gordon (1992) and Arthur (1995) conclude that self-assessment in health related

education is lacking.

Marienau (1999) in a study of students enrolled in an adult education program

identified four attributes of self-assessment: (a) self-assessment is a powerful tool for

learning from experience, (b) self-assessment strengthens one's commitment to

competent performance in the workplace, (c) self-assessment enhances higher order skills

for functioning in the workplace, and (d) self-assessment facilitates a greater self-awareness of one's self and social self (p. 140). In a synthesis of 11 studies, Gordon (1992) suggests that incorporating self-assessment "may promote more mature, collegial, and productive learning environments, particularly suited to the training of health professionals" (p. 677).

Marienau (1999) identified the paucity of research related to self-assessment in postsecondary learning. A number of studies have examined self-assessment at the graduate level (Marienau) and undergraduate level (Fallows & Chandramohan, 2001; Orsmond, Merry & Reiling, 2000; Sullivan & Hall, 1997). With respect to specific forms of self-assessment, a number of studies have examined the effectiveness of student self-assessment in the use of student constructed marking criteria (Orsmond et al., 2000), student self-assessment in judging their own work (Fallows & Chandramohan, 2001; Humphreys & Greenan, 1997; Sullivan & Hall, 1997; Yancey, 1998) in relation to grade attainment (Oppenheimer, 2001) and evaluation of practice (Gleeson, 1990). Research has also focused on the use of portfolios and diaries (Fazey, 1993). However, there is little research that focuses on the self-assessment of attitudes and behaviours (Hager & Butler, 1996).

The literature is silent on self-assessment of learning at the college level. If the expectation is that college graduates will incorporate self-assessment of employability skills into their professional practice more research is needed, first at the college level and, second, with respect to attitudes and behaviours. Such research would inform the development of the knowledge and skills required to engage in self-assessment to prepare graduated for practice (Gleeson, 1990).

Collaborative Assessment

A recurring theme throughout the literature is the need to employ multiple assessment methods that incorporate both internal (student) and external measured assessments (Grummon, 1997). Self-assessment alone may lack accuracy. Collaborative assessment which involves the "participation of students and staff in the assessment process, is a way of providing an opportunity for students to assess themselves whilst allowing the staff to maintain the necessary control over the final assessment" (Hall, as cited Dochy et al., 1999, p. 342). A number of research studies have also emphasized the need to balance student self-assessment by utilizing external measures of student's performance.

The accuracy of student self-assessment is enhanced with instructor's feedback (Dochy et. al., 1999). Feedback is a key component of formative evaluation (Klenowski, 1995). However, Grummon (1997) suggested that instructors have been ineffective in providing constructive feedback in relation to student's preparedness for entry and success in the workplace.

The literature also demonstrates a lack of similarity between self and instructor assessments. This may be indicative of the reliability and validity of the assessment measures or the different approaches used by instructors and students in the process of assessment. Arthur (1995) further suggests that students may perceive more readily personal and meaningful changes. These results suggest that incorporating instructor assessment strategies are valid and meaningful activities to optimize learning.

Implementing Self-Assessment

Research that explored the implementation of self-assessment activities concluded that self-assessment is essential to competent professional practice (Gordon, 1992) and fosters competent performance in the workplace (Marienau, 1999). Arthur (1995) suggested that the skill of self-assessment provides an avenue for the transition from learner to a member of the professional community. The underlying assumption is that through the use of self-assessment the learner begins to value and internalize the practice and ethics that guide the discipline and to understand acceptable behaviours. By identifying with the "ego-ideal of the profession" (Arthur, 1995, p. 275) students are able to examine the self and set personal goals.

However, research to guide the integration of a self-assessment tool into the curriculum is limited (Klenowski, 1995). The implementation of self-assessment strategies must be undertaken with careful consideration. The nature of self-assessment itself raises a number of concerns. Self-assessment requires learners to engage not only in the critical analysis and evaluation of performance but to acknowledge and share their own personal strengths and weaknesses and identify strategies for self-improvement. Consequently, learners may feel vulnerable and unwilling to engage in the process. Addressing issues related to anxiety and trust are essential (Gordon, 1992).

In addition, the literature discusses a variety of concerns for instructors and students that must be considered in the implementation of self-assessment. Instructor concerns include (a) the reliability and validity of student-based assessments and (b) the possibility of cheating and unfairness. Concerns related to students include their limitations regarding (a) the lack of skills and confidence to engage in the process, (b) the

failure of students to accept responsibility in the process, and (c) increased workload

(Daniels & Magarey, 2000). Self-assessment initiatives must be designed to address these

concerns.

Integrating Framework

A shared assumption of activity theory and situated learning is that the acquisition

of knowledge and understanding is inherently social in nature. Knowledge results from

engaging in activities within the context and culture of the community in which it is

developed and practiced (Blakeslee, 1997). Learning results from "the interactions among

learners, the tools they use in those interactions, the activity itself, and the social context

in which the activity takes place shapes learning" (Hansman, 2001, p. 45).

Learners acquire knowledge through the acquisition of knowledge and real-world

experiences (Maypole & Davies, 2001). Knowledge develops through active participation

and understanding based on previous experience and the social context (Granello, 2000).

"Through discussion with others – where ideas are shared, challenged, negotiated, and

justified new levels of conceptual understanding can be reached – knowledge of the

world is based on negotiated understandings" (Marshall, 1998, p. 452). The aim for

students is to engage in self-assessment with the goal of integrating knowledge and

learning experiences to reflect the practice environment (Stein, 1998).

In this study, this framework was used to guide an investigation of the impact of a

self-assessment tool on the teaching and learning of selected employability skills in two

interdisciplinary health education programs.

Figure 1. Activity theory as situated learning (adapted from Hung & Wong, 2000, p. 34).

Learning
Tools

Learner

Self-
Assessment
and Other

Object

Outcome

Individual values
and beliefs

Rules

Division of
Labour

Community

Discipline
knowledge and
practices
Classroom norms
and regulations

Classroom Participants
Practice Community

Faculty/Student
Roles in Learning
and Assessment
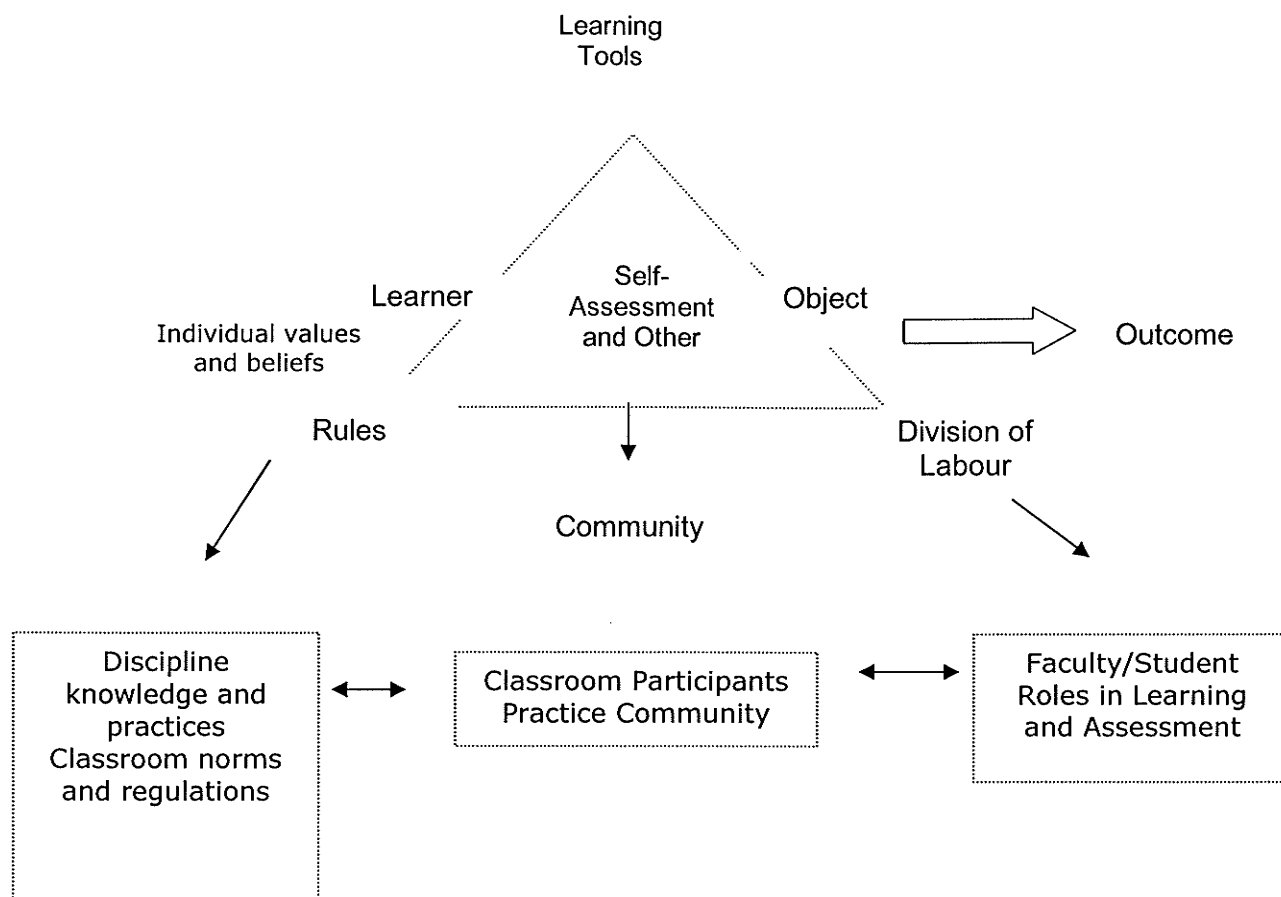
Research Questions

Based on a review of the existing literature, the aim of the present study was to explore the experiences of students and faculty in relation to the integration of a self-assessment tool to enhance the awareness and acquisition of selected employability skills of students enrolled in two interdisciplinary health science programs.

Based on the review of the literature, the following questions guided this study:

1.   How do students in these two programs perceive the effect of engaging in self-assessment as a strategy to promote the learning of selected employability skills?

2.   How do faculty in these two programs perceive the effects of engaging students in self-assessment as a strategy to foster the development of selected employability skills?

3.   How specifically does the self-assessment of employability skills influence the teaching and learning of selected employability skills in these two programs?

4.   How can the self-assessment process be improved to better support learning of these employability skills?

The underlying assumptions of this study included:

1.   Actively engaging students in the process of self-assessment will increase their self-awareness related to attitudes and behaviours and provide a mechanism by which to improve their understanding and performance.

2.   Self-directed learning is enhanced when students assume an active role in their learning, by reflecting on their performance, monitoring their own progress, based on identified strengths and weaknesses, setting personal goals, and developing strategies for self-improvement.

Chapter 3: Methodology

The review of the literature (Chapter 2) clearly identifies the need to ensure that graduates possess the critical employability skills essential to competent work performance. However, the literature that currently exists does not address the development, integration, and assessment of teaching and learning strategies of an employability skills curriculum. The purpose of this research was to explore the implementation of a self-assessment tool as a strategy to promote the teaching and learning of employability skills.

This chapter provides a description of qualitative exploratory designs including the methodological perspective that guided this study. The second part of this chapter provides detailed information related to the study including sample recruitment and selection, data collection and analysis strategies, procedures to enhance trustworthiness, role of the researcher, and ethical considerations.

Qualitative Exploratory Design: An Overview

Qualitative methods are particularly useful for exploration and discovery of the personal dimension of the human experience (Gillis & Jackson, 2002). Exploratory designs allow for the discovery of insight and understanding, to find meaning in the data, and the exploration of all aspects of an experience (Brink & Wood, 2001). These approaches are based on a holistic view that there is no one single reality and meaning is found within a given context or situation (Burns & Grove, 1995; Creswell, 1994). Rather than impose a single point of view, qualitative inquiry attempts to understand the multiple perspectives that emerge from the data (Patton, 1990). Reality and meaning are shaped and created by individuals. The basis for understanding the phenomenon under study is

the voices and interpretations of those who experience the phenomena (Polit & Hungler, 1999).

Brink and Wood (1998) recommend that exploratory designs are most appropriate:

1.   to identify and describe a problem area not well studied or known (p. 309)

2.   to explore a concept in-depth using a flexible approach to describe an experience and its meaning (p. 309)

3.   to gain insight into a topic that has not been studied from the point of view of the participant (p. 316).

Sample

Sample selection in qualitative research has a profound effect on the quality of the research (Coyne, 1997; Morse, 1991). The goal in selecting the sample is to develop a rich and dense description to discover insight, understanding, and meaning of the experiences of particular individuals. Participants are selected based on "their first-hand experience with a culture, social interaction, or phenomenon of interest" (Streubert & Carpenter, 1999, p. 22).

Purposive sampling is imperative to the quality of the data collected (Morse, 1991). Patton (1990) contends that the sample must be "judged on the basis of the purpose and rationale of each study and the sampling strategy used to achieve the study's purpose. The sample, like all other aspects of qualitative inquiry, must be judged in context" (p. 185). Exploratory designs employ small samples chosen through a "deliberate process to represent the desired perspective" (Brink & Wood, 1998, p. 320)

and reflect the diversity within a given population (Barbour, 2001), the context, and the nature of the participant's experiences (Morse, 1991).

There are no established criteria to guide the sample size in qualitative inquiry. Patton (1990) suggested sample size "depends on what you want to know, the purpose of the inquiry, what is at stake, what will be useful, what has credibility, and what can be done with available time and resources" (p. 184). Morse and Field (1995) suggested the sampling plan must meet the criteria of adequacy and appropriateness. Adequacy refers to the "sufficiency and quality of the data" (p. 80). Data saturation, which is used as an indicator of adequacy, is defined as "a situation in data collection in which the participants' descriptions become repetitive and confirm previously collected data" (Gillis & Jackson, 2002, p. 185). Appropriateness refers to the rationale for the "criteria used to select the participants" (p. 80). The degree of appropriateness is based on the sampling method and the ability of the sample to facilitate understanding of the research questions.

Data Collection Methods

The primary purpose of qualitative data collection is to understand reality in ways that reflect the experience of the participants (Polit & Hungler, 1999). Wolcott (as cited in Froggatt, 2001) identified three main data sources in qualitative research: experience (through observation), enquiry (in interviews) or examination (of documentation produced by others). To explore the collective experiences and perceptions of participants the study used focus group interviews and, as a secondary data course, examples of student work using the self-assessment tool.

Focus Group Interviews

Focus group interviews provided a means of eliciting participant attitudes, feelings, perceptions, and experiences (Carey & Smith, 1994; Rikard, Knight & Beacham, 1996; Wilson, 1997). The purpose of a focus group is defined as a "qualitative research technique used to obtain data about feelings and opinions of small groups of participants about a given problem, experience, service, or other phenomenon" (Basche, 1987, p. 414).

Focus groups usually consist of 6 to 12 participants who are knowledgeable about the topic under study (Gillis & Jackson, 2002). The selection of participants is based on a homogeneous group to encourage the sharing of ideas and perceptions (Morse & Field, 1995). Central to focus group research is the use of the interaction among the group members as part of the research data (Robinson, 1999). Group interaction is integral to obtaining valuable information (Asbury, 1995). The interactive nature of the group enhances the disclosure and sharing of information. Patton (1990) suggests that within the group, diverse participant views can be questioned and issues can be identified and addressed. The data collected must capture not only what is said but also the non-verbal interaction among the group members.

Focus groups draw on the multiplicity of perspectives of the group. The data generated through group interaction provides an understanding into the participants' view of the world, their values, and beliefs in relation to the experience (Kitzinger, 1995) through a rich, detailed insight (Asbury, 1995; McDaniel & Bach, 1994; Wilson, 1997) which is an integral component of the research process (Wilson, 1997). Focus groups "capitalize on the interaction within a group to elicit rich experiential data" (Asbury,

1995, p. 414). The data generated by focus groups are based on the participant's own words and provides a "rich description and interpretation of reality" (Swenson & Griswold, 1992, p. 460).

The advantages of focus groups include providing an efficient means to collect qualitative data, determining the extent to which views are shared, and allowing for probing into the assumptions, and perceptions that underlie attitudes (Robinson, 1999). Robinson suggests that focus groups are a more effective way to examine how knowledge is developed and organized within a given context. Carey and Smith (1994) further state that a focus group provides a mechanism to examine behaviour and motivations that evolve as a direct result of the group interaction. Butler (as cited in Sim, 1998) suggests that focus groups allow interaction among participants that fosters a greater degree of insight into personal views.

Selection of the group facilitator is crucial to the effectiveness of the focus group. The facilitator must guide the focus group interview to achieve the research objectives. Knowledge of group dynamics is needed to obtain trustworthy data (Krueger, 1988). Krueger suggests selecting a facilitator who is not connected to the program or in a position of authority over the participants (Morrison & Peoples, 1999).

Focus group interviews should be conducted in a comfortable and convenient location to enhance the process of data collection. The ability of the facilitator to create a nonjudgemental, nonthreatening environment is essential to enhancing group rapport (Krueger, 1988; Rikard et al., 1996). The facilitator must shape the discussion (Morgan, 1996) and encourage interaction between the group members (Carey & Smith, 1994) to achieve the research objectives. The environment must be conducive to the expression of

different perspectives and facilitate self-disclosure (Krueger, 1988). The involvement of the facilitator in the focus group may range from directive to nondirective, depending on the nature of the research goals.

An assistant was used to take comprehensive notes during the interviews to facilitate data analysis (McDaniel & Bach, 1994). Field notes are critical in qualitative research as they provide a descriptive account of the context, physical setting, social interactions, and activities (Patton, 1990). Field notes include "reconstructions of interactions, short conversational excerpts, or descriptions of events" (Morse & Field, 1995, p. 112). They provide a means to connect the nonverbal behaviour to the verbal accounts or participants, the interaction among group members, and the group dynamics which may not be captured with audiotaping alone (Carey & Smith, 1994; Sim, 1998) and influence the data collected (Carey, 1995). Including these elements is essential in providing the context and rationale for interpreting the data. The emphasis on the interaction of the group is an "integral component that cannot be teased out" (Carey, 1995 p. 488). Therefore, as Carey states, "an appropriate description of the nature of the dynamics is necessary to incorporate in analysis – for example, heated discussion, a dominant member, little agreement" (p. 488).

Instrument

The nature of exploratory research dictates the use of a less-directive interview style that allows the participants to voice their own interests (Morgan, 1996). A semi-structured guide provides flexibility to accommodate shifts in the direction of the discussion (Brink & Wood, 1998; Polit & Hungler, 1999), opportunity to guide the interview discussion, to probe, to clarify, and to follow-up on participant responses that

require elaboration (Rikard et al., 1996). Polit and Hungler (1999) contend that unstructured interviews "encourage respondents to define the important dimension of a phenomenon and to elaborate on what is relevant to them" (p. 331). However, semi-structured interviews permit the collection of consistent categories of data across groups and times, and permit the informants' perspectives to emerge. Open-ended questions minimize the possibility of predetermined responses (Patton, 1990) and allow participants to respond in their own words (Polit & Hungler, 1999).

An interview guide is essential to the focus group technique. The guide includes a list of questions that provide the framework for the group interview (Patton, 1990). Patton identified the advantages of the interview guide as follows:

1. increases comprehensiveness of the data

2. makes data collection somewhat systematic

3. logical gaps in data can be anticipated and closed

4. interviews remain fairly conversational and situational. (p. 288)

The interview process usually opens with a grand tour question. The purpose of the grand tour question is to set the tone and to engage all participants in the discussion (Brink & Wood, 1998). The grand tour question is a statement of the research question being explored that attempts to elicit a broad range of responses. Creswell (1994) suggests that a study should use one or two grand tour questions followed by subquestions. Subquestions are used to narrow the focus of the study. Krueger (1988) suggests that a focused interview should not have more than ten questions and often five or six. Carey (1995) indicates the number of questions should not exceed four or five to allow for in-depth exploration.

To discover the meanings, perceptions, and attitudes requires an approach conducive to eliciting participant responses. Using a non-directive approach allows greater flexibility in the responses provided and probe tactics (Frey & Fontana, 1991; Polit & Hungler, 1999). Probes utilize a combination of verbal and nonverbal cues that prompt the participant for more information, elaboration, or clarification of responses. Polit and Hungler identify the importance of using only neutral, nondirective probes. Table 2 identifies possible probes to be used during the interviews. Nonverbal cues, such as silence and head nodding, may also be used (Patton, 1990).

Table 2

Neutral, Nondirective Probes

1. Is there anything else?

2. Go on.

3. Could you tell me more about that?

4. Why do you feel that way?

5. Would you tell me what you have in mind?

6. Could you please explain that?

7. Could you give me an example? (Polit & Hungler, 1999, p. 347)

8. Would you explain further?

9. Would you give me an example of what you mean?

10. Would you say more?

11. Is there anything else?

12. Please describe what you mean? (Krueger, 1988, p. 83)

Polit and Hungler (1999) suggest the study design must be flexible to allow for ongoing decisions based on what is known and the need to explore new ideas that emerge from the data. Acknowledging the emerging nature of qualitative design, the interview questions may evolve and change as the study progresses based on new viewpoints and the responses given by the participants (Krueger, 1988).

Data Analysis

The purpose of qualitative analysis is to search for themes, patterns, and insights in the data that reflect the responses of the participants (Dempsey & Dempsey, 2000). Analysis encompasses a holistic approach to the examination of data. The process of analysis involves the transformation of collected data through interpretation to discover meaning. Data analysis in exploratory research requires a cyclical process that involves a flexible, intuitive interaction between the researcher and the data. The relationship between the data collection procedures and analysis is essential to determine what is known, what is unknown, and what does not fit. Data collection and analysis procedures must be simultaneous and flexible to address new areas of exploration (Brink & Wood, 1998; Creswell, 1994; Gillis & Jackson, 2002).

The process of content analysis is used when data are semistructured or unstructured (Brink & Wood, 2001; Miles & Huberman, 1994) in the form of text or verbal communication (Gillis & Jackson, 2002). Content analysis is "a method of categorizing observations into themes and concepts emerging from the data" (Doordan, as cited in Dempsey & Dempsey, 2000, p. 18). Themes are "recurrent ideas or patterns that emerge in the data representing common threads of meaning" (Gillis & Jackson, 2002, p. 715).

Determining the unit of analysis is essential in creating a systematic approach to data analysis (Gustafson, 1998). Insch and Moore (1997) identify five basic units of text (a) words, (b) word sense or phrase, (c) sentences, (d) paragraph, and (e) document. Data units are classified into categories that are derived from the research questions or theoretical framework. Categories are developed and codes are assigned. Code development is based on the participant responses to ensure their experiences are captured (Brink & Wood, 2001).

<div align="center">*Study Protocol and Procedures*</div>

The preceding section provides an overview of exploratory qualitative research. The next section outlines the specific process and procedures used for the research study based on these principles.

Role of the Researcher

Because qualitative research methods frequently involve the researcher as the primary collector and interpreter of data, it is widely recognized that the researcher, the data, and the participants will interact during the research (Gillis & Jackson, 2002: Polit & Hungler, 1999). The role of the researcher as the primary data collection instrument necessitates the articulation of personal values, assumptions, and biases at the onset of the study (Creswell, 1994). In this case, an undergraduate education in nursing has perpetuated a strong commitment to the ideals of professional practice and to the belief that the qualities of a competent health care provider are essential to ensuring optimal patient care. The attributes inherent to professional practice are encompassed in the employability skills profile. Through my experience as a clinical educator I understood first-hand the need to ensure that students possess and demonstrate not only the academic

and technical knowledge to achieve competent performance but also the personal skills essential to fulfill their role as competent health care providers. On one hand I had an understanding of the research topic, but on the other I needed to be aware of how these values and knowledge influenced the collection and interpretation of the data.

I was also familiar with the research context and known to potential faculty participants. While this familiarity may have been an asset in participant recruitment and data interpretation, care was taken to insure the free choice of participants and the privacy of data in determining the results. To ensure the confidentiality of the participants, an unbiased group facilitator conducted the selection and recruitment of participants, the focus group sessions, and ensured the integrity of the data collection procedures.

Context of the Study

The study was conducted at the largest post-secondary college in a province in central Canada. The study began following written approval from the University of Manitoba Research Ethics Board and the ethics committee at the college where the research was conducted. The study was conducted from October, 2002 to May, 2003. The study was carried out under the guidance and advice of a thesis advisor.

The health science division of continuing education department offered a broad range of interdisciplinary health science programs on a full and part-time basis. The two programs used in the research were interdisciplinary health science programs: Sterile Processing Technician and Medical Transcription. The programs were delivered on a full-time time basis over a six to seven month period. Each program consisted of both a theoretical and clinical component.

Recruitment and Selection of Participants

Sample selection in qualitative research is based on the needs of the study. For this study, participants were selected based on their experience and knowledge with the phenomenon under investigation. Students and faculty participating in two interdisciplinary health science programs in which the self-assessment tool was implemented were asked to participate in the study.

Student participants. Following ethics approval, the recruitment of student participants occurred during the first week of each program. During regularly scheduled class times students were given a ten-minute introduction to the study by the group facilitator and were asked to participate in the research project. The group facilitator provided potential participants with written and verbal information regarding the purpose of the study and data collection procedures. Participants were informed that the group facilitator and assistant would conduct the focus group interviews and be responsible for the data collection procedures. Participants were required to sign a consent form for participation in the study. A sample of the request for informed consent is included in Appendix A.

To minimize any conflict of interest on the part of the researcher, who was a faculty member, only the group facilitator and the assistant knew the identities of the participants. The group facilitator ensured that potential participants were informed of the confidentiality procedures to be implemented and made explicit that participation in the study was totally voluntary and unrelated to course work and that no compensation would be offered.

Up to eight students from each program were to be recruited to participate in three focus group interviews for each program. In the event that more than eight students wished to participate, the sample selected would reflect the diversity of the student population.

Faculty participants. Recruitment of faculty participants was conducted at a meeting prior to the start of each program. A presentation was provided to faculty to introduce the purpose of the study, data collection and analysis procedures, and intended use of the study findings. All faculty who wished to participate were included. A sample of the request for informed consent is included in Appendix B.

Because the researcher was a faculty member at the same institution, particular care was undertaken to protect the identities of the focus group participants. First, consent forms were administered and stored in a secure location by the focus group facilitator. Second, participants were identified by number only in the field notes and the audiotaped recordings were only heard by the transcriptionist. The audiotapes were stored in a secure location by transcriptionist. The researcher had access only to the typed transcripts. Any references that identified the participants, such as the use of their names, were masked by the transcriptionist.

Protocol for Data Collection

A total of 12 focus group interviews were conducted with both students and faculty in each program at three points in time: following the completion of the first self-assessment tool, at the midpoint of the program, and upon completion of the program (Table 3). Brink & Wood (2001) suggested that the strongest exploratory design is based on repeated interviews and observations of the same participants.

Table 3:

Schedule for Focus Group Interviews

Program	Student Participants	Faculty Participants
Sterile Processing	October 2002	October 2002
	December 2002	December 2002
	March 2003	March 2003
Medical Transcription	November 2002	November 2002
	January 2003	January 2003
	April 2003	April 2003

Student focus groups. The focus group interviews were 45 to 60 minutes in length. Three to six participants attended each focus group session. However, attendance of participants was inconsistent. During the introductory portion of each interview, the group facilitator provided participants with information regarding the nature, purpose, scope of their involvement, data collection and management procedures, and the intended use of the research findings. Participants were informed of their right to withdraw from the study at any time and their right to refuse to answer any questions. The importance of maintaining the confidentiality and anonymity of the other focus group members and the focus group interviews was emphasized. The focus group facilitator introduced the assistant and explained the procedures involved in the data collection process. At each focus group session, participants were informed that the focus group interviews would be audiotaped in their entirety and field notes would be taken by the assistant.

Following the introductory portion, participants were informed that the tape recording of the interview would commence. The focus group interviews opened with a grand tour question and a nondirective approach was taken to allow participants to

provide as much information as possible. Probes were used to elicit complete, detailed information and for clarification and confirmation.

Due to the lack of literature that currently existed to focus the questioning, the process of data collection for the first interview was guided by participant generated ideas and concerns. This decision allowed for the exploration of concepts that reflect the relevant dimensions of the research topic as expressed by the participants in the aim of achieving the research purpose. Subsequent interviews provided more focused questioning. The initial interview guide is located in Appendix C.

At the end of each focus group session, time was provided for the facilitator to clarify or confirm with the participants any information related to identified issues or concerns (Denzin & Lincoln, 1994). Following this, the tape recorder was turned off. Acknowledging the nature of informed consent, any information obtained following the formal interview required the permission of the participant.

Faculty focus groups. Thirty minute focus group interviews were conducted with faculty members at similar points in the program following the same procedures as outlined for the student participant group. Faculty participation in the focus group sessions was small. Only one to three participants were present at each interview. The interview guide is provided in Appendix D.

All focus group interviews were audiotaped to allow verbatim analysis of the data and to capture the information (Devers & Frankel, 2000) and maintain the "authentic voice of the participants" (Kooker, 1998, p. 284). This allowed the group facilitator the freedom to engage in the focus group. To assist in the data collection phase, field notes were taken by the assistant to capture the nonverbal aspects of the focus group interview.

To maintain the confidentiality of both student and faculty participants, numbers were assigned based on the seating arrangement. The identity of the participants in relation to the numbers was known only by the participant, the group facilitator, and assistant.

Setting and scheduling of focus group interviews. Selection of an appropriate time and location were imperative to increase student commitment in regards to attendance and participation in the focus group interviews. Student focus group interviews were conducted at a convenient and accessible location on the main college campus. The location selected provided a comfortable atmosphere conducive to data collection. Participants were seated at a round table to facilitate group interaction (Halloran & Grimes, 1995) and assist with a systematic process for data collection.

Integral to the process was to ensure the interviews do not impede on the student's time or cause any inconvenience. Based on the findings by Gowdy (1996), interviews were conducted at various times to avoid conflicts with classes. Refreshments were served as an incentive to participate. Similarly, faculty focus group interviews were scheduled at a convenient and mutually agreed upon time and location with refreshments provided.

Secondary data source - Self-reported documentation. Student participants were asked to voluntarily submit samples of how they completed the self-assessment tool at the end of each focus group interview. The inclusion of this data was used to further support or refute participant responses in reporting the study findings. The self-assessment tool reflected only participant responses (Appendix E).

The focus group facilitator removed any identifying information, photocopied the completed self-assessment form and marked it with the corresponding participant assigned number. The original self-assessment was returned to the participant to submit for marking. The submission of participant work was voluntary and had no implications regarding participation in the study.

In addition, student participants were asked to provide basic demographic data. This information was used to describe the sample. The instrument for collecting demographic data is located in Appendix F.

The data collected, including transcripts, field notes, and self-assessment tools, were given to the researcher following the completion of the each interview.

Protocol for Data Analysis and Interpretation

The process of data analysis was conducted by the researcher. The focus group interviews were transcribed for analysis. The data were entered into a word processing document by a professional transcriptionist. Interviews were transcribed and read by the researcher prior to the subsequent interviews. This allowed a "systematic and verifiable" (Crawford & Acorn, 1997, p. 16) approach and the exploration of emerging themes to guide future focus group interviews.

To capture the individual and interactive component the researcher attempted to analyze the data at both the individual and group levels. However, the lack of consistency in participant attendance precluded this. Incorporating two levels of analysis would have allowed for a more inclusive approach to understanding the experience of the research participants by providing insight into the individual attributions as well as the influence

of the group process, thus allowing judgements regarding persuasion and nature of agreement (Kidd & Parshall, 2000; Shih, 1998).

The unit of analysis for the study was the phrases or sentences used by the participants. The process of analysis began with the reduction of textual data and the development of themes, categories and codes. The process of content analysis was used to structure the data. Categories were developed and coded to form the basis for organizing the themes and patterns from the perspectives of the participants (Creswell, 1994) and to "ensure the experiences of the participants is captured and unbiased" (Brink & Wood, 2001, p. 272). The data were organized categorically and chronologically to reflect patterns or changes over time. Memoing was used throughout the coding and analysis procedures to allow the researcher to record ideas, insights, and feelings in relation to the data, themes, and underlying assumptions (Polit & Hungler, 1999).

Establishing Trustworthiness

The design of the study was guided by the four criteria identified by Lincoln and Guba in 1985 (Gillis & Jackson, 2002; Polit & Hungler, 1999, Polit, Beck & Hungler, 2001). These criteria included credibility, dependability, confirmability, and transferability.

Credibility refers to activities that would increase the likelihood of the accuracy of description between the participants' constructs and the interpretation (Morse & Field, 1995). The credibility of the study was enhanced by incorporating member checks, triangulation, and prolonged engagement in the field.

Member Checks

Member checking involved ensuring that the meaning and experiences of the participants were captured and reflected in the accurate descriptions of participant experiences (Gillis & Jackson, 2002). Setting time at the end of each focus group interview provided the group facilitator with the opportunity to summarize the discussion and seek clarification from the participants. Verification of the data collected during the interviews increased the accuracy of the data (Creswell, 1994).

Including raw data, such as participant's own words and statements or quotations from the self-assessment tools in the final report contributed to the credibility of the study findings (Drisko, 1997).

Triangulation

The initial design of the study incorporated triangulation to enhance the credibility of the findings (Morse, 1991). The purpose of triangulation was to allow for the connections among multiple and varying sources of information that would have contributed to a more complete understanding of the research questions (Creswell, 1994).

The study attempted to incorporate both data source and methodological triangulation. The purpose of data source triangulation was to capture the range of data that represented the topic under investigation.

As Denzin (as cited in Miles & Huberman, 1994) suggested, three levels of data sources – time, place, and person – were to be collected. Collecting data at three points in time would have provided a means to validate patterns and changes in participant responses over time. Obtaining data from students and faculty in two different programs also allowed analysis of data related to context. Person triangulation referred to the data

collected from both students/faculty and individuals/groups. Data collected at each of these levels were essential to determine the extent of shared or discrepant views (Morse & Field, 1995). Inclusion of these levels would have contributed to the completeness and, hence, the trustworthiness of the data (Morse, 1991). Although data was collected over time, the lack of continuity in the attendance of both student and faculty focus group participants influenced the completeness and trustworthiness of the study findings (Morse & Field, 1995).

The collection of data from the student focus group interviews and the self-assessment tool would have provided methodological triangulation. Employing a secondary data source would have allowed for explanatory insights from varying perspectives (Kimchi, Polivka, & Stevenson, 1991; Morse, 1991). However, the inadequate number of self-assessment tools submitted did not allow for accurate identification of inconsistencies and contradictions in the data (Reed & Payton, 1997).

Prolonged Engagement in the Field

Allowing the focus groups to convene three times over the course of the study was employed to enhance the opportunity to gain insight into the multiple perspectives of the participants and acquire an understanding of the context of the participant view (Creswell, 1994). The repetitive nature of the focus group interviews with the same participants over time increased the strength and credibility of this exploratory study (Brink & Wood, 1998).

Dependability

The dependability of a study refers to "both the stability and the trackability of changes in the data over time and conditions" (Gillis & Jackson, 2002, p. 216). Criteria for establishing dependability that were applied in the study included:

1.   research questions that were clear and consistent with the study design

2.   data was collected across a broad range of appropriate settings, times, and participants.

Confirmability

Confirmability refers to the neutrality of the study findings. Demonstrating confirmability relied on the integrity of the process involved in the data collection and analysis. The audit trail documented the inquiry process including evidence of all activities, including decisions, choices, and insights, identification of themes, and basis for code development. The purpose was to clearly illustrate that the evidence and thought processes used to draw conclusions were grounded in and represented the participants' experiences (Brink & Wood, 2001; Rodwell & Byers, 1997; Streubert & Carpenter, 1999). Personal biases, assumptions, and values were stated explicitly. The use of memos was used during data analysis to address the issue of researcher bias (Brink & Wood, 1998). Memos provided reflective comments that included ideas related to the data, themes, and emerging conceptual schemes that were used to further the analysis.

Transferability

Transferability in qualitative research refers to the "extent to which the findings from the data can be transferred to other settings and groups" (Polit & Hungler, 1999, p. 430). Including an adequate description of the setting, the process for selection of

participants, and central assumptions allowed judgements regarding contextual similarity (Gillis & Jackson, 2002).

Ethical Considerations

The nature of qualitative research required consideration of ethical issues. The researcher has the obligation to respect the rights, needs, values, and desires of the participants (Creswell, 1994). The ethical principles of respect for persons, beneficence, and justice were considered in the study (Brink & Wood, 2001; Polit & Hungler, 1999).

The principle of respect for persons includes autonomy and the right to full disclosure. Autonomy refers to the "right to self-determination" (Brink & Wood, 2001, p. 212). The right of self-determination respects participants' freedom to determine participation in the study. Participation in the study was voluntary. The right to full disclosure required the researcher to provide sufficient and appropriate information that was clearly understood so that potential participants were able to make an informed decision. The principles of self-determination and full disclosure underlied the process for informed consent (Polit & Hungler, 1999).

To address these principles prior to signing the consent form, the group facilitator provided potential participants with verbal and written information related to the nature of the study, purpose of the study, the procedures to be implemented to ensure confidentiality of participation and data, the scope of participant involvement, data collection devices and activities, storage of data, and the intended use of the study findings. The consent form was explained and potential participants were encouraged to ask questions or contact the group facilitator at any time during the course of the study. Participants were informed of their right to terminate the interview at any time and the

right to refuse to answer any questions. Signing the consent form indicated that the participant had understood and agreed to participate. Two copies of the consent form were signed, dated, and witnessed. One copy was returned to the participant. The second copy was held in confidence by the focus group facilitator until the completion of the study and then destroyed.

Beneficence refers to the potential risk to research participants. The participation of students in the study may have placed them in a position of vulnerability. Acknowledging this potential risk was essential to the integrity of the study. Due to the unequal power relationship between the student participants and researcher and the personal relationship between the faculty participants and the researcher, it was decided that an objective and unbiased focus group facilitator would be the primary data collection instrument. The person selected to facilitate the focus groups interviews was an individual from a professional discipline who had no affiliation with the students, faculty, program, or educational institution. This increased the objectivity in the research study (Saulnier, 2000). To further ensure participation in the study did not carry any negative consequences, the identities of the participants were limited to the focus group facilitator and assistant.

The principle of justice included the participants' right to fair treatment and privacy. Fair treatment encompasses the right of participants to withdraw from the study at any time and without prejudice and to access research team members at anytime. The right to privacy also acknowledged respect for the confidentiality of participants (Polit & Hungler, 1999).

The nature of focus groups precluded ensuring absolute confidentiality. The researcher has no control over what participants may disclose following the focus group interviews. However, as part of the protocol, the importance of maintaining confidentiality was explained and a commitment to honor this principle was sought. Informing participants of this potential risk was intended to alleviate fears (Smith, 1995).

In addition, the following procedures were implemented to protect the confidentiality of the participants:

1.   Participants were identified using a coded identity system, during the data collection, transcription, and reporting of data.

2.   Consent to participate in the study was obtained by the focus group facilitator, not the researcher.

3.   Signed consent forms were maintained by the focus group facilitator in a safe and secure location until completion of the study and then destroyed.

4.   Access to interview tapes was limited to the transcriptionist and the focus group facilitator.

5.   Audiotapes and field notes were kept in a locked and secure environment at the transcriptionist's home.

6.   Access to identifying information was restricted to the focus group facilitator and assistant.

7.   Final report did not contain any information identifying participants.

Limitations of Study

There were a number of inherent limitations in the design. The sampling technique used in this study allowed for the possibility of self-selection which raises

questions related to the representativeness of the total population. As in most qualitative studies, the results found in in-depth descriptions of a particular phenomenon in a particular setting are not intended to be generalizable. Consideration must also be given to the quality of the data due to the poor participation and inconsistency in participant attendance across all focus group sessions. These factors had implications in the continuity of the data collected. The subsequent analysis did not allow the longitudinal examination of participant responses over time but instead, provided cross-sectional groupings of the experiences of using the tool at points in time.

The second concern in relation to the results is the lack in the number of self-assessment tools submitted by the participants. This limited the ability of this secondary data source to support the analysis of the primary data through triangulation.

Chapter 4: Results

The data collected during the focus group sessions provided a rich description of the experiences of both student and faculty participants utilizing the self-assessment tool as a means to promote the teaching and learning of employability skills. The incorporation of examples from the student self-assessment tools, as a secondary data source, were to be used to support the findings from the transcribed focus group data. However, only six completed self-assessment tools were submitted. Where applicable, statements from these tools are included in the presentation of the study results.

The analysis of the transcribed data identified six themes that provided a framework for the presentation of the results:

1. criteria for marking of the tool

2. structure and format of the tool

3. process of external evaluation

4. value of the tool

5. personal growth

6. value of goal-setting

Description of the Student Participants

All participants in the study were registered in one of two interdisciplinary health science programs. Voluntary submission of demographic data provided the following information.

Table 4

Demographic Profile of Student Participants – Sterile Processing Program and Medical Transcription Program

Age	Gender	Current Occupation	Employment History	Highest Level of Education
Sterile Processing Program Students				
18-24	Male	Courtesy Clerk	Construction	Grade 12
36-40	Female	Sales/Retail	Canada Safeway	Bachelor of Arts
25-30	Male	Unemployed	Casino Dealer	Grade 12
18-24	Female	Lifeguard	City of Winnipeg	2 years Science
36-40	Female	Sterile Processing Technician	Mother	Grade 12
Medical Transcription Students				
18-24	Female	Medical Transcriptionist	Crena City 8	Grade 12
25-30	Female	Medical Transcriptionist	Product Consultant	Bachelor of Arts
36-40	Female	Student	Secretary	Bachelor of Science

The Student Perspective

The results for the student focus group sessions are presented using the six themes identified. Statements from the participants' self-assessment tools are included wherever possible.

Sterile Processing Participants - Focus Group 1

Five participants attended the first focus group session that was held during the second month of the program. The six major themes are addressed in the presentation of the results of this focus group.

Criteria for marking of the tool. The ambiguity of the marking structure of the tool was an overriding concept. Although three of the six participants stated they understood the marking criteria, the remaining three participants discussed the perceived ambiguity of the marking scheme implemented.

> Do you need to improve or not. With this, there's nothing. But then you get a mark at the end and what does that mark represent? Your honesty? How you felt that you assessed yourself? (p. 13)

> You don't get a mark between you and your teacher. Or even if they had criteria, if you and your teacher hit certain area in the same realm you will bet a certain mark based on, you know, because if your teacher thinks you are a 3 in every. Say, you're going from 1 to 10. Your teacher thinks you're a 3 in every area and you're putting yourself as a 9, there's a discrepancy there. There should have been, the parameters should have been set differently. (p. 25)

For one participant the uncertainty regarding the criteria by which students would be marked had implications for the motivation to complete the self-assessment tool. "The motivation was pretty negative because you were chasing a carrot. You're chasing your mark. And if you're concerned about getting marks for it, it just felt like you were kind of forced to do this" (p. 24).

Based on their early experiences with the tool, it was not surprising that three participants stated that the tool should not be marked or, if it was graded, marks should be based on the completion or effort given the tool as opposed to an assigned grade. Furthermore, two participants shared the view that the completion of the tool should be voluntary.

Structure and format of the tool. All participants made comments regarding the format of the tool in relation to the structure of the questions. Comments included:

> Questions should be more detailed. (p. 32)

> Yea, they should be more tailored. (p. 32)

> There were a lot of parts of the tool that I found quite repetitive, the questioning. And it was like, this is kind of redundant. I just answered this and now I'm forced to revisit it and I didn't like that. (p. 23)

> The questions in the tool, they're very vague in themselves. (p. 12)

> To make it a more valuable tool, I think part of it, it could be shortened. (p. 12)

One participant stated that the time commitment involved in completing the tool had implications on learning. "It hindered my learning in that the last couple of days while she's being lecturing I've kind of realized how much extra time this is going to take and I've been sitting in class during the lectures working on this" (p. 26).

At this early stage the experience of these students with the structure and format of the tool was not viewed positively.

Process of external evaluation. Participants questioned the ability of instructors to objectively evaluate their performance. This was based on their concerns that instructors did not know them personally, have knowledge of their personal circumstances or their skills, based on the length of time spent in the classroom environment. Two of the participants stated:

> I think there's only parts of it in there that they actually see us, you know, and assess us. (p. 11)

> They don't know our skills. (p. 11)

The general process of external evaluation was in general addressed by one participant who stated:

> And I don't feel that I could just spend all this extra time to write it down and hand it to somebody and have somebody else evaluate how good I was at evaluating myself. That was, it really bothered me. Still bothers me. (p. 9)

The issue of sharing personal information was also expressed. Participants felt they were being asked to divulge information and disclose their personal thoughts and feelings that should not be shared in the academic setting. As one participant stated, "and I disagree with instructors giving me a mark on something that is my own feelings, my own beliefs, my own morals are in there" (p. 11).

Another participant questioned the value of the self-assessment tool stating performance in the workplace was typically evaluated by others. This perception was captured in, "We're going to be evaluated by others when we get to the job more so than doing a self-evaluation when you're not in the workplace setting. Your evaluations generally are not generated by yourself" (p. 29).

The lack of feedback and discussion provided by the instructors regarding the self-assessment tool was addressed by one participant. "You know, it would be nice to sit down say with (name) and say, well I felt like I was this. And she goes, well no, I felt you were like this. And why are we, why are we off the page from one another" (p. 32).

Comments from the participants at this point in the study, reflected concerns related to the personal nature of the information that they were being asked to provide, the objectivity of the evaluator, and the lack of feedback provided by the instructors.

Value of the tool. The value of the self-assessment tool was perceived by participants in terms of priority, relevance, and context. The lack of priority given the tool by participants in relation to academic achievement was evident. All participants measured academic success as reflected by understanding of course content and grades attained on tests and exams.

> And it's, with the deadline, it' been interrupting schoolwork.
> There's more important things as far as school and learning go,
> going on right now. Like we have an exam tomorrow. (p. 10)

> If we don't pass the courses, we don't have a future. (p. 28)

Completion of the tool was viewed as a time-consuming endeavor in that it did not seem to be integrated into the academic workload. As one participant stated, "it's been interrupting school. There's a lot more important things as far as school and learning go" (p. 16). Another participant shared this point of view, "this is the last thing we need to do" (p. 15).

Furthermore, at this point in their program, students failed to appreciate how the tool related to their preparation for the work environment. Four participants felt the tool lacked any relationship to the performance competencies required in the work environment. One participant felt the tool did not have any positive impact on future job performance

> I don't think it made a difference with reference to jobs or careers
> or anything like that....I don't think there are things I need to work
> on ...the tool hasn't really helped me with thinking about how I'm
> going to do better in this job....I don't feel that I have anything that
> I need to work on in that respect so it hasn't helped me and
> thinking about how I'm going to be better in this job or anything
> like that....Make it more career oriented. (pp. 27-34)

The relevance of the tool was also measured by personal work ethic. Two participants felt that they already demonstrated a good work ethic and expressed a reluctance to engage in the self-assessment process. As one participant reported, "I know I have good work ethic. I don't think there's things that I, I need to work on" (p. 29).

In addition, participants who felt they consistently engaged in self-assessment did not place value on completing the tool, observing that, "I think this just formalized what we already do" (p. 34).

The segmentation of the tool, and consequently its perceived irrelevance to specific course content was evident. One participant expressed difficulty with the application of the tool across the program content in the comment: "Like they should have it involved with the Human Workplace Relations and not with the Sterile Processing course. Cause that's what it deals with right?" (p. 36).

Even within the program, confusion regarding the context in which to apply the tool was evident across participants. Two participants expressed their uncertainty regarding the scope of the self-assessment tool. In part this was due to the confusion regarding the inclusion of the external environment – classroom, faculty, program – and how it would apply to the tool was questioned.

> You know, how we feel about the course or even our faculty. I mean cause they affect our learning and your every day existence, right now until we're done this course, and let's be honest, there's people in our class that annoy us. Exactly. There is people in our class that the majority of us don't believe should be there, you know, but they still are. So I think in some points, there should have been something in that assessment that gives us the right to voice our concerns of our classmates and our course. (p. 16)

> I would have asked, like I would be concerned like about the environment, the study environment. Noise, whatever, interruptions, that kind of thing. I would definitely have made some points on that. (p.16)

> I think they needed to have, um, something about our course in there. (p. 16)

> Yea. You know, it's all general questions. Like we don't know what we should relate it to. (p. 33)

Participants were also unclear about the use of the tool for integrating learning and questioned the relevance of addressing employability skills in the academic setting. One participant commented: "I personally don't think we need to do this unless it was for school cause, you know, we are learning something totally different so that's when we should be, you know, assessing ourselves towards that" (p. 41).

The relevance of the tool was also perceived in terms of time orientation. The focus for participants was the here and now and they frequently viewed their employment as too far in the future. As one participant suggested, "So at this point the job is too far out there" (p. 28).

Personal growth. Despite some of these concerns about the use of the tool, three participants identified a number of areas in which the tool demonstrated benefits in promoting self-awareness. Comments from participants included

Helps you learn about yourself. (p. 8)

But I think by journaling it's forcing you to journal and in a way when you start having to journal it's a difficult process if you've never done it before. And it makes you face things that you might not have had to address before or might not, you just, because it is asking direct questions, you're faced with it. Whereas before you might not even want to go there. (p. 7)

It promotes awareness because sometimes when you're working through a section, you realize, gee, I do struggle in this area. (p. 22)

I think it does help you, help you to identify…whatever and make you stop and think when you have a problem. (p. 23)

Helps on showing where you really, really need improvement. (p. 6)

Specifically, using the tool facilitated the identification and acknowledgment of problems as reflected in statements from two participants

> Confess to a problem…admitting it, getting it out on paper and
> everything, you can work on trying to fix it. (p. 4)

> Putting the face on a problem. Like you are actually recognizing
> part of, part of realizing that you have maybe part of the solution,
> is recognizing what the problem is. (pp. 22-23)

The tool also provided opportunities to examine situations objectively and set the stage for action. As one student articulated, the process "separates the I from the you mentally" (p. 5). This more objective stance allowed some participants to examine their own contribution and role in the learning situation

> Take responsibility for, for things that are going on, say in the
> classroom, and see how you are involved in the process. (p. 5)

> Helps you to know whether you attack something full force or
> whether you step back and take another look at it. The tool helps
> you to, um, it helps you to analyze yourself and acknowledge what
> you have done and whether it's the right thing or not. (p. 6)

Some participants confessed concern about the negative focus of the tool in regards to emphasizing one's limitations and weaknesses in that it "begs the negative in a person, like gee, better find some faults with yourself" (p. 19). Another responded that "I don't think that necessarily doing a self-assessment should be accentuation of your negatives" (p. 19).

Even at this early stage in their program, three participants did not perceive the tool as personally beneficial, in that, "some people don't necessarily need to improve" (p. 18) or because "I think most people, and I'm saying most people, evaluate themselves regularly in their own mind" (p. 39).

One participant provided the following statement on the self-assessment tool. "I do not set short-term goals or identify them in problem solving. Decisions I make are

usually correct, however, they are based on experience and routine reaction, not evaluation."

These divergent views were explained, in part, by participants who suggested that there are predisposing factors that have implications regarding the relevance of the tool. The influence of age, gender, and previous work experience were discussed. With respect to age, one participant stated: "Most of us are at an age where we know where we need to improve and we know we are set in our way. We're not improving" (p. 19). Another participant identified gender as a factor in "women take ownership, men take, look at the extenuating factors" (p. 20). Similarly, another suggested work experience "I have way more skills than someone who is just out of high school" (p. 30), and the type of experience "I think it [the tool] is good for people who have previously worked on their own" (p. 19).

Value of goal setting. Two participants addressed the role of the tool in assisting them to examine the goals set in terms of achievability and attainment. As one participant stated:

> In terms of setting goals as well. If you're not used to setting goals.
> That was an interesting, interesting area and then when you look at
> the goals, and you go, later, it's like, gee, did I set time lines for
> these goals achievable. (p. 9)

One participant suggested the tool provided a means "to work through them and prioritize which goals are most important to start on" (p. 9) whereas another viewed goal setting as onerous, "you have all these goals that you set in the assessment but it's all like an obstacle. You gotta get over one. Once you've gotten that one, you can, you know the next one" (p. 21).

Sterile Processing Participants - Focus Group 2

Three participants attended the second focus group session that was held at the midpoint of their six month program. The results are again presented using the six themes identified, allowing the data to demonstrate how the participants' views about the use of the tool changed or remained stable over time.

Criteria for marking of the tool. Concerns around marking of the tool were presented by two participants who felt the ambiguity of the marking criteria was based on a lack of understanding related to how the tool was to be marked – completion or effort mark: "your effort, your participation, what you actually wrote" (p. 18) or personal ability to self-assess in those areas included in the tool. "I don't think that my mark necessarily should be based on my, my feelings of self-worth" (p. 7). Although participants continued to express similar concerns as in the first focus group regarding the marking structure there was increasing focus on the personal nature of the tool and one's ability to self-assess.

Process of external evaluation. Two participants questioned the validity and reliability of the external evaluation process. Comments regarding the ability and accuracy of instructors to assess student performance remained a point of discussion. There were general concerns, as captured by a participant who speculated, "how can you put, give it to an instructor to evaluate when they barely know me, you know, they know me within the classroom" (p. 14).

Given the personal nature of some of the information disclosed in the tool, another participant expressed a particular concern regarding the implications for future employment when potential employers were used as instructors in the statement, "the

people that are marking these self-assessment tools are actually going to be some of our future employer. I don't think that this is necessarily right either" (p.15).

Ongoing concern related to the priority assigned to using the tool were noted by one participant.

> It's a, the timing because it coincides with your exam schedule, it, it, it's unnecessary anxiety. I think. Just another thing to get out of the way. And I think more, maybe more thought might be put into it if it was due a, at, a not corresponding time. Going into write an exam and having to hand in a self-assessment. (p. 18)

As the program progressed, participants began to express concerns about the integrity in the completion of the tool. "I know what kind of answer is expected of me" (p. 13). Rather than responding in an honest manner, another participant, tongue in cheek, observed, "well, on one of my questions I wrote practically perfect in every way, that was my answer. Like Mary Poppins" (p. 14).

Concerns about the learning value of the tool persisted. All participants agreed the self-assessment tool had not assisted them in their program. Two participants felt they continuously engaged in self-assessment, therefore, the relevance of the tool was minimized in the statement, "from my past history, I already have them. I don't need to sit here and analyze, you know, do I have it or do I need to improve on that" (p. 22).

At this point in the program, there were mixed views in relation to the relevance of the tool to the workplace. As one participant stated that "all this stuff that we do in the self-assessment tool will eventually relate to sterile processing" (p. 23). In contrast, application of the tool within the context of the work environment was questioned by another participant who did not see this connection in stating "I'm not really looking at how it, how it will make sense to my work" (p. 22).

Personal growth. The value of the tool in contributing to personal growth varied across participants, and over time. One participant acknowledged a change in his/her approach to completing the tool a second time. As the participant stated, "last time I was just too enmeshed in just trying to write it. And this time you're looking at a little more bit more detail" (p. 13). Another participant stated "we had to think about it" (p. 13).

A third participant stated:

> I don't think it changed how I view myself. Um, I found that the self-assessment tool was helpful in more of a personal way. I feel it allows you to look at, it's easy to list things you don't like about yourself. Whereas, this one sort of, the self-assessment actually challenges you to look at some of your positives. (p. 41)

In contrast, a statement from a participant self-assessment tool stated "I tend to feel my performance is satisfactory and don't feel I need to change anything".

Participants continued to perceive the influence of mediating variables in the acquisition of employability skills. Age was discussed again by one participant who stated, "maybe for the younger people in the class it's helpful" (p. 23) and another participant identified prior work experience in the statement, "I think, for me, my past history, I already have them. I don't need to sit here and analyze, you know" (p. 22). Another participant continued to maintain that, "you know, to be perfectly honest, the self-assessment tool is useless to me" (p. 27).

Sterile Processing Participants - Focus Group 3

Four participants attended the third focus group session which was held upon completion of their six month program. Four of the six themes were identified including

criteria for marking, structure and format of the tool, process of external evaluation and value of goal setting.

Criteria for marking of the tool. Concerns about the evaluation of the tool persisted. Two participants suggested that completion of the tool should be voluntary as this would increase the effort to engage in the self-assessment process as well as increase the honesty of the responses given. Even at this late stage in the program, participants expressed, in ways very similar to the first focus groups, uncertainty related to what exactly was being evaluated – personality, behaviour, or performance.

Structure and format of the tool. Based on their experiences with the tool, all participants made comments related to the format of the questions on the tool.

> Some of the questions were, I found, pretty repetitive. Like it was asking us the same thing over and over again. (p. 11)

> More specific questions. (p. 22)

> [the questions] were frustrating about all of them is that it is really not a question. It's a statement that makes you analyze how you are about yourself. (p. 13)

Overall, the participants suggested the questions needed to be more structured to provide greater direction for completion. One participant felt the statements were not specific to the qualities and attributes employers were looking for.

Process of external evaluation. Concerns regarding the use of potential employers as evaluators were shared by two participants. As one participant commented, "a lot of people are kind of watching what they're writing in there because they were being marked by potential employers" (p. 8). Two participants felt there was a need to use impartial evaluators. As one participant stated, "oh, yea and make it that our instructor or make it somebody who's not involved in the course" (p. 21).

From the students' perspective, the learning value of the tool was reflected in the priority placed on completing the tool. Competing course demands, such as tests and exams, were viewed as the most important tasks and measures of personal academic achievement. Two participants provided the following comments

> I thought about it while I was writing it and then gone from my mind. The farthest thing. It's like your brain can't handle only so much, you know, and this is irrelevant. (p. 12)

> I didn't have to do it. I have enough marks. I could have passed without that at all. So it was like put it off, put it off, put it off. So it was just annoying. (p. 12)

Participants continued to question the integrity involved in completing the tool suggesting that the responses given were targeted towards the specific evaluator. "You're almost looking at the audience. You're not concentrating so much necessarily on your personality as, okay, this is the person that's going to be reading this" (p. 7). Candidly, one participant commented on his/her approach to completing the tool. "You're directing it towards the instructor and you're directing it towards getting your marks fulfilled" (p. 7).

Two participants identified a growing perception of the relevance of the skills included on the tool to the workplace. They also identified that there are individuals within the workplace that would benefit from using the tool.

> I think maybe the managers need to do this too, because, I mean, where I was and this same person every day was late and every, there's lots of issues that this person, all the staff had issues with this person and he's still there, you know" (p. 18).

Two participants expressed an appreciation for the value of the tool.

> I don't think the tool is completely useless. It's just, like I say, it, falling into the category of an assignment, it changes it. It doesn't make it useless and also, talking about putting negatives, I think

> for some people actually looking at your strengths and your positives. I think that was one of the things that I had to address about myself. That, yea, there are positives. Yea, there are strengths. And I think that in that sense, yea, it was good. (p. 10-11).

> And it kind of made me look at those a little bit and realize what I needed to be doing different not be doing better and what not in school. (p. 8)

One participant still did not perceive the relevance of the tool. "I couldn't really relate it to everything that I was doing in the workplace" (p. 5). Another participant expressed the view that one way to heighten the relevance of the tool would be to "make it more specific, more specifically about things that, that the employer would be looking for in you" (p. 22).

Some students' perceptions of the self-assessment process appeared to change over time. Two participants reported a positive experience related to the self-assessment process. One participant felt the tool was helpful "and it kinda made me look at those a little bit and realize what I needed to be doing different to be doing better" (p. 8). In contrast, the focus on individual weaknesses and limitations was also expressed less negatively by another participant in "it gave me an opportunity to write down more negative things about myself" (p. 8).

Value of goal setting. At the end of their program, participants began to recognize the general value of goal setting. As one participant stated, "I think the whole thing was the goal-setting though. That's a good thing because once you have to actually write it down it becomes something physical that's there" (p. 24). However, two participants questioned the number of goals that needed to be identified. The ambivalence about the relevance of setting specific goals was voiced by one participant "I have goals that I've

set for myself but they're not the dinky little things that I'm writing down in here" (p. 25).

Medical Transcription Students - Focus Group 1

The self-assessment tool was also implemented in the Medical Transcription program. The major difference noted from the demographic data provided was that all participants were female.

Five participants attended the first focus group session which was held during the second month of their program. The results for the student focus group sessions are presented using the six themes that were identified.

Criteria for marking of the tool. Participants from the Medical Transcription program provided personal insight into their experiences with the self-assessment tool regarding the marking structure. One participant stated the marking of the tool was frustrating, that in general "it's a lot of pressure" (p. 10). This was in contrast to the Sterile Processing group who emphasized the ambiguity of the tool and a lack of understanding regarding the criteria by which they were being assessed.

Structure and format of the tool. The format of the tool was addressed by all participants. At this early stage of their program, four participants felt the tool was difficult to use. In addition, the length of time to complete the tool and timing for completion of the tool in relation to other program requirements was raised by two participants. As one participant stated, "timing too close to exams and stuff [inaudible] time to study" (p. 22).

Process of external evaluation. The process of external evaluation was discussed in relation to the value or reliability of this type of assessment. "How could somebody

mark you on what you are, on what your feelings are towards your goals" (p. 4). Another participant viewed the value of the process in relation to the credibility of the particular individual who is providing the feedback. "When we get…some people we respect and you know accept" (p. 33). At this point in the program, the focus for student participants was related to the quality of feedback and the perceived credibility of the evaluator.

Value of the tool. All participants indicated that the priority given the tool was measured in comparison to test and exam requirements. As in the Sterile Processing program, the measure of student success was based on final grades achieved on tests and exams. As one participant stated, "right now it is not a priority" (p. 1).

Even at this early stage of their program, participants discussed the integrity with which the tool was used. The process by which participants engaged in the completion of the tool was frequently influenced by the desire to "please" the external evaluator. This outcome had implications for the approach and effort given the tool assignment. More specifically, the self-assigned grade was viewed by two participants as a means to an end rather than a genuine self-assessment. "I thought my mark was going to be borderline between A and A+, I might grade myself high on the self-assessment tool" (p. 10). Participants also felt the private nature of their responses raised issues concerning confidentiality and disclosure which had implications for the candid completion of the tool.

At this early stage of the program, all five participants agreed that they did not see the relevance of the self-assessment tool to the workplace. One participant stated "What is the use for it? Like generally. Instead of like we need to [inaudible] in the workplace and doing our self-evaluation. Everyone has faults. Yea. So like what for" (p. 14).

Statements regarding the appropriateness of the self-assessment tool in an academic

setting were also noted by one participant who commented, "they're really life skill

goals. So I'm not sure [their appropriateness in] the course and being in the college"

(p. 12).

    Personal growth. Three participants expressed the benefits of engaging in the

process of self-assessment as reflected in the following comments:

> I don't think it has changed the way I act in my life or who I am
> but it has [helped make] me more aware right now. (p. 29)

> Sit down and assess yourself. It forces you. (p. 5)

> Always a good thing to do. No doubt about it. (p. 20)

    Overall, participants agreed the tool did not hinder learning but was viewed as

either positive or neutral. In contrast to the Sterile Processing participants, only one

participant expressed a concern that the tool emphasized the identification of areas for

improvement as opposed to personal strengths.

    Value of goal setting. Perhaps most shocking were participants' views about the

value of goal setting at the onset of their program. The need to set personal goals for self-

improvement was not viewed as positive as captured in:

> Who actually sets goals for yourself. Like specifically set goals. I
> don't think that is appropriate. (p. 8)

> The time not realistically set goals. You shouldn't have to set
> goals. (p. 13)

> I don't particularly like to be told now, right now, you're going to
> identify a problem, set a goal, and in two months down the road
> have a look. (p. 12)

Medical Transcription Students - Focus Group 2

Two participants attended the second focus group session held at the midpoint of their six month program. The results are again presented using the six themes.

Criteria for marking of the tool. The appropriateness of the marking process for the tool was addressed by both participants:

> "I don't really like it being used as something that is part of our grade. (p. 12)
>
> I think that making our own assessment of ourselves go into our final marks for the course is just a good idea because it discourages honesty and it discourages us really looking at it. (p.14)

Structure and format of the tool. Like their peers in the Sterile Processing program, these two participants commented on the length of time required to complete the tool, the format, and repetition were raised. One participant identified the time between the first and second application of the tool needed to be longer, "time in between is when you're kind of improving on yourself" (p. 8).

Process of external evaluation. The subjectivity of external evaluation was noted as a concern by one participant. Both participants viewed the credibility of the external evaluator on the basis of perceived expertise and potential future relationship with the evaluator. As one participant commented, "I did not feel as comfortable the second time around giving out personal information to people who are then in the workforce that we're going to be part of" (p. 21). More generally, there were concerns about the integrity of the evaluation process. "How honest can the instructors be when they're working with us everyday" (p. 15). There were also process integrity issues from the students' perspective. Reservations related to the value of the evaluation process were expressed by

one participant. "You know, you don't particularly feel like making improvements over those three months because you've been told to on a bit of paper that you had to" (p. 20).

Value of the tool. The priority placed on the tool in relation to course work was consistent with views expressed with the first focus group. As two participants stated

> It's just always at really bad timing when there's other things that need my attention more that this. (p. 7)

> The only time I have, I'd like to study for my exams but then I had to do this. (p. 10)

Both participants acknowledged that the tool addressed required skills in their chosen career. However, one participant expressed difficulty relating the tool across the curriculum. "It was easier to apply these questions to the um, Human/Workplace course. where in a typical class, we would interact with each other and with the teacher" (p. 4). In part the challenge was in reorganizing the applicability of the tool across a number of courses. As one participant suggested, "you could make it specific to each course, not just one general. Like you're using it as a tool to improve, like you have to look at each course separately" (p.12).

Personal growth. Participant responses to a question about the benefits of using the tool in the development of personal growth were negative, as evidenced in the following statements:

> We tend to have thought of a lot of the stuff before. (p. 17)

> Like it's just kind of like, writing stuff I've already realized. (p. 9)

> I think the skills that are related to this, I know where my [weaknesses] are and I know how to improve them. (p. 18)

The completion of the tool for a second time in the program was also viewed by both participants as void of any positive impact on learning and personal growth. "I

thought it was helpful the first time and I really did see insights but, like it's just kind of reinforcing the stuff that I already realized" (p. 6). Without perceiving additional learning value, participants had "more of an interest in getting it done" (p. 7) rather than in learning from the experience.

Like their peers in the Sterile Processing program, these participants identified gender as a factor influencing one's ability to self-assess and to grow personally through the use of the tool. "I think women tend to engage in a lot of this kind of self-analysis anyway" (p. 9).

Value of goal setting. Even at this point in their program, the value of goal setting was not acknowledged by either participant as reflected in the statement "maybe I see an area where I need to improve and I haven't made any progress on it since the first time because that wasn't something I was able to work on at that time" (p. 20).

Medical Transcription Students - Focus Group 3

Three participants attended the final focus group session which was held upon completion of the theoretical and clinical components of their program. Statements from the participants reflecting three of the six themes are presented.

Criteria for marking of the tool. Participant responses regarding concerns about the instructions provided for completing the tool were addressed. Two participants stated:

> I was a little unclear in the differences between the areas for self-improvement and personal goals. (p. 17)

> The first time I think it should have just been explained a lot better. (p. 13)

Process of external evaluation. In regard to the process of external evaluation, one participant reflected growing acceptance for being evaluated through this tool by an instructor:

> Its perfectly okay for her to see it because she's a professional in the field. She's teaching it. It's confidential information, no problem. Felt like I could be completely honest with that because, you know, she's a professional instructor. She deals with lots of these kind of things. (p. 16)

In contrast, another participant continued to express reservations:

> I don't know if I fully agree with it being marked at all. Like I don't think it is fair somebody can give me an opinion when like they see me in class. They really don't know who I am, maybe my work is. (p. 15)

The objectivity of the evaluator, as perceived by the participants, was also a measure of evaluator credibility. The following comment by one participant alludes to this: "like suppose they think that someone doesn't demonstrate respect to others, it puts them in a bad situation if they give you a bad mark" (p. 16).

Value of the tool. The lack of priority given the tool, even at this late stage of the program, was evident. As one participant put it, "there's other things I'd rather do" (p. 11). The potential of the tool to assist participants in their learning was not often realized, as reflected in a number of comments:

> I don't think it's anything that someone's going to make improvements specifically because of this, of this tool. (p. 9)

> It's not something I haven't done before in other courses. Like stuff I already knew. (p. 12)

> Having to do this didn't make much sense. (p. 11)

One participant felt the focus of the tool should only be on the evaluation of learning in the context of theoretical knowledge. "You know, how well you can

[inaudible] medical terms, how well you can [inaudible] learning the ability to listen, distinguish between words" (pp. 7-8). Participants did not indicate that they experienced the kind of learning that the tool was assigned to facilitate.

The number of times participants were asked to complete the tool also remained an issue for two participants:

> I just think three times was too much. The first time was good, like I learned a lot about myself and stuff the first time, The second one was okay. This one, it just seemed really monotonous. (p. 5)

> I think the first time was, the first time was worth doing. (p. 5)

The failure to appreciate the relationship of the tool to the workplace experience was also reflected in the comments made:

> I couldn't relate it to the practical. (p. 7)

> It was so irrelevant to the practicum. I mean it was still talking about things you've done in class and we were supposed to be relating it to the practicum. (p. 5)

> For me one like problem-solving. Like just, it's still so new we really haven't had enough time to do any problem-solving, like in four days. It's not really enough time to come up with having any problems. (p. 6)

The Faculty Perspective

Focus group interviews were conducted with faculty from both the Sterile Processing and Medical Transcription programs at similar points in time with the student focus sessions – the beginning, midpoint, and completion of the programs. The use of faculty focus groups provided insight into their experience with the self-assessment tool in relation to promoting the teaching and learning of employability skills. The faculty for both Sterile Processing and Medical Transcription consisted of industry experts and nurse

educators. No further demographic data was collected from the faculty participants to maintain their anonymity.

The results are presented using five of the six themes as identified in the student focus group sessions. The theme of goal setting was not addressed by the faculty participants.

1.   criteria for marking of the tool

2.   structure and format of the tool

3.   process of external evaluation

4.   value of the tool

5.   personal growth

Sterile Processing Faculty - Focus Group 1

Two participants attended the focus group session that was held during the second month of the program. The major themes identified included structure and format of the tool, value of the tool, and personal growth.

Structure and format of the tool. The two participants agreed the statements in the tool were culturally sensitive and the terminology used may be perceived as vague and not culturally relevant.

> Actual terms that were used might be hard for a student to, to
> interpret.
> (p. 14)

> Well, like sometimes the terms are, uh, it's like we just talked
> about growth areas, you know. Like how vague is that, you know.
> (p. 13)

The time involved in completing the tool was also addressed by one participant who observed that the personal demands placed on students in stating, "some of them are adults juggling many different factors and have to do one more thing" (p. 12).

Value of the tool. Both participants viewed the tool in terms of relevance to the participants in relation to their academic priorities in that they

> felt that this was pretty basic stuff that everybody should know, you know, and that they had been taught this in their, in their previous, well there're life skills that they were aware of and that, um, I can't say that I actually saw evidence of being taught that, but that was their feeling that this was kind of not something that was necessary for them personally. (p. 7)

The priority given the tool by the instructors was also measured against the need to teach and have students acquire the theoretical knowledge. "They have to learn this knowledge and they got so much time to get it and learn it appropriately" (p. 22).

Perhaps most telling were the instructors own priority for using the tool as reflected in reports that the tool did not influence their teaching methods. "I don't know if they have anything to do with this tool" (p. 20).

Personal growth. Both participants agreed that knowledge of the employability skills was beneficial in the promotion of self-awareness and in identifying expectations for student behaviour. The usefulness of the self-assessment tool was in that:

> It lays the ground rules for what behaviour is expected of you. And not only in the workplace but in communication with other people. And in my experience with the students all of these things come up from time to time. All of these things on the tool. (p. 10)

> It could be a reinforcement tool for those that already know and understand what is required of them and being a student….what we think is socially and culturally desirable in a classroom or a learning experience. (p. 9)

One participant alluded to age as a factor. "Maybe it might really force for those younger students the importance of, um, in understanding themselves and what they're all about" (p. 9).

Sterile Processing Faculty Participants - Focus Group 2

One participant attended the focus group session held at the midpoint of the six month program. The two themes addressed by this participant included criteria for marking and the value of the tool.

Criteria for marking of the tool. The issue raised in regards to the marking of the tool was the ability of the student participants to satisfactorily complete the tool. The faculty participant stated the completed tools lacked detail and evidence of self-reflection in the comment, "well it ranges from, um, really incomplete and, I use the word shallow" (p. 6).

The continuity of the evaluator over time was also raised. "Because there's had to be different people involved with grading them it is hard to see how these people have grown" (p.15).

The instructor identified the parameters used in marking the tool as the ability of the students to engage in the process of self-assessment, the depth of the self-assessment process, and the extent of the goal setting.

> In what they're saying. Like, yea, how deep did they get with this.
> Not, that's not being about how personal it is....It's more like,
> what the quality of the information is...on the goal side, and, or
> how, what the next step. (p. 7)

Value of the tool. The usefulness of the tool as part of the learning experience for participants in the preparation for employment was recognized by this faculty member:

> Within the education environment, all students are usually
> preparing themselves for employment. And that, um, if we really
> want to move ahead in, in different workplaces or even within the
> context of education, that we need to develop these skills for
> people because they're not really, not being addressed anywhere
> else. (p. 11)

This one participant also questioned the ability of students to connect the value or experience of using the tool in the classroom setting to a broader context "I don't know if they're quite able to make the link between what they've gone through in using this tool and what it means to them as individuals" (p. 11). At the same time, this faculty member experienced some of the tensions reported by the students, "right now this is an obligation and they need to meet their course requirements" and that "some students view it as an isolated exercise" (p. 11).

Sterile Processing Faculty Participants – Focus Group 3

Two participants attended the final focus group session which was held upon completion of both the theoretical and clinical components of the program. Four of the major themes that emerged were consistent with previous faculty focus group interviews.

Structure and format of the tool. Issues regarding the format of the tool were raised. One participant stated, "how to fill in the tool or utilize it seemed to be a challenge...questions themselves or the statements themselves were not complicated. It's just that sometimes people didn't answer what was asked" (p. 5).

The number of times students had to complete the tool was also addressed in the comment concern. "I can see the value in doing it twice. Three times I think is a little overkill" (p. 10).

Process of external evaluation. With respect to the evaluation of the tool, the importance of establishing a relationship between the evaluator and the student was stressed. One participant summed it up particularly well. "Develop that trust between the instructor or the person administering it and the feedback that you get. And then have that feedback to the students" (p. 14). Instructors were also aware, "at worst, there were

people who really felt like they were being evaluated as, for their quality of human being" (p. 13).

Value of the tool. Both participants discussed the priority of the tool for students in relation to academic and personal demands. Students were perceived as having "too much work to do, you know, they had so many things on their plates" (p. 10) and "they were very tired and they had their sights just set on finishing" (p. 8).

The importance of the skills included in the tool and the relevance to demands of the workplace and employer expectations were identified. "It's a valuable tool no matter what business you're in kind of thing" (p. 11). With one exception, faculty appreciated the value of the tool more than students did. "As also perspective employers, we're saying, yea, we do want some soft skills and we want people to be able to realize, you know, that" (p. 13).

However, the focus on academic achievement as evidenced by the acquisition of theoretical knowledge was also emphasized in "I want him to have passed or her to pass the course and to know I've got a good employee coming out. And I'll make that, I'll make that assessment when the person's working for me" (p. 16).

Even though instructors were focused on knowledge acquisition, they also recognized the usefulness of the tool in determining and focusing teaching strategies. As one participant stated, "every time I get more information about someone you incorporate that into how you're going to approach them the next time. So definitely there is a value" (p. 19).

Personal growth. In regard to the usefulness of the tool in promoting personal growth or self-awareness among the students, one participant stated, "I didn't notice a

significant change" (p. 4). In contrast, "were people who were really committed to it. If they were committed to the overall learning process, they were generally committed to all aspects of it" (p. 4). As suggested by one participant, the learning value of the tool, not surprisingly, depended on the motivation of the learner.

Medical Transcription Faculty Participants - Focus Group 1

Faculty members from the Medical Transcription program also participated in the study. The results are presented using the major themes identified from the data. The following themes were addressed – criteria for marking, value of the tool, and personal growth. Two participants attended the first focus group session which was held during the second month of the program.

Criteria for marking of the tool. Both participants expressed confusion regarding the marking of the tool. As one participant stated:

> I'm not clear on how I'm, I mean I know they are going to put down their thoughts. And I'm going to, you know, compare their thoughts on how I think they are doing. But how do I give them a mark on that. (p. 11)

This was in contrast to the Sterile Processing peers who did not address the marking criteria at a similar point in the program.

Value of the tool. The priority of the tool was weighed in relation to the academic progress and technical skills of students. Both participants agreed the purpose of the program was the preparation of entrance level employees measured by the acquisition of theoretical knowledge and evidenced in grades. As one participant observed, "in the course we are dealing with people who are just learning medical terminology and there is still a great deal of areas for improvement there" (p. 14). In fact, these instructors did not always see employability skills as the focus of their teaching "We're not teaching them,

like in this course, in this particular course, we're not teaching teamwork, communication skills. We're teaching them what they need to know as far as the, as far as the transcription" (p. 4).

At this point in the program, the use of the tool was not a high priority for these instructors. Despite the low priority assigned to using the tool, the value of the tool was perceived to influence the teaching methods used "because of the discussion we've had this week about some of the concerns over how these students are doing. And now seeing the tool, I think we can use it so, yes it has changed my thoughts on teaching" (p. 21).

Personal growth. Both participants agreed the self-assessment tool provided a structured intervention point to initiate discussion with students. Participants commented that

> It's very difficult to approach someone and tell them I don't think you're doing very well but with the self-assessment done, that opens the for you. (p. 21)

> I think there's some students who definitely are going to need to have their eyes opened. (p. 13)

> We can use it as a learning tool with them to point out their, basically their strengths and weaknesses so they will know what to improve on. (p. 25)

Medical Transcription Faculty Participants – Focus Group 2

One participant attended the second focus group session held at the midpoint of the program. The major themes included criteria for marking, value of the tool, and personal growth.

This instructor noted, as a concern, the issue of the time involved in marking the tool, "the only issue was the time involved and knowing how much time it takes" (p. 17). This was heightened by the instructor's perception that the use of the tool by students was

a means to achieve a high grade as opposed to learning the value in completing the tool. "She [the student] was looking for the mark alone" (p. 6).

In contrast to the perceptions of many student participants, this faculty participant stated the skills included in the tool were essential to the workplace. "Basically I think the whole, the whole tool, is very useful. We found it useful, as I said, from a performance appraisal point of view" (p. 9). He/she also held the view that the tool assisted students to look beyond technical skills and knowledge to include other important aspects of their role such as "having the students understand that, that these skills are needed in the workplace because they are focused just on their taking the course" (p. 14).

This participant suggested the usefulness of the tool was in guiding teaching strategies that helped to identify and implement situations of where, when, and in which situation the tool would be applicable. The view was also expressed that the value of the tool as a personal learning instrument was in:

> Knowing how we implemented it and how useful the tool is in assessing the skills of the student and giving them feedback on how they're doing. Yea, it's definitely, um, wouldn't say changed how I would teach it, but it has made one more aware that we have this tool so we can work towards it from the beginning in preparing them for it. (p. 16)

Faculty also used the tool to discuss formative growth for students. "I mean we wanted to be encouraging in their skills and point out what was positive" (p. 12) and in a more summative sense the tool was "used as a progress report for the student" (p. 3).

Medical Transcription Faculty Participants – Focus Group 3

Two instructors participated in the final focus group session conducted upon completion of both the theoretical and clinical component of the program. The major

themes discussed included structure and format of the tool, value of the tool, and personal growth.

Structure and format of the tool. Both participants felt the tool was vague and needed to be tailored to relate to the specific skills required of medical transcriptionists in the work environment. The format of the tool which required students to provide comments, identify strengths and weaknesses, and set goals was viewed as a substantial time commitment on behalf of the students. "They have to look at the questions and formulate an answer. Write their strengths and then think about how they can improve" (p. 21). The time required, and not the concept of the tool itself, was seen as the primary barrier. "But I think they'd be more receptive to filling it out if they didn't take so much time. Like it's, ha, a lot of effort required and time" (p. 22).

The value the instructor participants placed on the tool was evidenced in the assumption that the tool should be formatted in the form of check-off boxes whereby students would be "asked the question they can say whether they have the skill or not, I think there's not so much thought involved" (p. 22). Such a format is in contrast to the learning experience intended in the design of the tool.

Value of the tool. Both participants viewed the tool as a useful means for instructors to increase their understanding of students and personalize their interactions. "I feel closer to them. I felt like I knew them better and anytime that I feel I know someone better I can open up more myself and communicate better" (p. 15). Another participant used the information provided by students through the tool to facilitate student learning. "I read through the different assessments and I felt like I actually knew them better, and as a result, I could probably help them better" (p. 9).

Providing feedback to the students was seen as an essential component of using the tool effectively. As one participant stated, "well, I think they need feedback, otherwise they can write whatever they want about themselves…using it as a progress report" (p. 8).

Personal growth. In contrast to the Sterile Processing faculty, both participants acknowledged the potential value of the tool in the promotion of self-awareness in students. "The tool may have brought something to a student's attention or allow them to focus on something or gain some insight into themselves that maybe otherwise they wouldn't have taken the time or had the opportunity to do" (p. 14). Another instructor reported demonstrable outcomes attributed to using the tool. "I saw an increase in responsibility, taking responsibility for assignments being done" (p. 2).

Chapter 5: Discussion

The use of the self-assessment tool in the teaching and learning of employability skills proved to be a complex and challenging task. This final chapter summarizes the patterns of similarity and differences observed across focus groups and across time with respect to the major themes that emerged from the perspectives of students and faculty who used the self-assessment tool. These patterns are then discussed in terms of the challenges to teaching and learning inherent in the results and in the context of activity theory, the conceptual framework for the study. Finally, a number of recommendations are made to enhance the use of this self-assessment tool in the future.

Synthesis of the Student Perspective

This section provides a synthesis of the student perspective in using the self-assessment tool based on the patterns of similarity and difference across focus groups and time with respect to the major themes.

Criteria for Marking of the Tool

Participant responses related to the ambiguity of the marking criteria of the self-assessment tool were consistent within and across the three focus group interviews. The lack of understanding by students with respect to the marking criteria perhaps contributed to the uncertainty and confusion which had implications regarding both the effectiveness and approach used by participants in completing the self-assessment tool.

Participants across both focus groups consistently expressed the view that their personal measure of academic achievement was based on the grades achieved on tests and exams. The use of these traditional assessment measures appeared to be more familiar and to provide a comfort level. Emphasis on these external methods, which have

emphasized the passive role assumed by these learners in the assessment process, may have had implications regarding the ability of participants to become self-directed and engage in the self-assessment process. This observation concurs with Katz (1993) who suggested that learners have little experience with opportunities to assume responsibility for their own learning.

Uncertainty related to the performance parameters being assessed impacted the approach participants took regarding the self-assessment tool. To ensure the effectiveness of the self-assessment process, it is imperative that students understand the criteria by which they are to be assessed ("What is Unique", 2002).

Issues related to the private and personal nature of the responses may have been influenced by a lack of understanding regarding the purpose and scope of the tool. The perception that one's personal beliefs, thoughts, and morals were being scrutinized may have been perceived as a personal threat. This may have also led to a feeling of vulnerability which may have influenced the honesty of the responses and the willingness to engage in the self-assessment process (Gordon, 1992). In addition, participants did not view the tool as similar to a performance appraisal used in the workplace. There was also the perception that the use of the self-assessment tool in the academic setting was inappropriate. This may be in part due to the fact that a number of the participants assumed that these skills had been acquired through previous work experience, or mere age alone, or characteristics of gender, as opposed to a life-long learning process.

Consistently throughout the focus groups the participants suggested that the tool should not be marked but perhaps based on a completion or effort criterion or be completed on a voluntary basis. There was an assumption by the participants that these

measures would increase the honesty of the responses and that there would be self-motivation to engage in the self-assessment process.

Structure and Format of the Tool

Responses regarding the format and time involved in completing the tool were also consistent across focus groups and time. The format of the tool instrument was viewed as too long, lacking specificity, and repetitive.

The time and effort required to complete the tool assignment competed with the various other academic demands. Also, the timing for submission of the tool was frustrating for students. Consequently, the time and effort allotted to the completion of the tool were impinged upon by the increased value placed on the other program demands which were perceived as more valuable, as determined by their influence on final grades. This was reflected in the superficial nature of the responses provided by participants in the completion of the tool.

Process of External Evaluation

Within and across the focus groups, participants consistently questioned the subjectivity and credibility in the process of external evaluation. The use of an external measure of performance was not generally viewed in a positive light. This could, in part, be due to the fact that an external evaluator may not be in a position to acknowledge any personal or meaningful changes (Arthur, 1995).

The credibility given the evaluator by the participants was critical to the value placed on the completion of the tool. Credibility was equated with the ability and qualifications of the evaluator to objectively and accurately evaluate performance. This was influenced by the relationship with the evaluator and to perceived expertise.

However, the value or ability of potential employers, as evaluators, to objectively assess performance was not recognized by the participants even when they met relationship and expertise criteria.

Not withstanding their reservations about who should evaluate them, the provision of evaluator feedback was important to participants. Participants felt that they were not provided with feedback or the opportunity for discussion related to the tool. This finding concurs with Grummon (1997) who suggested that instructors have been ineffective in providing ongoing feedback to learners in regards to preparedness and success for the workplace. The minimal amount or lack of feedback provided may also have contributed to the participants' feelings that the process was devalued by the instructors.

Value of the Tool

The lack of priority given the tool in relation to other academic program requirements was obvious. Participant responses were consistent across focus groups and time regarding their personal priorities as related to academic success and life circumstances.

The lack of importance given the self-assessment tool in comparison to the traditional methods of student evaluation was evident. Academic achievement, as measured by grades, was the criterion used by participants to assess performance. Consequently, the effort required and approach taken to complete the tool were perceived as a waste of time and not relevant to academic achievement.

The integrity of participants' approach and their honesty in the responses provided on the tool were influenced by the private and personal nature of the

information. As Gordon (1992) suggested, the process of self-assessment requires learners to acknowledge and discuss personal strengths and weaknesses and identify strategies for self-improvement. Feelings of vulnerability may have had implications in relation to the honesty of the responses given. The overriding concept was that the completion of the tool outweighed the integrity of the process. Consequently, the participant-assigned mark was used as a means to an end, usually a grade, rather than an accurate assessment of performance.

The relevance of the self-assessment tool was measured in terms of personal and contextual relevance. Personal relevance was reflected in the assumption by participants that engaging in self-assessment was equated with the acquisition of employability skills. However, participants did not differentiate the "critical" aspect of assessment that is required. Participants discussed looking at actions and consequences but in a reactive rather than proactive sense. Although there was some evidence within the data of engaging in the examination of behaviours, there was no mention regarding the examination of actions taken and identifying strategies for self-improvement.

The integration of the tool in context proved to be difficult for the participants. This was consistent throughout the focus groups and across time. Participants were uncertain regarding the application of the tool to the academic setting versus professional versus personal experience.

The application of the tool across the curriculum was perceived as a barrier to utilization of the tool throughout each program. From the student perspective, the compartmentalization of the skills to specific courses within the curriculum was evident. There was an overriding assumption that the relevance of these skills was only realized in

explicit course content. This assumption led to implications regarding the value, relevance, and applicability of the tool across the program content.

Part of the confusion regarding the tool was in understanding the context of internal versus external focus. The responses seemed to reflect that looking beyond self was easier than looking within. There was a lack of connection between the external environment and the examination from the point of self. Participants were readily able to identify external factors that affected them, but were unable to objectively assess these observations in terms of self.

Personal Growth

The benefits of the tool to personal growth were varied. Throughout the focus groups sessions, the Sterile Processing participants expressed a positive value associated engaging in the self-assessment process, whereas the Medical Transcription participants demonstrated a decrease in the value of the process over time. Age, gender, and previous work experience were perceived as the most important predisposing factors in regards to the relevance or value of the tool by both groups.

Value of Goal Setting

The potential value of goal-setting was not realized. The need to identify personal goals and actions for self-improvement were met with mixed feelings. Perhaps this was due in part to the perceived bias of the tool to emphasize one's weaknesses and limitations. Determining personal goals in relation to attitude and behaviour was viewed as an overwhelming task.

<center>*Synthesis of the Faculty Perspective*</center>

The following section provides a summary of the faculty perspectives for the focus group interviews using the five themes identified. Results are presented within groups and over time to reflect any changes observed.

Criteria for Marking of the Tool

Faculty participants, although initially confused regarding the marking of the tool, demonstrated more clarity and understanding as time went on. The faculty participants came to understand the criteria by which the tool should be marked. It appeared, as they progressed through each tool, they were better able to incorporate strategies to increase positive interactions with students and personalize teaching methods.

Structure and Format of the Tool

Concerns regarding the format of the tool were raised across focus groups. For instructors, concerns regarding the time commitment for students in completing the tool and the lack of specificity of the questions that may have contributed to a lack of understanding regarding what was being asked.

Value of the Tool

Although the value of students engaging in self-assessment was acknowledged, the significance of the tool in relation to the academic achievements of the students took priority. Faculty, as well as students, were focused on academic achievement as measured by grades on written tests and assignments. The objectivity of traditional external methods was seen as reflective of the acquisition of theoretical and technical knowledge.

Both participant groups agreed the skills included in the tool were relevant to the workplace and employer demands. Faculty acknowledged the value of developing these

skills in students in preparation for success in the workplace. Although they acknowledged their importance, the need to teach and have students learn the theoretical and technical content prevailed. Consequently, for the Sterile Processing faculty in particular, the tool had minimal influence on their teaching practices. For the Medical Transcription participants, the importance of the tool as a learning instrument was realized over time. The tool provided a mechanism whereby they gained increased understanding of the students which in turn guided future interactions. Although faculty understood the potential for the tool, they did not communicate the value of the tool to the students.

Personal Growth

The usefulness of the tool in promoting the acquisition of employability skills in students was mixed. Medical Transcription faculty were more optimistic in the value of the tool in providing students with the opportunity to engage in self-assessment. The Sterile Processing faculty did not perceive the value of the tool in changing attitudes and behaviours. Perhaps as Fazey (1993) suggested, the assumption was made that adult students have acquired the skills necessary to engage in self-assessment.

<div align="center">

The Challenges

</div>

The results of this study illustrate the teaching and learning of employability skills in learners within a post-secondary curriculum faces a number of challenges. Perhaps the greatest challenge lies in changing the perceptions and expectations of both learners and faculty related to the inclusion criteria for measuring student success. As Whitston (1998) suggests, "the remedy for such a limited learning experience lies as much in constructing a different kind of learning experience as it does in defining outcomes" (p. 316).

The move to a learner-centered environment requires a change in the roles and responsibilities of both students and faculty. The difficulty in doing so is in part due to the prevalence of traditional instructional approaches that have contributed to an inflated perception by students of their personal academic performance through "grade inflation and the acknowledgement of minimal student effort" (Hansen & Stephens, 2000 p. 42). As suggested by Hansen and Stephens, many college students "judge their own academic competence to be high, and tend to blame low performance on instruction" (p. 42). Continuing this trend will negate efforts to provide a challenging environment that is learner-centered, fosters student involvement, and increases personal motivation for learning (Felder & Brent, 1996).

Moving to a learner-driven environment will pose a number of challenges for students (Felder & Brent, 1996). Increased expectations placed on students to assume responsibility for their own learning may be unsettling and elicit feelings of shock, denial, strong emotion, resistance and withdrawal, struggle and exploration, return of confidence, and integration and success (Woods, as cited in Felder & Brent, 1996). Kloss further suggested that this transition is a "natural part of their journey from dependence to intellectual autonomy" (as cited in Felder & Brent, 1996 p. 44). The reluctance of students to engage in the self-assessment of their own learning performance diminishes their ability for personal growth and participation in an active learning environment. Personal growth requires critical thinking and a realistic self-assessment (Hansen & Stephens, 2000).

Faculty also face a number of challenges in their pursuit of redefining their purpose and role in a learner-centered environment. The need to move from the role of

instructor to facilitator will require the reexamination of their relationship with students and approach to teaching and learning. Instructors need to assume responsibility for the intellectual and social growth of the student (Hansen & Stephens, 2000)

The emphasis on traditional assessment models for student achievement that have dominated the education system must be revisited. Changing these perceptions is essential to increasing the understanding of the appropriateness and need for addressing employability skills in postsecondary education. The first step in addressing these perceptions will require the explicit integration of the context of the classroom and the workplace and the realization of their relevance must be perceived by both learners and instructors.

Faculty must also assume responsibility for not only acknowledging the importance of employability skills but also their integration across the curriculum as opposed to specific course content. The acquisition of discipline specific knowledge and technical skills no longer prepares graduates to meet the complexities of the work environment. Re-focusing on measures that are more inclusive of authentic assessment models that reflect the workplace must be emphasized.

The assumption that learners enter postsecondary education with the essential skills to engage in critical self-assessment must be reconsidered. The learning environment must address and emphasize those skills that promote autonomous and self-directed learning. Incorporating teaching strategies that encourage discovery and critical thinking must be included. This challenges the traditional lecture and testing strategies which promote the passive role of learners.

The responsibility of educators is to ensure learners develop those skills necessary for life-long learning. Employing strategies that promote self-motivation, the ability to continuously engage in critical analysis of personal attitudes and behaviours, the ability to identify strengths and weaknesses, and set goals for improvement must be integrated into the learning process. Self-directed learners will be able to continuously monitor their progress and adapt. These skills are essential if graduates are to secure and sustain future employment success.

The accountability of postsecondary education resides in the ability to produce graduates that will contribute to both economic and social growth and achieve career success. The health care environment has characterized those attributes that are required of a graduate and define a competent professional. To meet these expectations, faculty must be open to re-examining their role and responsibility in ensuring the qualities of graduates prepare them for the demands and expectations of employers.

Integrating Framework

Activity theory provided the conceptual framework for explaining the factors and presumed relationships in the study (Miles & Huberman, 1994). The following section relates the findings of the study utilizing this framework and, in addition, discusses how this could further inform the on-going development of the self-assessment tool.

Activity theory holds that learning is a process mediated by social factors and the interaction of learners with and within their environment. The integration of the students to the broader discipline community begins within the context and activities of the classroom. This is important in the acquisition of practical knowledge and professional knowledge (Jenlick & Kinnucan-Welsh, 1999) as well as competent professional

practice. The self-assessment tool was intended to provide a mechanism to promote the teaching and learning of employability skills essential in developing the characteristics of a health care professional. The acquisition of these skills was influenced by the norms and regulations established within the classroom and the roles of the students and faculty, framed within the context of the broader discipline community.

The norms and regulations of the classroom were stated in the rules which reflected the social relations and broader practice community in terms of the behavioural expectations of a competent professional. The relationship of the learner, the instructor, their respective roles and responsibilities and the self-assessment tool were critical to this process (Hasan, 1998). The findings suggested that learning is dependent on the complex interaction among these factors. The development of a common social meaning within the context of the classroom was essential to facilitate learning. The lack of feedback and guidance provided by the faculty may have been perceived by students as a devaluation of the self-assessment process. This lack of communication did not allow for sharing and negotiation, where knowledge and understanding is achieved in a collaborative learning experience.

The use of the tool to facilitate and guide teaching and learning practices was also integral to creating a common social meaning (Hansman, 2001). However, the lack of communication by faculty did not support student understanding, and consequently the integration of the students into the broader discipline community.

The framework (Figure 1) provided a mechanism for understanding the dynamic and interactional components necessary for learning to occur. To acquire the desired

outcome was dependent on the complex interaction among all these factors. As suggested by the findings, when this does not occur learning is compromised.

<div align="center">*Recommendations*</div>

The implementation of the self-assessment tool turned out to be a more complex task than first anticipated. This study revealed implications for the tool itself, the preparation of students and faculty to use the tool, and for the programs that implemented the tool in their curricula.

The Self-Assessment Tool

The use of the self-assessment tool as a mechanism for the teaching and learning of employability skills must be undertaken with careful consideration and planning. As the study findings suggested, the potential success of this method requires deliberate attention to issues related to the criteria for marking and the structure and the format of the tool.

Criteria for marking of the tool. The criteria for marking of the self-assessment tool must be made explicit to both learners and faculty. Providing clear and concise instructions is essential. For students, the uncertainty of the process may lead to frustration and have implications for the approach and effort given the process of self-assessment. A supportive environment that acknowledges the importance of engaging in the critical examination of attitudes and behaviours for future career success must become an integral part of learning.

Structure and format of the tool. The self-assessment tool must be structured in a format that is useable and not deemed frustrating or requiring a substantial time

commitment for students. There is a need to modify the tool in a manner that will encourage its acceptance.

Preparation of Students and Faculty

As the study findings suggest, students and faculty require preparation in the implementation of this type of teaching and learning practice. The process of external evaluation must be explicitly understood by both students and faculty. For students, critical to this process is facilitating a trusting relationship that will encourage integrity in the responses provided. The concept of sharing personal and confidential information gives rise to the possibility of vulnerability of the learner. Consequently, learners must feel comfortable and to do so requires the establishment of a safe and non-threatening environment. Instructors must assume an active role in the self-assessment process and demonstrate the value of the process in their interactions with learners.

Inherent in this process is ensuring learners are provided with ongoing feedback and guidance by instructors. This will convey the value of engaging in the process. The perceived credibility of the evaluator is also essential. Students need to be given feedback by an individual that they deem as an "expert". In conjunction, ensuring consistency of a single evaluator for each student is also important to establishing an environment conducive to this approach.

The value of setting goals for addressing attitudes and behaviours must be integrated into the academic goals established by both students and faculty. To promote increased performance, students must be able to set specific goals that are challenging and realistic. Students must come to understand the importance of setting goals that address employability skills as important as those for academic achievement.

Implications for Programs

The explicit integration of the tool throughout the program is necessary to avoid fragmentation so that it is not perceived as an isolated experience, but integral to the learning process. Students must come to understand the importance of employability skills not only for their personal growth but also for career success.

Faculty must make a concerted effort to employ teaching and learning strategies that promote the acquisition of these skills. Faculty must embrace the value of integrating these skills by examining their approach to teaching and learning. The typical lecture and testing format must be challenged. Providing faculty support throughout this reexamination is essential. For too long, we have been complacent and somewhat comfortable in utilizing traditional assessments of the acquisition of knowledge. No longer will the attitude of teachers teach and students learn be adequate as the premise for the promotion of student success.

The integration of authentic learning strategies will be met with challenges and frustrations. Both students and faculty must be supported throughout the process. Providing students with challenges that engage them in their own learning is essential in facilitating the "intrinsic value of meaningful learning" (Hansen & Stephens, 2000, p. 47).

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Appendix A

Request for Informed Consent – Student

Project Title: An Exploratory Study of Self-Assessment in the Teaching and Learning of

Employability Skills in Interdisciplinary Health Science Programs

Researcher: Jo-Anne Shay RN.BN. (M. Ed. Student)

Date: _____

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.

This consent form outlines the purpose of the research study and provides a description of your involvement and rights as a participant. This research study is being conducted in partial fulfillment of the requirements in the Master of Education (Post-Secondary Studies) at the University of Manitoba.

Purpose
The purpose of this study is to explore the effectiveness of a self-assessment tool in promoting the teaching and learning of employability skills in students enrolled in interdisciplinary health science programs at Red River College.

Participation
If you choose to participate in the study, you and up to 7 other people will be asked to participate in three ninety-minute focus group interviews to discuss your experience with the self-assessment tool over the course of the program. Focus group interviews will be held at a convenient and accessible location on the main campus at Red River College and the timing of the interviews will be scheduled to avoid any conflict with your coursework. Focus group interviews will be held near the beginning, middle and end of the program. In addition, you will also be asked to provide selected demographic information including age, gender, brief work experience, and current occupation. Finally, you will be asked to voluntarily submit several samples of how you used the self-assessment tool in your courses.

Data Collection
The purpose of the focus group interviews is to elicit data regarding your opinions, perceptions, and experience in relation to using the self-assessment tool. To avoid any

conflict in my role as program facilitator and not to bias the study, the focus group interviews will be conducted by an experienced focus group facilitator who has no affiliation with your respective program or Red River College. This individual was selected to maintain objectivity and to protect the anonymity of the participants.

Data collection procedures during the focus group interviews will include tape recording and handwritten notes to ensure accuracy in the data collection process. Handwritten notes will be taken by an assistant. The original audio-tapes and notes will be kept in a secure place by the focus group facilitator and destroyed at the end of the study. The researcher will receive only a typed transcript of the audio-tapes and notes, in which the participants will be identified by number only. Only the focus group facilitator and assistant will have know the identity of the participants and they will keep this information confidential. Participants will be provided with an opportunity to review transcriptions to verify and confirm the accuracy of the data.

You will also be asked to submit samples of your completed self-assessment tool following each focus group interview. Any identifiable information contained in your work will be removed by the focus group facilitator and the researcher will receive a copy of your work identified by a number corresponding to your assigned number in the focus group interviews. The data collected will be maintained in the strictest confidence.

Confidentiality
Participation in the study requires signed informed consent. Signed consent forms will be held by the focus group facilitator for the duration of the study. Only the focus group facilitator and assistant will have knowledge of your participation in the study. Participants will be asked to commit to maintaining the confidentiality of what is said during the focus group interviews. The data collected will be held confidential and your anonymity respected. Your name will not appear in the data collected, during analysis procedures, or in the findings of the study. A code number based on the seating arrangement during the interviews will be used to identify participants in all interview transcripts and handwritten notes. All data will be stored in a safe and secure location: audio-tapes and original focus group notes will be held by the focus group facilitator, transcriptions and anonymous samples of student work by the researcher. Upon completion of the study, all tape-recorded data and field notes that may identify you will be destroyed. Transcriptions and participant submitted material will kept in a secure place by the researcher for up to five years. To minimize the risk that you might be identified from a quote, only short statements or quotations will be utilized in the final report, these quotes will not include information identifying participants.

Risks
Given the nature of the study, I do not anticipate any negative risks beyond the anxiety in relation to providing feedback about the program. Confidentiality and anonymity procedures will be implemented to minimize the risk that your identity will be revealed.

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.

Please feel free to ask any questions and regarding the study or your rights as a research participant. If you have questions at any time during the course of the study please contact the focus group facilitator or the thesis advisor at the numbers listed below.

Jo-Anne Shay RN.BN.
XXXXXXX
XXXXXXX

Thesis Advisor:
K. Lynn Taylor Ph.D.
XXXXXXX.
University of Manitoba

This research has been approved by the Education/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 Human Ethics Secretariat at '   :. A copy of this consent form has been given to you to keep for your records and reference.

If you wish to receive a summary of the research results, please provide your mailing address below, and the focus group facilitator will mail you a report provided to her by the researcher.

Sincerely,

Jo-Anne Shay RN.BN.
M.Ed. Student

_____

Participant's Signature   Date

_____

Researcher and/or Delegate's Signature   Date

Request for a Summary of the Research Results

Please send a summary of the self-assessment research project results to:
Name: _____
Address: _____
             _____
             _____

Appendix B

Request for Informed Consent – Faculty

Project Title: An Exploratory Study of Self-Assessment in the Teaching and Learning of

Employability Skills in Interdisciplinary Health Science Programs

Researcher: Jo-Anne Shay RN.BN. (M.Ed. Student)

Date:

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.

This consent form outlines the purpose of the research study and provides a description of your involvement and rights as a participant. This research study is being conducted in partial fulfillment of the requirements in the Master of Education (Post-Secondary Studies) at the University of Manitoba.

Purpose
The purpose of this study is to explore the effectiveness of a self-assessment tool in promoting the teaching and learning of employability skills in students enrolled in interdisciplinary health science programs at Red River College.

Participation
If you choose to participate you will be asked to participate with up to 7 other people in three sixty-minute focus group interviews to discuss your experience with the student self-assessment tool over the course of the program. Focus group interviews will be held near the beginning, middle and end of the program at a convenient location on the main campus at Red River College. The timing of the interviews will be scheduled at a mutually agreed upon.

Data Collection
The purpose of the focus group interviews is to elicit data regarding your opinions, perceptions, and experience in relation to the use of the self-assessment tool. To avoid any conflict in my role as the program facilitator, the focus group interviews will be conducted by an experienced focus group facilitator who has no affiliation with your respective program or Red River College. This individual was selected to maintain objectivity and to protect the anonymity of the participants.

Data collection procedures during focus group interviews will include tape recording and handwritten notes to ensure accuracy in the data collection process. Handwritten notes will be taken by an assistant. The original audio-tapes and notes will be kept in a secure place by the focus group facilitator and destroyed at the end of the study. The researcher will receive only a typed transcript of the audio-tapes and notes, in which the participants will be identified by number only. Only the focus group facilitator and assistant will know the identity of the participants and they will keep this information confidential.

Confidentiality
Signed consent forms will be maintained by the focus group facilitator until the completion of the study. Only the group facilitator and assistant will have knowledge of your participation in the study. Participants will be asked to commit to maintaining the confidentiality of what is said during the focus group interviews. The data collected will be held confidential and your anonymity respected. Your name will not appear in the data collected, during analysis procedures, or in the findings of the study. A code number based on the seating arrangement during the focus group interviews will be used to identify participants in all interview transcripts and handwritten notes. All data will be stored in a safe and secure location: audio-tapes and original focus group notes will be held by the focus group facilitator, transcriptions and anonymous samples of student work by the researcher. Upon completion of the study, all tape-recorded data and field notes that may identify you will be destroyed. Transcripts will kept in a secure place by the researcher for up to five years. To minimize the risk that you might be identified from a quote, only short statements or quotations will be utilized in the final report, these quotes will not include information identifying participants.

Risks
Given the nature of the study, I do not anticipate any negative risks beyond the anxiety in relation to providing feedback about the program. Confidentiality and anonymity procedures will be implemented to minimize the risk that your identity will be revealed.

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.

Please feel free to ask any questions and regarding the study or your rights as a research participant. If you have questions at any time during the course of the study please contact the focus group facilitator or the thesis advisor at the numbers listed below.

Jo-Anne Shay RN.BN.
XXXXXXX
XXXXXXX

Thesis Advisor:
K. Lynn Taylor Ph.D.
University of Manitoba

This research has been approved by the Education/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 Human Ethics Secretariat at 474-7122. A copy of this consent form has been given to you to keep for your records and reference.

If you wish to receive a summary of the research results, please provide your mailing address below, and the focus group facilitator will mail you a report provided to her by the researcher.

Sincerely,

Jo-Anne Shay RN.BN.
M.Ed. Student

_____

Participant's Signature   Date

_____

Researcher and/or Delegate's Signature   Date

Request for a Summary of the Research Results

Please send a summary of the self-assessment research project results to:
Name: _____
Address: _____
        _____
        _____

Appendix C

Sample Interview Guides – Student

GRAND TOUR QUESTION:

Examples:

Interview #1:

> One of the things college programs try to do is to help individuals develop the skills to judge how they are doing. What are some of the ways you judge how you are doing in your own learning or in your job?

Interview #2:

> Can you give an example of one of the most surprising or interesting things you have learned so far in the program?

Interview #3:

> Can you tell me something you have learned about yourself while in the program?

QUESTIONS:

1. What have you found most useful about using the self-assessment tool as part of your learning experience in this program?

2. What have you found least helpful about using the self-assessment tool as part of your learning experience in this program?

3. In what ways do you think the self-assessment tool has assisted or inhibited your learning?

4. Could you give me an example of how the self-assessment tool has made a difference in the way you think about the occupation you are being prepared for?

5. What could be done to make the self-assessment experience more relevant to you and your employment goals?

6.   Are there ways in which the self-assessment process has made a difference in

your everyday experience?

7.   Are there other ways that you reflect on how you are learning or working in this

program besides the self-assessment tool?

Appendix D

Sample Interview Guides – Faculty

GRAND TOUR QUESTION:

Interview #1:

>   One of the ways college programs aim to do is prepare students for life-long
>   learning. What are some of the things you are doing in your course to help
>   students become more aware of what they need to learn?

Interview #2:

>   Can you give an example of one of the most surprising or interesting things you
>   have learned so far in the program?

Interview #3

>   What are some of the most important ways in which students have changed
>   throughout their program?

QUESTIONS:

1.   Could you tell me about some of your students' reactions to using the self-
assessment tool in your course?

2.   What have you found most useful about using the self-assessment tool as part of
the learning experience of students?

3.   What have you found least useful using the self-assessment tool as part of the
learning experience of students?

4.   Could you give an example of how the self-assessment tool has made a difference
in a particular students' learning experience?

5.   What could be done to make the self-assessment tool experience more relevant to
the student's learning or employment goals?

6.   Has using the self-assessment tool in your course in any way changed the way you approach?

Appendix E

Self-Assessment Tool

Focus Group #: _____

Assigned Participant #: _____

FUNDAMENTAL SKILLS			
Communication Skills	**Demonstrate the ability to communicate effectively ie. oral communication, body language, writing, and listening**		
Understands and demonstrates effective oral communication skills	Clearly organizes and effectively articulates ideas Communicates in a professional manner with colleagues and instructors		Areas for Improvement: Personal Goals:
Demonstrates effective interpersonal skills	Receives, attends to, and responds appropriately Expresses ideas, feelings, and reactions in an appropriate manner		Areas for Improvement: Personal Goals:
Demonstrates effective writing skills	Assignments legible and completed as directed		Areas for Improvement: Personal Goals:

Thinking Skills	Demonstrate the ability to problem-solving		
Demonstrates the ability to problem solve	Think critically and act logically to evaluate situations and identify problems Be creative and innovative in exploring possible solutions Implement solutions		Areas for Improvement: Personal Goals: :
Demonstrates the ability to make decisions	Uses a process to identify goals and constraints, evaluates alternatives, and reaches a conclusion		Areas for Improvement: Personal Goals:
Individual Assessment Score _____/10 **Instructor Assessment Score _____/10**			

PERSONAL MANAGMENT SKILLS	Demonstrate the skills, attitudes and behaviours required to achieve the best results		
Demonstrates self-management/ self-discipline	Demonstrates punctuality, readiness to work, attends class regularly Prepared for class Ability to manage time effectively and efficiently Sets own goals		Areas for Improvement: Personal Goals:
Demonstrates positive attitudes and behaviours	Positive attitude toward learning and growth Show initiative, interest, and effort to get the job done Deals with people, problems, and situations with honesty, integrity, and personal ethics		Areas for Improvement: Personal Goals:
Demonstrates the ability to engage in self-care	Identify sources of stress and develop effective coping strategies Shows a positive attitude towards learning, growth, and personal health		Areas for Improvement: Personal Goals:

Individual Assessment Score _____/10

Instructor Assessment Score _____/10

TEAMWORK SKILLS	Demonstrates the characteristics of an effective worker		
Demonstrates a positive work ethic	Follows through consistently with honesty and integrity Self-directed		Areas for Improvement: Personal Goals:
Be adaptable	Demonstrates a positive attitude toward change Able to identify and suggest new ideas		Areas for Improvement: Personal Goals:
Be responsible	Hands in assignments on time Follows directions Accepts accountability and consequences for own actions		Areas for Improvement: Personal Goals:
Responds to constructive feedback in a positive manner	Able to identify sources of and seek out feedback Acts on feedback to improve performance		Areas for Improvement: Personal Goals:

Demonstrates the ability to work with diversity	Respects and accepts differences and works well with individuals from a variety of lifestyles, backgrounds and/or philosophies and ideas		Areas for Improvement: Personal Goals:
	Actively participates and contributes to a group process with ideas, suggestions, and efforts Plan and make decisions with others Respect the thoughts and opinions of others in the group Works on individual/ group assignments and projects as required		Areas for Improvement: Personal Goals:
Demonstrates respect for others	Demonstrates respect for individuals Contributes to and maintains a safe learning environment Fair-minded in dealing with contradictory or conflicting views		Areas for Improvement: Personal Goals:
Demonstrates the ability to engage in self-evaluation	Collects, evaluates and uses data to monitor and improve performance Identifies personal strengths and limitations Demonstrates a commitment to learning, ability to self-assess, self—correct, and self-direct to identify needs and sources for learning Identifies strategies to be successful Set goals and priorities		Areas for Improvement: Personal Goals:

Individual Assessment Score _____ **/10**

Instructor Assessment Score _____ **/10**

Individual Assessment Score _____ /30   Instructor Assessment Score _____ /30

FINAL GRADE: _____ **/30 =** _____ **out of 10%**

Based on Conference Board of Canada Employability Skills 2000+ adopted by Red River College
Appendix F

Appendix F

Demographic Data

1.   Please indicate age:

        ( ) 18-20   ( ) 31-40

        ( ) 21-25   ( ) 41-50

        ( ) 26-30   ( ) 50+

2.   Gender   ( ) Male   ( ) Female

3.   Highest level of education: _____

4.   Employment history: _____

_____

_____

_____

Appendix G

Ethics Approval

Appendix H

Permission to Use