

SELF-DIRECTED LEARNING IN NURSING EDUCATION:  
AN EVALUATION OF A HOSPITAL-BASED  
DIPLOMA SCHOOL OF NURSING

by

Maureen Mary O'Toole

A thesis  
presented to the University of Manitoba  
in partial fulfillment of the  
requirements for the degree of  
Master of Education  
Faculty of Graduate Studies

Winnipeg, Manitoba

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## "ABSTRACT"

In nursing and its education, self-directedness is thought to be beneficial to enable nurses to maintain currency in their knowledge. This program evaluation study is designed to determine whether nursing students, in a nursing program whose philosophy assumes learners take responsibility for their learning, do perceive themselves to be self-directed learners. The study also investigates whether faculty, within a nursing program whose philosophy assumes teachers to be facilitators of learning, are using principles of adult learning in their instruction.

The study is framed around the Stufflebeam program evaluation model concerning the context and process components. Context evaluation measures the extent to which the program is meeting the needs of those it serves. Two student samples were utilized in this study. Process evaluation measures the actual implementation of the program. In this study, the teachers' utilization of principles of adult learning was measured. Two questionnaires were utilized in the methodology:

(1) Guglielmino's 'self-directed learning readiness scale' (SDLRS) measured two student samples' perceived self-directed learning readiness; and (2) Conti's 'principles of adult learning scale' (PALS) measured the faculty's use of principles of adult learning.

The two student samples included: (1) 75 students at the end of their first year in the program; and (2) 99 beginning students. Their SDLRS scores were statistically related to each other, and to age and amount of formal education. The SDLRS scores of sample 1 were correlated to the final year one grades. The students were found to have no more or less self-directed learning readiness than the norming population. Comparatively, the two samples had similar SDLRS scores. There was a statistically significant positive relationship between age, amount of formal education and SDLRS scores. There was a weak positive correlation between SDLRS scores and final year one grades.

Twenty-two faculty were found to be using principles of

adult learning no more or less often than the norming population. The sample was too small confidently to conclude statistical relationships, but there was a tendency for faculty under 40 years old, with educational background in principles of adult learning, with less than 20 years overall nursing practice, to have higher PALS scores.

Implications for future study center on: (1) validation of the principles of adult learning scale with nursing samples, (2) investigation of the effect of teacher instruction on student's self-directed learning readiness and ability, and (3) determination of effective facilitation behavior in the clinical setting.

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## Chapter One

### INTRODUCTION

The purpose of this thesis is to explore self-directed learning in nursing education by comparing the practice and philosophy of a school of nursing. The philosophy of the particular school of nursing to be studied suggests that learners are self-directed and responsible for their learning, and that their teachers act as facilitators to the learning process. The study is designed to determine whether the nursing students perceive themselves to be self-directed and whether their faculty perceive themselves to be using principles of adult learning in their instruction. If the findings determine that students perceive themselves as self-directed learners and faculty are utilizing principles of adult learning, the study will conclude that the philosophy is realistic for this nursing program.

Self-directedness in learning is seen by writers of adult education to be beneficial for the retention of learning. In nursing and its education, self-directedness

is thought to be beneficial in terms of enabling nurses and student nurses to meet the demands of the nursing profession and ever changing health care technology (Jarvis, 1987). The perceived need for self-directedness in nursing education is so valued that many schools of nursing state beliefs in their curriculum philosophies that emphasize the learners' responsibility for their learning and the teachers' responsibility to act as facilitators to this learning process. There is little empirical evidence that this emphasis on learner self-directedness is suitable for the beginning nursing student within a structured time-limited curriculum. Brookfield (1984) suggests "it is not easy to admit that a dearly held, humanistically impeccable philosophy might be difficult to implement in practical situations" (p. 2). Studies on self-directed learning and nurses in an educational setting discuss the self-directedness of nurses in continuing nursing education or of registered nurses in baccalaureate programs; little is written on the self-directedness of beginning students in diploma schools of nursing. Such belief statements about learners and teachers may, therefore, be difficult to enact in a beginning diploma nursing program. Instead, self-directedness may be the goal for these students as they progress through the nursing program.

It is assumed that by being self-directed learners, these nursing students, who then become practitioners, will

also be continual lifelong learners capable of remaining current in their health care knowledge and nursing practice. Tibbles (1977) suggests agreement that with rapid technological advances and the bioscientific knowledge explosion, every nurse should be responsible for continuing her education. She cites difficulties in achieving this goal by stating "the basic education of many nurses has not prepared them to assume this responsibility" (p. 25).

Cooper (1980), Rodgers (1985), Diekelmann (1986), Jarvis (1987) and Sook Sohn (1987) identify the needs for research in nursing education. In their individual writings, these authors indicate that there is minimal documentation in the area of nursing education research. Cooper emphatically identifies a need for more research about self-directed learning in nursing education. Rodgers identifies several areas for research in nursing education. In particular, she identifies a need to study how teachers teach nursing and how students may be able to acquire the needed information in the most efficient way. Diekelmann suggests a need to study the teaching-learning process in nursing. Jarvis further suggests a need to study self-directed learning in nursing education in 1987. Sook Sohn writes of the need to study the area of program evaluation in nursing. She claims it to be "one of the least studied areas in nursing" (p. 27). Dressel and Thompson (1973) identify a need to study self-directed



learning in higher education. They claim "fewer areas in higher education today are so vaguely eulogized, yet so little understood, so loosely defined, and so inadequately researched as self-directed learning" (p. vii). Since 1973, more research has ensued in the area of self-directed learning; however, it remains a loosely defined area of inquiry.

Patricia Benner (1984) describes her 'Novice to Expert' theory that is based on the Dreyfuss model of skills acquisition. Essentially, this theory describes five levels of transition through which a nurse evolves from being a beginning student and practitioner to becoming an expert practitioner. She describes the implications for teaching and learning at each of the levels. The implications differ for each of the levels from novice, advanced beginner, competent, proficient, to expert practitioner. Student nurses are described as being novice to advanced beginner practitioners. Benner describes the novice as being a dependent learner who requires structure in the teaching-learning process. The advanced beginner is described by Benner as requiring assistance to make clinical situations meaningful. One may, therefore, question whether the students' abilities to be self-directed are also influenced by the level of skills acquisition. Can the beginning nursing student be totally responsible for learning a new field and be self-directed in this goal?

Brookfield (1986) suggests that "one cannot be a fully self-directed learner if one is applying techniques of independent study within a context of goals and evaluative criteria determined by an external authority" (p. 19). Such goals and evaluative criteria determined by others are common and realistic for approved beginning nursing programs.

Frisch (1987) writes about the cognitive maturity of nursing students and found that "their level of cognitive growth may be less advanced than many nurse educators and leaders assume" (p. 27). This finding may suggest that with less cognitive maturity, nursing students may also possess less advanced traits in other areas of adult development, such as the ability to be self-directed. Lyne (1980) supports this premise (in Long, 1983). Lyne's research concluded that adults at lower stages of cognitive development prefer highly structured directions for course activities and assignments. Individuals at higher stages of cognitive development were found to prefer more flexibility and diversity (Long, 1983, p. 248). Investigation, therefore, is appropriate to determine whether beginning nursing students are ready and able to be self-directed learners.

This study purports to investigate teaching and learning of nursing students in a descriptive manner using empirical quantitative methodology. By using a program

evaluation model--Stufflebeam's context, input, process and product (CIPP) model--the study will review the philosophy of a nursing program's curriculum in terms of its assumptions about learners and teachers and the teaching-learning process. The philosophy of this program assumes that learners will take responsibility for their learning, and hence possess a degree of self-directed ability. It also assumes that the teachers assist and facilitate learning by providing an environment conducive to learning. This study will measure the perceived self-directed learning readiness of the students and the perceived use of the principles of adult learning by the teachers, in order to investigate whether the philosophy of the program is enacted by its curriculum.

The following are operational definitions of terms utilized throughout this thesis:

Adult Anyone who is over 18 years of age and is not attending secondary school, or anyone who has assumed responsibility for him/herself and functions within the community by performing social roles typically assigned by our culture (Long, 1983).

Self-Directed Learning An activity for which the learner takes the initiative and responsibility for the learning process either in formal or informal educational settings.

It includes both self-designed and other-designed approaches (Bell & Bell, 1983).

Facilitators are teachers who provide an environment conducive to learning, consider the individuality of the learners, and allow for collaboration throughout the learning process. They are less authoritarian and teacher centered and more learner centered (Brookfield, 1987; Conti, 1982).

Philosophy-Ideologies The philosophic base comprising logic, ethics, aesthetics, metaphysics and the theory of knowledge to present assumptions and ideals as defined by philosophers. Examples include humanism, existentialism, idealism, pragmatism and behaviorism (Leddy & Pepper, 1985).

Curriculum Philosophies An integrated viewpoint toward certain beliefs, ideas, attitudes and practices based on the ideologies. They form the foundation for the curriculum (Bevis, 1982).

Diploma Nursing Program A two year hospital or college based nursing program that provides the educational content and experience to prepare students to write licensing examinations for Registered Nurse status.

Program Evaluation      The process of describing and judging an education program through the systematic identification, collection and interpretation of specific information for the purpose of assisting decision makers to choose among available alternatives (Horan, Knight & McAtee, 1984).

Holistic Care      Nursing care that is concerned with all aspects of the whole person, seen as the physical, physiological, emotional, mental, social and spiritual dimensions.

#### FRAMEWORK FOR THE STUDY

The curriculum for a nursing program offers guidelines for structuring the teaching-learning process. Involved in curriculum development is the establishment of a philosophy statement, theoretical framework, goals, objectives, learning activities and evaluation methodologies (Bevis, 1982). According to Bevis, this philosophy statement is the basis for the curriculum. The beliefs and assumptions stated in the philosophy document are to be addressed throughout the curriculum. These philosophy statements contribute to the uniqueness of the program by reflecting the school's beliefs and assumptions about man, health, nursing, learning, teachers and learners. Croll (1977) identifies purposes of curriculum philosophy statements.

Although her focus is on nursing continuing education, these purposes are universal. She writes that philosophy statements (1) give meaning and clarify reasoning for the learning activities, (2) provide a basis for accountability, (3) provide a basis upon which to establish objectives for the program, and ultimately to evaluate the program, and (4) should be relevant to teachers, learners, and the needs of society (p. 24).

The curriculum philosophy statements containing assumptions about man, health, learning, teachers and learners ultimately reflect ideologies identified by philosophers. Bevis described the evolution of philosophical ideologies throughout the existence of nursing education programs. They have evolved in order to meet societal and nursing demands and needs. The current ideology of nursing education is said, by Bevis (1982) and Joseph (1985), to be a humanistic existential one, wherein holism and humanitarianism are the ideals. Scales (1985) suggests that pragmatism, realism and idealism are the underlying ideologies of current nursing education programs. One might conclude, therefore, that there are multiple ideals operationalized in nursing education. These ideologies are also identified by philosophers in adult education as being appropriate for adult education (Apps, 1985; Conti, 1982; Elias & Merriam, 1980; Bergurn, 1967; Lindeman, 1961). As such, learners who follow a pragmatic,

humanistic, existential ideology use past experience as a basis upon which to learn further and may be assumed to be self-directed in their learning. It may be further assumed that teachers of these students are facilitators that can assist in the learning process by providing an environment conducive to learning. These assumptions about learners and teachers, taken from adult education ideologies and current societal beliefs, are incorporated into nursing education program philosophies for the curriculum to operationalize.

Often nursing program designs, while espousing this learner-centered philosophy, are, in fact, teacher-centered with predetermined learning objectives, content, learning strategies and evaluation methodologies. Sheehan (1986) describes the design of predetermined objectives, content, strategies and evaluation as being a product and not a process design. It is behavioristic in ideology. He criticizes that the teacher is the more active player, while the learner is passive. This criticism is similar to that of Rogers (1969). He suggested that "when we use a prescribed curriculum, similar assignments for all students, lecturing, standard tests and instructor chosen grades, then we can almost guarantee that meaningful learning will be at an absolute minimum" (p. 5). Sheehan goes on to describe the process design as being more learner-centered; the learner is active by solving meaningful problems. This process design is more congruent with a humanistic,

pragmatic ideology.

Yuen (1987) describes a similar paradigm to Sheehan's in his discussions of linear vs. multidimensional approaches to curriculum design. He describes the linear model to be an 'ends' model whereby the objectives, content, strategies and evaluation are predetermined by the faculty; the learners are simply to meet the objectives. This linear approach is similar to Sheehan's product model. Such models tend to be popular with program/approval agencies who offer strict standards from which nursing programs are to operate in order to be approved (MARN Registered Nurses' Act). Yuen also states that such designs arise from philosophies that claim to be learner-centered with assumptions that learners are able to make their own decisions and take responsibility for their learning. He suggests that most nursing programs fall into the category of learner-centered philosophies but follow linear designed approaches. He offers an alternative approach - a multidimensional one that allows for learner input and problem solving. Research, therefore, may be appropriate in this area to investigate the enactment of a program philosophy by its curriculum to determine whether it is a product, linear, teacher-centered design or a process, multidimensional, learner centered one.

Research through the use of a program evaluation model is an efficient way to investigate the enactment of a program philosophy. Grotelueschen (in Knox and Associates,



1980) distinguishes between evaluation and research by saying that program evaluation is not concerned with knowledge for its own sake, but with knowledge for action. He suggests that program evaluation is less concerned with making generalizations than with making decisions in a specific setting (p. 81). This thesis pertains to a program's evaluation and attempts to make generalizations, in so far as the data analysis allows, and in relation to programs with similar curriculum philosophies. The Stufflebeam model for program evaluation is suitable for this study because it, too, purports to gather evaluation data for decision makers in a program. Specific conclusions are made for the program under study.

Stufflebeam's CIPP model is designed to review a curriculum in a comprehensive manner. It was developed in 1966 to be used for programs oriented to objective testing and experimental design. The approach was based on the view that "the most important purpose of evaluation is not to prove but to improve" (Stufflebeam, 1983, p. 118). Evaluation, by this framework, is seen as a tool by which programs are made more effective for the people they intend to serve. It allows for student participation, which Jenkins (1986) suggests is valuable for refining and improving course curricula.

The Stufflebeam model considers four aspects of evaluation: context, input, process and product. Context

evaluation purports to identify the strengths and weaknesses of some object, and to examine whether existing goals and priorities are attuned to the needs of those being served. It provides information for curriculum planning decisions. Input evaluation identifies and rates relevant approaches to the program under review. It assesses the program by comparing what is being done elsewhere and what is proposed in the literature. It provides information for curriculum structuring decisions. Process evaluation is an ongoing assessment of the implementation of the program. It addresses the extent to which program participants accept and are able to carry out their roles. It guides implementation decisions in the evaluation design. Product evaluation measures, interprets, and judges the attainments of the program. It assesses long term effects and does so by looking broadly at how the program met the needs of the group it intended to serve. It facilitates recycling decisions.

The use of a program evaluation model is important as suggested by Ediger, Snyder and Corcorran (1983). They cite the following advantages for using program evaluation models: a model provides direction, indicates the parameters for the evaluation, supplies a systematic approach, and specifies relationships of its parts (p. 196). Using a program evaluation model as a framework for a research study is useful for the same reasons. The model will be

beneficial for developing the focus of the study. By using Stufflebeams's CIPP model, particularly the context and process aspects, the research questions for this study will be formulated.

The Stufflebeam model has been chosen for this study for several reasons: (1) by using the structured format suggested by the context and process descriptions, the study will have a focus and direction with parameters outlined in a systematic way; (2) it is the program evaluation model being utilized by the institution from which the study sample will be chosen; (3) it is congruent with the holistic, humanistic philosophy of the intended program of study; (4) as a systems model, it is congruent with the linear/product oriented curriculum design of the intended program of study; and (5) it has been documented as having been successfully utilized by other nursing programs (Clark, Goodwin, Moviani, Marshall & Moorek, 1983; Parfitt, 1986; Sook Sohn, 1987).

Parfitt (1986) used the CIPP model to evaluate a baccalaureate nursing program and determined that there was much conflict within the faculty regarding the teaching methods utilized within the program. She felt that this conflict stemmed from the fact that there were many philosophies at work; consequently, many 'mini' programs were underway with each teacher teaching according to her own philosophy (p. 169). A quantitative study, such as the

one reported herein, is useful for obtaining information regarding the perceptions of teachers about their teaching methods to determine if the methods are congruent with the ones suggested by the overall program philosophy.

Sook Sohn (1987) states that Stufflebeam's CIPP model is useful in nursing program evaluation because it emphasizes formative rather than summative evaluation, thereby enabling improvements earlier than at the end of an evaluative period. She cites the following questions as being appropriately addressed by this model: "Do faculty use teaching methods consistent with the proposed ones?" and "Are the students learning as expected?" The intent of this thesis was to address these questions by using the context and process evaluation components of the Stufflebeam model. The components were utilized because they are specific to the evaluation of a philosophy of a program. The context evaluation examines the environment in which the curriculum exists to determine whether the existing goals and priorities are attuned to the needs of those being served. Nursing students at the beginning and at the end of the first year of study were studied because they are the recipients of the curriculum.

The curriculum philosophy suggests that these learners are responsible for their learning, and hence possess a degree of self-directedness. Within the framework of the context evaluation, the following research question was

addressed in this study: "Do nursing students in this program perceive themselves to be self-directed learners as the program philosophy suggests?" Actual self-directed learning behavior is difficult to measure because of the diversity of self-directed learning and difficulties in obtaining unbiased results.

Process evaluation addresses the actual implementation of the program to determine whether it is being implemented as planned. The curriculum philosophy of the nursing program studied states that learning is facilitated, and the teacher is responsible for providing an environment conducive to learning, inquiry, and problem solving (Institution Handbook, p. 2). The teacher, therefore, is expected to implement principles of adult learning. The following research question was addressed in this study within the framework of the process evaluation: "Are faculty in this program using principles of adult learning as the philosophy suggests?"

Stufflebeam advocates questionnaire methodology as an appropriate data collecting approach for the context and process components. Survey questionnaire methodology was used in this study to address the research questions. Stufflebeam also maintains that this model is not intended to be a hypothesis testing format; however, it can provide a rich data base which can be analyzed and interpreted statistically.

The central purpose of this study was to explore the enactment of a philosophy of a school of nursing in relation to its learners and teachers and the teaching-learning process. Specifically, the context evaluation part sought to answer:

1. Do nursing students at the beginning and at the end of the first year of a diploma program perceive themselves to be self-directed learners as the philosophy of the program suggests and as determined by the 'Self-Directed Learning Readiness Scale--SDLRS'?
2. Is there a statistical relationship between the SDLRS scores and age, and number of years of formal education?
3. Is there a statistical relationship between the SDLRS scores of the beginning students and the scores of students after one year of study in a program whose philosophy advocates that students accept responsibility for their learning?
4. Is there a statistical relationship between the SDLRS scores of the students at the end of first year and their final grades at the end of first year?

Hypotheses were tested to enable further exploration of the context questions. The average population identified in

the hypotheses refers to the norming populations described by the creators of the measuring instruments. These hypotheses are listed as follows:

1. NULL: Students in a diploma nursing program which advocates student responsibility for learning, will have SDLRS scores that are similar to those of the average population.

ALTERNATE HYPOTHESIS: Students in a diploma nursing program which advocates student responsibility for learning, will have SDLRS scores that are higher than the average population.

2. NULL: Students who are over 25 years of age will have SDLRS scores that are similar to the average population.

ALTERNATE HYPOTHESIS: Students who are older than 25 years of age will have SDLRS scores that are higher than the average population.

3. NULL: Students with more than grade 12 formal education will have SDLRS scores that are similar to those of the average population.

ALTERNATE HYPOTHESIS: Students with more than grade 12 formal education will have SDLRS scores that are higher than the average population.

4. NULL: Students who have completed one year of study of this program (which assumes learners to

be responsible for their learning) will have SDLRS scores that are similar to the SDLRS scores of the beginning students.

ALTERNATE HYPOTHESIS: Students who have completed one year of study in this program (which assumes learners to be responsible for their learning) will have SDLRS scores that are higher than the SDLRS scores of beginning students.

5. NULL: Students with higher SDLRS scores will have average year one final grades. (This nursing program considers 60-70% to be an average score.)

ALTERNATE HYPOTHESIS: Students with higher SDLRS scores will also have higher year one final grades than students with low SDLRS scores.

The following questions were addressed within the framework of the process evaluation:

1. Are faculty in a diploma nursing program using principles of adult learning as their program philosophy suggests and as determined by the 'Principles of Adult Learning Scale (PALS)'?
2. Is there a statistical relationship between the PALS scores and age of the teacher, the teacher's educational background in adult education, number of years teaching and amount of overall nursing practice?



The following hypotheses were tested to enable further exploration of the process evaluation. (The norming population refers to the one utilized by the creator of the measuring instrument.):

1. NULL: Faculty in a diploma nursing program that purports to facilitate learning will have PALS scores that are similar to the norming population.  
ALTERNATE HYPOTHESIS: Faculty in a diploma nursing program that purports to facilitate learning will have PALS scores that are higher than the norming population.
2. NULL: Faculty who are older than 40 years of age will have PALS scores that are similar to the norming population.  
ALTERNATE HYPOTHESIS: Faculty who are older than 40 years of age will have PALS scores that are higher than the norming population.
3. NULL: Faculty who have had educational background in adult education (graduate work in adult education) will have PALS scores that are similar to the norming population.  
ALTERNATE HYPOTHESIS: Faculty who have had educational background in adult education (graduate work in adult education) will have PALS scores that are higher than the norming population.

4. NULL: Faculty who have taught for more than 5 years practice will have PALS scores that are similar to the norming population.

ALTERNATE HYPOTHESIS: Faculty who have taught for more than 5 years practice will have PALS scores that are higher than the norming population.

5. NULL: Faculty who have less than 20 years of overall nursing practice will have PALS scores that are similar to the norming population.

ALTERNATE HYPOTHESIS: Faculty who have less than 20 years of overall nursing practice will have PALS scores that are higher than the norming population.

This chapter has outlined the need for the study by explaining the importance of self-directedness for nurses and suggesting the difficulties of its implementation in a beginning nursing program. The framework for the study was introduced followed by the statements of the research questions and hypotheses.

Chapter Two will contain a review of the literature that is pertinent to philosophies of nursing and adult education. The review will also include literature about adult learning and its facilitation. In Chapter Three, the methodology will be described. A description of the samples and the nursing program from which they were selected will

be included. Literature on the measuring instruments and their validation will also be presented. Chapter Four will include this data, their analyses and implications. Chapter Five will conclude the thesis by summarizing the results, drawing conclusions, and making recommendations.

## Chapter Two

### LITERATURE REVIEW

The literature review will be presented in three parts. Part 1 will include information related to the philosophies of nursing and adult education. This part of the review will explore the philosophical base of the assumption "learners take responsibility for their learning". Part 2 will consider the context evaluation, presenting literature related to the learners and their learning. It will address the needs and priorities of the learners as adults and as nursing students. Part 3 will address the process evaluation in a review of literature related to the teachers and their facilitation of learning. Adult learning principles and effective facilitation of learning will be its focus.

#### PART 1 - PHILOSOPHIES OF ADULT LEARNING

Philosophies of education are designed to help us to understand the nature of knowledge, values, reality, and personal education experiences (Ebel, Noel & Bauer, 1969, p.

947). The purpose of an educational philosophy, as defined by Bergevin (1967), is to establish a common point of reference and an integrated viewpoint toward certain beliefs, ideas, attitudes and practice. These beliefs arise from the ideologies or philosophical bases suggested by philosophers. Ideologies consider logic, ethics, aesthetics, metaphysics, and the theory of knowledge. Examples of ideologies are idealism, realism, pragmatism, progressivism, humanism, behaviorism, and existentialism. Elements of these philosophical bases are included in curriculum and program philosophies. It is not the intent of this study critically to evaluate these ideologies nor to engage in philosophical debate. Rather, it will outline the basic premises of these ideologies as they relate to adult and nursing education.

Elias and Merriam (1980) wrote a comprehensive book elaborating the philosophical foundations of adult education. They identify several ideologies; of these, humanism, pragmatism, behaviorism, progressivism, and existentialism will be described because of their significance to nursing education. The philosophical base for the program under study is said to be a humanistic (humanitarian) one. Its structure, however, reflects a behavioristic base.

Behaviorism, in adult education, is described as emphasizing such concepts as control, learning by behavioral

objectives, reinforcement and behavior modification. It focuses upon measureable, overt activity. Learning, to a behaviorist, involves a change in behavior. The learner is considered active but only to the extent that he/she meets the predetermined objectives that are then used to evaluate the learning. The student's activities are in response to a teacher-centered program and not a learner-centered one. Many nursing programs use behavioral objectives in their curriculum design. Their utility is in providing approval agencies with concrete evidence of the maintenance of the preset standards.

The program under study is based on behavioral objectives, and yet the philosophy views the learner as being a unique individual responsible for the initiative and learning and active participation in the program of studies. The two ideas are not congruent. This behaviorally designed program has a philosophy that considers learning to be the foundation for problem solving. Learning is believed to be facilitated and meaningful to learners when consideration is given to the individual variations of the learners. This consideration reflects a humanistic, pragmatic philosophical base, not a behavioristic one.

Elias and Merriam (1980) relate humanistic adult education to existential philosophy and humanistic psychology. Its key concepts, according to these authors, are autonomy, trust, active cooperation and participation

and self-directed learning. They contrast the humanistic view with the behavioristic view. Humanistic education is student-centered. It assumes individual freedom and responsibility. The teacher is a facilitator who considers individual learning styles, needs, and interests of the learners. Elias and Merriam go on to describe pragmatism as being involved with solving human problems. Its postulates emphasize the consequences of action in the determination of truth and goodness (p. 48). Such a philosophical base is appropriate for nursing, a discipline involving ethics and problem solving. Pragmatism is often associated with progressivism because of its orientation towards social reform.

Elias and Merriam describe the progressive view of adult education as being learner-centered with an aim of bringing about social change. Lifelong learning is valued by proponents of the ideology. Conti (1985) also describes a progressive view of education. He regards this view to serve two functions. It allows for individual growth, as well as maintaining and/or promoting the good of society (p. 10). Dewey (1916) is cited by Elias and Merriam as an advocate of a pragmatic-progressive view. He describes learning as something that students do for themselves, with teachers providing a setting that is conducive to learning. This description is congruent to the philosophy espoused by the nursing program under study.

Carl Rogers (1969), a renowned author in adult learning, also advocates a humanistic, pragmatic, progressive ideology. His emphasis is self initiated learning which is relevant to the learner. He advocates student participation within programs in program planning and evaluation. His view of a teacher's role is that of a facilitator. Several writers share this learner-centered philosophical viewpoint. Mezirow in Merriam (1984) considers this learner-centered view to be the essence of adult learning. He suggests that enhancing the learners' abilities for self-direction should become the philosophical base for adult learning. This belief reflects a pragmatic, humanistic, existential ideology.

Conti (1985) assumes a humanistic and progressive viewpoint as underlying his collaborative mode for learning. His assumptions presuppose that the curriculum be learner-centered; that the learning episodes should capitalize on the learners' experiences; that adults are self-directed and problem centered; that learners should participate in need diagnosis, goals formation, and outcomes evaluation; and that the teacher should serve as a facilitator rather than a repository of facts (p. 221).

These authors tend to operationalize several ideologies at the same time. Lindeman (1961) suggests that possessing and practising more than one ideology at any given time is commonplace and even necessary. To illustrate this point,



he aptly quotes Anatole France. "Each of us must ever be allowed to possess two or three philosophies at the same time . . . (in order to) . . . save our thought from the deadly formality of consistency" (p. xxvii). To him, adult education gives life meaning; it has a situation and not a content approach.

Apps (1979) identifies that a lack of consistent or any philosophical foundation is contributing to problems in adult education. He does not advocate one base to be applicable to all adult learning situations; instead he suggests that each program be developed from a philosophical foundation. He offers his assumptions of adult learning as a useful foundation for adult education programs, stemming from a broad humanistic viewpoint, whereby man is a unique individual within the context of society. Man, to him, is not an isolated being with a goal of self-enhancement. Adult learners are assumed to be self-directed and purposive in their learning pursuits. He projects the purpose of adult learning to be problem-oriented and critically reflective.

Bergevin (1967) states that adult education must be based on a philosophy of change and movement. The ideologies underlying his assumptions are pragmatism, existentialism and progressivism. Those who have written about adult education philosophical foundations emphasize a learner-centered, pragmatic and progressive viewpoint. It

is generally assumed by such writers that there is minimal desire for adult educators to assume a behavioristic viewpoint. In practice, however, there exists a predominant operationalization of a behavioristic ideology. Apps (1979) cites this to be a significant problem with adult education. He also suggests that although behaviorism is evident in practice, it is not necessarily arising from a program's written philosophy.

Bevis (1982) describes written curriculum philosophies. She states that the belief statements for nursing education arise from two elements: the curriculum group's beliefs about life and nursing that are accepted as valid, and the propositions taken "on faith" (p. 51). These beliefs and values then influence the remainder of the curriculum, such as the conceptual framework, objectives, learning strategies and evaluation methodologies. White in Smith, Aker & Kidd (1970) suggests four questions to consider about learning in the philosophy statements: (1) who should learn?, (2) who should be responsible for the learning?, (3) what should be learned?, and (4) how should it be learned?

Torres (1986) writes about difficulties in implementing curriculum philosophies. Four main problems are identified: (1) the curriculum philosophy is incongruent with the parent institution; (2) the philosophy is nonoperational and idealistic, rather than realistic; (3) new faculty are often not sufficiently oriented to the

philosophy and its implications; and (4) the philosophy reflects the beliefs from nursing theory only and not from the program's faculty.

Landrum in Bec, Rawlins and Williams (1984) suggests that nursing philosophies are not static but constantly evolving, as are the participants. Nursing philosophical foundations have evolved historically since the beginning of nursing education programs. A description of these historical foundations is important to account for current nursing philosophical foundations. Practitioners often operate from an earlier philosophical ideology. Bevis (1982) describes the evolution of the philosophical bases throughout the lifespan of nursing education programs. This lifespan, as suggested by Bevis, arose in the mid-nineteenth century until the present time, during which there were four main philosophical bases and phases apparent. She states that "each of the four rose into prominence at differing periods in nursing's development and gave rise to different choices. None of them ever entirely disappeared from nursing's decision making system, and traces of them are found in modern nursing" (p. 35). She lists the four philosophies as aestheticism, romanticism, pragmatism, and humanistic existentialism. She recognizes that aestheticism and romanticism are not true ideologies; but she coined these terms to reflect their historical presence. She states that aestheticism arose from idealism, and

romanticism originated from realism.

Aestheticism, according to Bevis, arose from Plato's beliefs that a physical world is not the ultimate reality. During the period 1850-1900, nurses seemingly followed this belief and dedicated their lives to nursing. They lived a self-denial existence. Piety was viewed as being more important than patient advocacy. Nursing education was viewed of little import because nurses at this time were "born", and learned their skills from other practising nurses (pp. 36-37).

Romanticism, according to Bevis, existed from 1890-1950. Having arisen from realism, nurses no longer needed to dedicate themselves solely to nursing. They could have other worldly interests. They developed a romantic notion to obey other authority figures, such as physicians. It was during this period that nurses became "handmaidens" to the physician, an entrenchment that can be evident today. Nurses, while not practising self-denial, were dependent and lacked autonomy and assertiveness.

World War II resulted in an acute nursing shortage which necessitated the era of pragmatism. This philosophical era extended from World War II to the seventies. Practicality and efficiency became the necessary values. During this time, many ancillary health workers evolved in order to cope with the increased health care demands post war. Specialty areas emerged during this time.

Nursing evolved to incorporate independence, autonomy, and assertiveness, and to be seen as a profession unto itself. As a result of these changed views, the patient, and not the physician became the center of the health care system.

The emphasis on considering the patient as central to health care evoked a humanistic, existential philosophical base during the early seventies. Holistic care, primary nursing, and patients with biopsychosocial and spiritual needs were included into definitions and curriculum philosophies. Nursing care became less task-oriented, and more focused on genuine interest and care for the patients. Curricula were based on nursing theory and not merely a division of medical specialities. Patients and nurses were seen to take responsibility for their actions.

Bevis suggests that the result of this existential viewpoint is that statements are made about learners accepting responsibility for their learning, or being self-directed learners. The humanistic view accounts for collaboration between teacher and learner. A combination of ideologies now exists in nursing practitioners and forms the philosophies of schools of nursing. To Bevis, these philosophies determine subsequent action by the practitioners. Tibbles (1977) writes about the importance of nurses being lifelong learners. She indicates that if nursing programs made provision in their philosophies and curricula to incorporate self-directed learning, more nurses

would be lifelong learners.

Joseph (1985) considers humanism as an appropriate philosophical base for nursing because its tenets can be easily incorporated into beliefs about patients, students and nursing education. She cites Lamont's (1965) definition of humanism: being concerned with the greatest good for all humanity. Emphasis is placed on the importance of humaneness. This view is similar to the one described by Apps (1979) concerning adult education.

Scales (1985) describes curriculum philosophy development and states that consideration must be given to individuals' general philosophies of life and living. She cites realism, pragmatism and idealism as being the ideologies of the majority of faculty members she studied. She defined these ideals and outlined their implications for learners and teachers. Faculty with realistic ideals were found to be concerned with facts and an established body of knowledge, as the basis for the curriculum. Learning, from this foundation, is concerned with acquiring as much knowledge as possible. The teaching-learning process is teacher-centered. Pragmatic believers were described as assuming knowledge to be ever-changing. Learners, from this foundation, should have the opportunity to learn that which is meaningful to them. The teaching-learning process was described as being learner-centered. Idealistic learners were found to place emphasis on ideas so that learning is

the search for truth of these ideas. The teaching-learning process for idealists was considered to be one of collaboration.

According to the literature, a collaborative, learner-centered view considering pragmatism, humanism (Apps view), existentialism and progressivism can be assumed as being the foundation for understanding adult and nursing learning and its facilitation.

#### CONTEXT EVALUATION:

##### PART 2 - ADULT LEARNERS AND ADULT LEARNING

The adult learning population is a diverse one with varied motivations and desires for learning. Many writers (e.g., Knox, 1981; Kidd, 1973; Knowles, 1984; Cross, 1981; Tough, 1979; Apps, 1985; and Brookfield, 1986) have investigated the characteristics and motivations of adult learners as well as barriers for learning. Some have attempted to articulate theories related to adult learning. Some writers (e.g., Cross, Apps and Brookfield) argue that these theories lack empirical evidence. Others argue that adult learning defies a theoretical construct (Courtenay, 1986).

The use of terminology, such as "characteristics", "assumptions", and "principles of adult learning", is employed to describe how and why adults learn. These

descriptors generally arise from psychological, sociological, and philosophical theories. Merriam (1987) describes adult learning and theory building. He identifies ambiguity as the reason for a lack of substantive adult learning theory. Cross (1981) believes the lack of substantive adult learning theory arises from "the lack of desire or perceived need for theory" (p. 221). Adult learning is diverse and multidisciplinary, and as such, a universal theory may be an unobtainable goal. Merriam groups attempts at theory building into three categories: (1) those that are based on adult learner characteristics, (2) those that emphasize the adults' life situations, and (3) those that focus upon changes in consciousness. Such theories define learning in terms of adult social roles and life situations, as opposed to the traditional definitions of learning related to behavioral changes. These definitions arise from the humanistic, pragmatic, progressive philosophical foundations earlier described.

### Characteristics of Adult Learners

Adult learner characteristics consider age, development, social roles, learning styles, motivations and barriers. Adults are defined as individuals over 18 years of age and not attending secondary school, or anyone who has assumed responsibility for him/herself and functions within



the community by performing social roles typically assigned by our culture (Long, 1983). Apps (1981) describes the differences between traditional college students and returning students. Traditional students are between 18 and 22 years of age and have gone directly to college after high school. Such students are described as worried about life experiences, such as getting jobs, and being married. They have fewer life experiences, varied motivations, and their learning has usually been in formal classrooms. According to Apps, such learners tend to be more idealistic than returning students. The returning student is 25 years old or older and has not been enrolled in formal education programs for several years. These learners have more and varied life and learning experiences than traditional students. Returning students tend to be more pragmatic and less idealistic. They have worries over family and job commitments. Their formal learning experience has often been teacher-centered, and they expect, initially, to have a teacher-centered approach (p. 75). Apps makes an interesting observation about adult learners, saying, "although many adult learners do enjoy and often expect to have the opportunity to be self-directed in their learning, at least initially upon returning to school, they expect and often need some structure" (p. 48). Beginning adult learners, therefore, may not perceive themselves to be self-directed learners.

Merriam (1984) identifies differences in the characteristics of young adult learners. He identifies two periods of young adulthood: (1) the introductory period from age 18 to 24 years of age; and (2) the later young adult between 25 and 34 years of age. Merriam states that these distinctions are well documented by Chickering (1981) and Havighurst (1980). Young adult learners are viewed by Merriam as at a transition point in their lives. They are concerned with finding their place in the world, dealing with intimacy, independence and identity concerns (pp. 3-13). Darkenwald (1984) suggests that these young adults "are pragmatic learners. Education is a means of preparing for and consolidating one's place in the world of work and family life" (p. 27). Knox (1981) describes this group as being compulsive and rigid (p. 317). He states that such a group emphasizes expansiveness and they have a tendency to maintain high expectations in learning situations. He suggests that they tend to have a high need for structure and are goal directed (pp. 427-431). Lovell (1980) also describes characteristics of adults in this age group. These individuals, he claims, are at their most adventuresome and creative stage. He describes such adults as being socially concerned and idealistic. They may become easily frustrated when others fail to live up to their expectations. Lovell also states that some learners in this age group may demand individuality and autonomy, whereas,

others may not. Attention by educators, therefore, must be given to the individual learner rather than the collective group. The young adult population is typically the majority in nursing programs.

Knowles (1973, 1975, 1980, 1984) has written extensively about adult learning, and has prompted the term "andragogy" as the "art and science of helping adults learn" (Knowles, 1980, p. 43). Originally, Knowles (1973) identified four assumptions of andragogy related to: (1) self-concept of being innately self-directed; (2) role of experience as being rich and varied; (3) readiness to learn as being dependent upon developmental level; and (4) orientation to learning as being problem-, not subject-centered. After these original assumptions were outlined and criticized (Brookfield, 1984, Darkenwald, 1984, Mezirow, 1981), Knowles elaborated on them to establish five main assumptions, and suggested that they were not exclusive to adult learning. In 1984, he described his five main assumptions: (1) the adult learner is self-directing although he/she may exhibit dependent behavior in new learning situations; (2) adults have a greater volume and quality of experience that will affect their learning; (3) adults are ready to learn when they experience a need to know something; (4) adults enter an educational activity with life-centered or problem-centered orientations; and (5) adults tend to respond more readily to internal motivations

(pp. 9-12). Although critics continued to reiterate that not all adults are necessarily self-directed (Brookfield, 1986; Darkenwald, 1984), Knowles emphasizes that adults can and do acquire these self-directing skills. His view of andragogy and pedagogy is now of a continuum; the use of both or each technique is appropriate at different times, in different situations, regardless of the age of the learner. Smith (1982) identified characteristics of adult learners similar to those of Knowles. He suggests that they have multiple roles and responsibilities, accumulated many life experiences, passed through many developmental phases, and often experience anxiety and ambivalence in their learning.

Cross (1981) also identifies adult learning in terms of the characteristics of the adult learners. She identifies several demographic characteristics that have contributed to a changed adult learner population in the eighties in her content analysis. She describes adult learners today as being more diversified, many in number, with increased longevity, and a product of the post war 'baby boom'. Increased technology and resources and a tendency for people to change career patterns several times throughout a lifetime are characteristic of this population. These factors suggest diversity in the adult learner group, as well as the need for diversified programs. Current social changes also contribute to the diversified population. There is a greater incidence of divorces, single parent

families and double income families; hence, there are more women as adult learners. The result is a greater variation of motivations and barriers to learning. Consideration now must be given to part time programs, day care facilities and alternate study resources. Cross outlines a comprehensive model for adult learning that considers these factors: the Characteristics of Adults as Learners (CAL) model. Personal and situational characteristics are considered in this model. Personal characteristics include developmental, physical, physiological and sociological dimensions. Situational characteristics consider the social and demographic variables. This model offers a comprehensive 'possible theory' for adult learning. However, it is criticized as being too broad to be readily implemented by practitioners (Merriam, 1987, p. 191).

Other writers have also considered characteristics of adult learners. Witkin and Associates (1977) describe field dependent-independent learning style theory. It is the most widely known and researched of the learning style theories and is based upon characteristics of adults as learners. Garity (1985) defines learning style as "our preferred manner of processing information" (p. 12). Witken describes field dependent individuals as tending to see the whole rather than the parts of a situation. Such individuals are described as passively conforming to the influence of the prevailing field of context. Field independent individuals

are described as being capable of experiencing their surroundings analytically. They are socially independent, inner directed and individualistic. As learners, field independent people learn more effectively by calling upon their intrinsic motivations and are able to organize their material for learning into parts/pieces. They are likened, by Witkin, to self-directed learners. Brookfield and Thiel (1984), however, state that successful self-directed learners use a field dependent learning style, learning within the social context of a particular situation and capitalizing on the material within that context (Brookfield, 1985, p. 9).

Cooper (1982) describes successful self-directed learners as being highly motivated and having an innate love of learning for its own sake. These people, she claims, have clear goals and know how to go about learning (p. 37). She suggest that all adults are not necessarily successful self-directed learners and it may be surmised that successful learners have fewer barriers to participating in adult education.

Brookfield (1986) provided a comprehensive summary of the research by Cross (1981), Aslanian and Bricknell (1980), Johnstone and Rivera (1965), and Darkenwald and Rivera (1982). The description of the typical adult learner derived from the research is "relatively affluent, well educated, white middle class individual" (p. 5). One may

conclude that such an individual will encounter fewer obstacles to learning and typically, can afford the costs of tuition, child care, educational resources, and time for studying.

### Adult Life Situations

Adult life situations are the focus of the second line of adult education inquiry. Gibb (1960) describes an experiential theory of adult learning based on Dewey's earlier work. Rogers (1969), Kidd (1976), Brundage and Mackeracher (1980) share this view of adult learning based on life situations of experience. Gibb states that adult learning should be problem- and experience-centered. The experience should be meaningful, whereby, the learner is free to look at and analyze the experience. Kidd (1976) considers the adult to be "an inner directed, self operated learner" (p. 47). As such, this learner should be encouraged to make his experiences meaningful. Rogers also emphasizes the consideration of assuming adults to be capable of learning for themselves in their experiences. He asserts that no man can properly be called educated until he has learned how to learn, and how to adapt and change (p. 104). He views adults as being capable of learning throughout their lifetimes and ascertaining meaning in their lives and learning situations. Brundage and Mackeracher

also consider life situations and the adult's self-concept in identifying their 36 principles of adult learning. They emphasize that adults with positive self-concepts tend to be more responsive to learning, and are strongly motivated to learn in areas relevant to their current developmental tasks, social roles, life crises, and transition periods (Brookfield, 1986, p. 27).

Knox (1980) has viewed adults and their learning in terms of biological, psychological and social development, evolving from birth to death. He discourages the identification of adults and their learning abilities in terms of chronological age. He prefers to describe them in terms of the learner's developmental level. He describes effective adult learning as transactional and developmental (p. 378). He also offers a proficiency theory similar to Wilkin's field dependent learning style theory which defines adult learning in terms of enhancing proficiencies to improve performance. Involved in achieving proficiency is having the opportunity to perform. A discrepancy between current and desired proficiencies, according to Knox, creates educational needs. An adult learner pursues learning to achieve these proficiencies. As transactional learners, the adults are assumed to be motivated to learn by means of interaction with their social context. Knox concludes that adult learners interact with people and resources within the learning situation.



### Adult Learning As Changes in Consciousness

The third area of investigation regarding adult education 'theories' considers changes in the adults' consciousness as being the learning, encompassing inner meaning and reflective thought. It entails more than attaching meanings to situations; it also involves critical reflection of these meanings. Mezirow (1981) views critical reflection as becoming aware of "why we attach the meanings we do to reality, especially to our roles and relationships" (p. 11). He considers this type of learning to be the significant distinguishing feature of adult learning. Apps (1981) writes of a similar view of adult learning in describing his spiral approach to learning emphasizing critical reflection. Brookfield (1985, 1986) also considers critical reflection and action to be crucial to adult learning. He states that the development in learners of their personal power and self worth is fundamental to adult learning.

Brookfield (1986) summarizes various writings pertaining to adult learning and offers the following as a comprehensive and workable definition of the adult learner: "Adults learn throughout their lives with the negotiations of the transitional stages in the life-span being the immediate causes and motives for much of this learning. They exhibit diverse learning styles . . . and learn in

different ways, at different times for different purposes. As a rule, however, they like their learning activities to be problem centered and to be meaningful to their life situation, and they want the learning outcomes to have some immediacy of application. The past experiences of adults affect their current learning, sometimes as a hindrance. Effective learning is also linked to the adult's subscription to a self-concept of himself or herself as a learner. Finally, adults exhibit a tendency towards self-directness in learning" (p. 31).

#### Self-Directed Learning: Characteristics

#### And Its Role In Nursing Education

Self-directed learning is identified by several authors as an appropriate focus for adult learning because adults are believed to possess the need, desire and propensity to be self-directed as part of their developmental being. In describing self-directed learning, several definitions may be utilized. Tough (1968, 1979) describes self-directed learning as the projects that learners pursue on their own in order to help meet a current learning need. The learner is independent and pursues his/her learning often in the absence of a designated teacher. Bell and Bell (1983) describe self-directed as "an activity for which the learner takes the initiative and responsibility for the learning

process" (p. 24). Such a learner, they say, has chosen a certain learning goal, often in the confines of a set curriculum, and assumes responsibility to learn the prescribed material in a self-directed way. Self-directed learning may be seen by these learners as a means to an end; not as merely an end unto itself. The learner as described by Tough pursues learning in a self-designed, self-directed manner; whereas, the learner described by Bell and Bell pursues learning in an other-designed, self-directed manner. This latter learner type is often the type found in nursing programs.

Tough (1979) identified that almost all adults undertake a major learning project each year and spend approximately 700 hours completing it. Approximately 73% of these learners pursue their learning in a self-directed manner. Penfield (1979) substantiates this finding from doing a similar study and concluding 76% are pursued in a self-directed way. In his investigation of the reasons for pursuing learning projects, Tough (1968) found that "the most common and important reason for adult learning is the desire to use or apply the knowledge and skill . . . as a result of puzzlement, curiosity or a question" (p. 52). Cross (1981) described Houle's three main types of learners as typifying the motivations for pursuing adult learning. These include: goal, activity, and learning-oriented learners. The goal-oriented learner pursues knowledge to

solve a problem; the activity-oriented learner is mainly interested in skills acquisition; and the learning-oriented learner pursues learning for its own sake.

The characteristics of self-directed learners have been studied and identified by several authors. Tough (1979) describes successful self-directed learners as ones who possess a degree of initiative, curiosity, and rationality in their daily lives. They have insight into their behavior and perceive positive consequences for their actions. They are future-oriented and accepting of change. Such individuals deal with problems, and not merely their symptoms. Wedermeyer in Cooper (1982) also outlines the characteristics of successful self-directed learners. Many are similar to Tough's description; however, Wedermeyer emphasizes that the learners are organized and make the best possible use of time. They realize that they must give up something else in their lives in order to pursue their learning goals.

A review of nursing student characteristics and their learning indicated that, in professional education, such as nursing, preservice learning approaches may not be exclusively self-directed. Brookfield (1986) argues that "no adult can be fully self-directed while working within an accredited educational institution" (p. 2). He offers sound criticism to the assumption that self-directed learning is the plethora for all learning. While several writers claim

that self-directedness is an innate characteristic of adults, empirical evidence is not available to support or deny this claim. Brookfield writes that often learners do not possess the necessary skills, knowledge or resources to pursue learning independently. Many learners, according to Brookfield, operate from a "narrow and constrictive paradigm" and will likely pursue learning from this narrow framework. In these situations, a facilitator is required to assist the learner to learn how to learn and to develop critical reflection. A knowledgeable facilitator could alleviate some of the difficulties associated with self-directed learning.

The difficulties with self-directed learning in a structured program are outlined as follows: (1) faculty who are untrained in this mode may philosophically believe in it, but do not have the necessary expertise to facilitate it; (2) faculty who resist its use block its facilitation; (3) learners are not always at the same level of readiness or ability; (4) learners may view it to be intimidating and confusing, or consider it to be a 'lazy' teacher's way of operation; (5) institutional structures may limit time and resources; (6) more time is often involved in the student-facilitator contact; and (7) it may be viewed as ambiguous and uncertain by both learners and facilitators. Brookfield's (1986) presentation suggests that pursuing self-directed learning in a structured time limited program

may not always be suitable or appropriate.

In his description of traditional professional education, Houle (1980) proposes that the professional begins learning in earnest after entry to practice. He advocates a redesigning of preservice education programs to enable students to become lifelong learners. This suggestion by various authors is generally followed by a recommendation to include a self-directed learning component into professional education programs. Sweeney (1986), for example, suggests that nursing education needs to become more learner centered so that the development of critical thinking and self-direction will be fostered. He believes that regardless of their predominately young adult status, students should be treated as fully adult by virtue of their age and the expectations of demands placed on them in the clinical area. He advocates a self-directed approach and the facilitation of self-directedness in nursing programs. Cooper (1982) maintains that if the students were exposed to a self-directed approach in their basic education, they would be more likely to pursue their continued education in the same manner.

The need for learner-centered approaches in nursing education is supported when consideration is given to the diversity of nursing students. Although the majority continue to be young adults, there is a trend away from the traditional "fresh from high school" female type of student.

DeTornyay and Thompson (1982) describe the changed demography of nursing students as similar to the ones identified by Cross (1981). DeTornyay and Thompson report that there are increased numbers of men, ethnic minorities, and older women, many of whom are returning to school after or during raising a family (p. 125). Jope (1981) writes that "sociocultural and economic changes have encouraged acceptance of both marriage and career roles for women" (p. 21) in nursing education and practice.

Other studies investigating nursing students' psychological characteristics and learning styles have implied a preference, by nursing students, for traditional teacher centered, and not the learner centered approach. Ostmo, Vanhoozer, Scheffel and Crowell (1984) investigated the learning style preferences of nursing students in a content analysis of relevant research. They cite research by Kezler and French (1975), Ferrell (1978), and Canfield and Lafferty (1974) which determined that nursing students tended to prefer traditional teacher-structured learning experiences dealing with concrete rather than abstract aspects of course content. Canfield and Lafferty describe these students as possessing a strong need for organization and direct experience. These researchers studied beginning and finishing students in a baccalaureate nursing program. They concluded that the beginning students preferred and were exposed to nontraditional learner-centered methods more

than the finishing students. This finding suggested that the method of instruction contributed to the preference. Laschinger, in 1986, also studied the learning style preference of nursing students, and found them to continue to be concrete in their learning style and orientation throughout the program.

Benner (1984) discusses learning style of nursing students in her description of the Dreyfuss model of skills acquisition. This situational model proposes five levels through which nursing students and practitioners evolve from being novices to becoming expert practitioners in the clinical setting. These levels are: novice, advanced beginner, competent, proficient, and expert. The different levels, Benner writes, reflect changes in three general aspects of skilled performance: (1) movement from reliance on abstract principles to the use of past concrete experiences; (2) movement from considering all bits of information as equally relevant to ascertaining that only certain parts are relevant; and (3) movement from being a detached observer to becoming an involved performer (p. 13). Benner states that nursing students are at the novice or advanced beginner levels of skills acquisition. They progress to the other levels after entry to practice. This statement is supportive of Houle's premise that professional education begins in earnest after entry to practice.

Benner (1984) describes novices as having no experience



in situations for which they are expected to perform. These learners, she claims, must be given rules to guide their performance (p. 21). Advanced beginners are described, by Benner, as being able to demonstrate marginally acceptable performance, requiring assistance and support in the clinical area to set priorities and recognize recurrent meaningful patterns in their clinical practice (pp. 24-25). Implications for educators demand a structured teacher-centered approach, whereby the teacher offers guidelines and suggests possible priorities. Benner devotes little emphasis or credence to a self-directed approach for the novice level. She implies that self-directedness could be promoted in the advanced beginner by encouraging this learner to identify the meaningful patterns in the clinical area. The self-identification of meaningful patterns allows the advanced beginner to progress to the competent level. Benner cautions against offering too many structured 'checklist' guidelines if the learner is to progress beyond the competent level (p. 30). She advocates an environment of inquiry with an expert practitioner to enable the competent practitioner to progress to the proficient and expert levels.

These studies of nursing students' learning styles and their preferences for structure seem congruent to Frisch's (1987) findings of their lowered cognitive maturity and need for structure. It may also be postulated that these

students are more highly anxious. Peterson (1977) studied student anxiety and learning preference, and found that the more highly anxious students achieved higher grades in the teacher-centered courses; whereas the students with low levels of anxiety achieved higher grades in learner-centered courses. Hammer and Tuft (1985) conclude in their research that nursing faculty contribute to student anxiety and feelings of poor self image, lack of confidence, and fear of initiative. These characteristics are antithetical to a learner-centered or collaborative approach. They suggest that the faculty do this by exercising their power of authority, often in subtle ways of intellectual elitism and general lack of respect for student abilities.

Hammer and Tuft suggest methods to facilitate enhancement of a student's self concept. Their strategies are comparable to those described by authors regarding facilitation of adult learning. Facilitation of adult learning is the focus of Part 3 of this literature review. Research by authors on adult and nursing education will be highlighted.

### PART 3 - PROCESS EVALUATION:

#### FACILITATION OF LEARNING

Facilitation of learning involves developing a learner centered approach to program planning. For true

self-directed learners (i.e., those who totally direct all their own learning), facilitation may be irrelevant. For the self-directed learner in an 'other' planned program, facilitation is important. Burns in Hammer and Tuft (1985) cites guidelines for facilitation. Burns conducted research on self concept and its enhancement and found enhancement of self concept occurred when the following guidelines were employed: (1) showing unconditional acceptance of each student and believing in his abilities and potentials; (2) accentuating the positive without denying the failings or shortcomings; (3) providing opportunities for success as well as some challenges; (4) avoiding over-criticism and stifling desires to try; and (5) ensuring criticism is centered where it belongs (Burns, 1980, p. 195). Hammer and Tuft postulated that positive self-concepts are directly related to learning potential so that if enhancement of self-concept were facilitated, learning potential would also be enhanced. These guidelines offered by Burns could then be utilized by facilitators of adult learners.

Those who have written about adult learning facilitation offer other guidelines regarding effective facilitation. Rogers (1969) considers meaningful experiential learning to be the essence of adult education. Its facilitation, according to Rogers, is accomplished by: having personal involvements with the learner; understanding that discovery comes from within and is self initiated;

understanding that learning is pervasive; and allowing learners to evaluate their own learning (p. 5). Kidd (1976) also favors a learner-centered experiential approach. To him, facilitators assist learners in "being and becoming" (p. 125). The facilitator task is one of creating a stimulating, non-hostile and supportive environment. Knowles (1975, 1978, 1980, 1984) describes similar parameters in his seven elements for facilitation. Effective facilitators, according to Knowles: (1) create a climate conducive to learning, including establishment of mutual trust, respect, collaboration, support, openness, pleasure and humaneness; (2) involve learners in mutual planning, (3) needs diagnosis, (4) objectives formation, and (5) plan design; (6) assist learners to carry out their plans; and (7) involve learners in evaluation of learning. In a curriculum with set learning goals, objectives and often set learning activities, it may be difficult to facilitate learning using these elements. The elements concerned with climate setting, diagnosing needs, assisting with carrying out plans and evaluating could be implemented in a set curriculum. However, the other elements would be elusive in a curriculum of this kind.

Conti (1982) established his 'collaborative mode' and guidelines for effective facilitation based on assumptions cited from Kidd, 1977; Houle, ; and Knowles, 1975. Effective facilitation is viewed by Conti as involving a

learner-centered curriculum, providing learning episodes that capitalize on the learners' experiences, enhancing self-direction, and discouraging a didactic teaching style. These learner-centered experiential approaches are congruent with Apps' (1981) description of nine exemplary teaching principles, Brundage and MacKeracher's (1980) principles of adult learning and facilitation, and Mezirow's (1984) recommendations for effective facilitation.

Apps (1981) suggests effective facilitators (1) know their students, (2) use their experiences, (3) integrate theory with practice, (4) provide a climate conducive to learning, (5) offer a variety of formats and (6) teaching techniques, (7) provide students with feedback on their progress, (8) help students acquire resources, and (9) are available to students outside of class contacts. Experiential learning and accessibility appear to have particular significance for Apps. Brundage and Mackeracher (1980) outline an extensive list of 36 adult learning principles and their facilitation. Essentially, they suggest that teachers should be sensitive to learners' self concepts and past experiences. They should be willing to share their experiences and be open to learners' suggestions. Mezirow (1984) also writes extensive recommendations for effective facilitation. He considers self-concept and its enhancement to be essential, as well as involving the learners in their learning and encouraging

them to assume responsibility for their learning. He also advocates problem posing and reflective thought as appropriate for developing critical thinking.

Darkenwald and Knox (1984) offer pragmatic guidelines for assisting young adult learners to learn. They suggest that the facilitator: (1) be sensitive to possible turmoil related to the students' developmental levels; (2) provide a warm and flexible learning environment; (3) not expect an instant, positive adjustment to a learner-centered environment; (4) communicate forcefully that the learners are responsible for their learning; (5) provide continuous constructive feedback; and (6) avoid age segregation from older adult groups. Their emphasis is also a learner-centered approach although specific to the young adult learner's developmental stage. Inherent in all learner-centered approaches is the need to learn how to learn.

Guglielmino (1977), Smith (1982), Haverkamp (1983) and Brookfield (1986) agree that learners and facilitators need to learn how to learn. "Mathetics" is coined by Smith as the definition for learning how to learn. Believing mathetics and praxis (reflection upon activity) to be crucial for effective facilitation, Brookfield offers six principles of effective practice that encompass several views of adult learning and its effective facilitation:

1. Participation in learning is voluntary.
2. Effective practice is characterized by mutual

respect.

3. Facilitation is collaboration.
4. Praxis and mathetics are the heart of effective facilitation.
5. Facilitation aims to foster a spirit of critical reflection in adults.
6. The aim of facilitation is the nurturing of self-directed empowered adults. (Pp. 10-11).

Effective facilitation requires effective facilitators. Various writers, such as Tough (1979), Knox (1980), Apps (1981), Griffith and Bakanauskas (1983), and Dinham and Stritter (1986) have identified characteristics of effective facilitators. Many of these descriptors reflect the facilitator's personality. Tough suggests that they are warm, loving, caring and accepting of learners, have a high regard for the learners' self-planning competencies, view themselves as participating in a dialogue with equals, and are open to changes (p. 183). Apps describes them as being more concerned about the learners than themselves. They know their subject matter and relate theory to practice. They are confident as instructors and are open to a wide variety of approaches. They share of themselves with their students (p. 113). Knox identifies effective facilitators as having the following personal characteristics: enthusiasm, humour, cultural awareness and clarity in

expression (p. 382).

Dinham and Stritter discuss these characteristics in relation to nursing education. They synthesized several authors' findings to outline effective characteristics. Effective nurse educators are described as: supportive, human, encouraging; and demonstrating energy, enthusiasm, and dynamism. These nursing educators demonstrate observable and personal interest in the learners' individual achievements (p. 958).

Griffith and Bakanauskas (1983), in their article about student-faculty relationships, also describe effective facilitators as: learner-centered; empathetic; good role models; and open, honest and responsive to learner needs. They utilize helping relationship theory described by Rogers (1961) and Combs (1977) as the basis for effective facilitation. When teachers exhibit effective facilitator behaviors, these authors claim, students tend to be more productive by "discovering, exploring, experimenting, synthesizing and deriving implications" (p. 105). Such student behaviors are self-directed skill and reflect a higher cognitive maturity (p. 105). Effective facilitation by teachers, therefore, can foster self-directed behavior in students.

By considering the characteristics of adults and their learning, and being aware of effective facilitation and characteristics of facilitators, teachers may implement the



principles of adult learning in a set curriculum, such as a nursing program. The utilization of principles of adult learning is consistent with a humanistic, existential, pragmatic and progressive philosophical base. Effective facilitation and utilization of principles of adult learning can enhance the promotion of learner responsibility for learning. Learners will then assume more responsibility for their learning and demonstrate a greater readiness and ability to be self-directed learners.

## Chapter Three

### METHODOLOGY

Descriptive questionnaire methodology was utilized with three samples from one school of nursing. Wilson (1985) describes survey research as being appropriate for describing characteristics, opinions, attitudes or behaviors as they currently exist in a population (p. 138). Descriptive survey methodology is useful for providing an accurate portrayal of a population that has been targeted. Such methodology can be utilized to determine the extent or direction of behavior (Wilson, p. 142). Two questionnaires were utilized in this study: one given to student samples for the context evaluation; and one given to a faculty sample for the process evaluation. The utilization of both questionnaires, concerned with learners and teachers, was deemed appropriate to address the underlying research question: Is the philosophy of a school of nursing being enacted by its curriculum in terms of its learners, teachers and the teaching-learning process?

This chapter begins with a description of the nursing program under study and the selection of the samples. The

ethical considerations will be explained. Finally, the questionnaires will be described in terms of their development, utility, reliability and validity.

### The Nursing Program

The nursing program is a two year hospital based program set in a tertiary care hospital. This program is intended to prepare graduates who are then eligible to write licensing examinations to become registered nurses. Graduates of the program tend to practise in acute care facilities, often in dependent roles. This is in contrast to graduates from four year baccalaureate nursing programs, who also are eligible to write licensing examinations but tend to practise in areas that allow them more independence.

Schools of nursing in the province receive their operation approval from the Manitoba Association of Registered Nurses' Board of Directors in accordance with the Registered Nurses' Act Regulation/80, By-Law No. 1/1981. The board receives advice and recommendations from an Advisory Council whose terms of reference prescribe standards and provide verification that these standards are being met by the nursing programs. The standards consider that nursing programs have: (1) a comprehensive plan that reflects the community's needs, the institution's ability to provide resources to meet the needs of the program, and a

demonstrated collaboration with the governing agency; (2) a belief (philosophy) statement that is congruent with the sponsoring agency's beliefs, and explains the conceptual framework and relationships between theory and practice in nursing; (3) a description from the sponsoring agency's nursing division's philosophy, objectives and situations for which graduates can practise; (4) a curriculum plan that outlines the structural organization, objectives, sequencing and timing of context and process, relevant learning experiences and criteria for the selection of students and teachers; and (5) a statement of the ways by which learners, teachers and the program are to be evaluated (Marn, 1980, pp. 27-28).

The program under study has met these standards and is an approved program. Its philosophy is congruent with the sponsoring agency's mission, aims and objectives. Lifelong education is gleaned to be important by the sponsoring agency, with statements that nursing personnel are to be self-directing and responsible to make patient care decisions appropriate to their knowledge and skill (Nursing Division Philosophy Statement). The salient points of the school of nursing's philosophy (revised in 1981) are: "the learner is a unique individual with specific psychosocial needs and cultural backgrounds, personal interests, values and life experiences . . . . Learning is facilitated and becomes more meaningful when consideration is given to the

individual variations of the learners. The learner has the primary responsibility for initiative and active participation in the program of studies . . . . The teacher is responsible for providing an environment conducive to learning, inquiry and problem solving. The teacher also provides support for exploration of new ideas, feelings, attitudes and development of psychomotor skills" (Institution Handbook, p. 2). This written document demonstrates that the nursing program is striving to enable its learners to be self-directing so that they will remain self-directing practitioners who pursue lifelong learning. Its structural design and theoretical framework are intended to facilitate implementation of this philosophy. However, on examination of this framework, it may not be an appropriate vehicle to facilitate self-directed behavior.

The program's design is based on a human needs nursing curriculum framework. Such a framework presents the humanistic view that all people have needs (requirements) that must be met. If a person is unable to meet his/her needs, nurses can assist this person to meet the needs and regain independence. The values of this framework are holism and independence. However, the framework evokes a dependency role for nurses who depend upon a person with unmet needs to function in the nursing role. Such a dependency role is antithetical to developing self-directed learning skills.

This program's framework was adapted from Virginia Henderson's (1966) needs framework. According to Bevis (1982), dependency was a characteristic of nurses in this 1960 time period. The framework focuses on "assisting an individual to perform those activities contributing to health or its recovery (or to a peaceful death) that he would perform unaided if he had the necessary strength, will or knowledge" (Henderson, 1969, p. 4). This focus is product and not necessarily process oriented. The nurse functions to assist the individual; the manner by which this assistance is made is not addressed.

The program also has an element of behaviorism in its design. It has set behavioral objectives, learning activities, resources, and evaluation criteria. These are necessary to comply with the current provincial approval agency's standards. However, they limit the potential to develop self-directing behavior by making a linear-product curriculum design as described in Chapter Two.

The teachers and students are not necessarily selected to participate in this program based on their knowledge of the philosophy and its implementation. Students are accepted into the program based on general nursing program admission criteria. Such criteria require an academic achievement of grade twelve with an overall C average. Mandatory preadmission courses are English, Math, and two sciences, one of which should be Chemistry 300. Overall

general good health is also required (though not defined). The criteria do not suggest a self-directed learning aptitude. Student applicants, however, receive a calendar description of the program that contains a statement that the program "provides students with educational opportunities and individual support to become self-directed, competent diploma nurses" (Calendar 1986-87, p. 2). When they have been accepted to the program, they are given a handbook that specifies the program's philosophy, theoretical framework, learning strategies and evaluation methods.

Teachers are required to have a baccalaureate degree in nursing and it is preferred that they also possess a Master's degree in Nursing or Education. They are not necessarily selected based on their knowledge and use of principles of adult learning and the facilitation of self-directed learning. Within their job description, however, is an expectation that the teachers will "incorporate principles of adult education in classroom and clinical instruction" (Job Description - Teacher). As part of their annual performance appraisal, the teachers are evaluated based on the criteria outlined in the job description.

The learning experiences, in this program, have been designed to facilitate a learner-centered approach. There are the traditional didactic strategies, whereby, a teacher

lectures to the large classroom group. More frequently scheduled, however, are group discussions, laboratories, clinical experiences, and time allowed for self-directed learning to accomplish set behavioral objectives. The groups, for group discussions and clinical experience, are assigned to one teacher for 8 or 16 week period. This teacher then has the opportunity to develop individual learner-centered strategies for the group members.

Evaluation methods are to be clearly identified according to the approval agency's standards. Performance evaluation implies a behavioristic approach. In this program, students and teachers are involved in such a behavioristic evaluation process. Student performance is evaluated by objective multiple choice tests to measure learning of the theoretical component. Clinical performance is evaluated using a criteria referenced format. Students evaluate courses and teacher's performance using a criteria and normative referenced evaluation format. Students and teachers are presently involved in program evaluation considering context, input, process and product evaluation.

As demonstrated in the above descriptions of the curriculum's theoretical framework, selection of student and teacher candidates, learning strategies and evaluation methods, this nursing program has a learner-centered philosophy but a linear-product design.



## SAMPLE SELECTION

Context Evaluation: Student Sample Selection

There are 108 students accepted for admission to this program each year. By the end of the first year, attrition results in reduced numbers of original students so that 92 may be remaining in the class. Students who have withdrawn from the program on a temporary or permanent basis, may have failed a course or have chosen a "leave of absence". Students on leave from the program are later allowed to re-enter the program at the point of exit, and are termed "continuator students". The result of this continual re-entry of students is that approximately 100 students remain in each year of the program at any given time. Continuator students will be excluded from the study to avoid possible skewedness of results.

The majority of students enrolled in the program range in age from eighteen to twenty-four years old, according to the available school statistics. The school reports an increasing percentage of older female students who have had families and are now entering the nursing program as their first employment preparation. As well, there are more males entering the nursing program. A small percentage of the student population have had other careers and have made the transition to nursing for a variety of reasons. The

demographic patterns inherent in the school of nursing include a diversity of student ages and career/educational backgrounds. This accounts for a diversity of learning needs and styles in the program.

In order to determine the extent to which the program is attuned to the needs of the students it serves (context evaluation), two samples of students from two classes were asked to complete biographical data and a questionnaire designed to measure their perceived self-directed learning readiness (learning style). A random selection did not occur because the intent of the study was program evaluation; therefore, the greater the response the more significant the analysis. All students from the population, except the continuator students, were invited to participate in the study. The population included the beginning students and the students at the end of their first year in the program. These students were involved in the school's current program evaluation and were known to the researcher. The graduating students in the second year of the program were not selected as a potential sample for several reasons: they were not involved in the school's program evaluation, they were not known to the researcher and they were involved in various preceptor learning experiences, all of which could contribute to skewed results.

The first sample surveyed included the students at the completion of the first year in the program. Of the

possible 92 respondents, 75 completed and returned the questionnaires. The population of 92 students, although one class, was divided into five groups that represented the five courses for which the students were then enrolled. The students were approached in these five separate groups, asked to participate in the study, and given instructions for this participation. Seven of the 92 students were absent from the classes, and a further 10 students opted not to participate in the study.

There were 70 female and 5 male respondents; hence 93% of the sample was female and 7% was male. The majority of the respondents, 88%, were under 25 years old. The remaining 12% were over 25 years old. The majority of the respondents' maximum education level was grade twelve education with 67% of the sample in this category. The remaining 33% of the sample had more than grade twelve education by having taken accredited post secondary courses, diplomas or degrees.

The second student sample consisted of the beginning students within two weeks after entry into the program. Of a possible 103 respondents, 99 completed and returned the biographical data and questionnaires. The students were approached in the large class setting, invited to participate in the study and given instructions for this participation. Two of the 103 students were absent from the class, and a further two students did not submit the

required biographical data and identification number. All student respondents were requested to use their student numbers, not names, for the researcher's purposes of identification.

There were 92 female and 7 male respondents; hence 93% of the sample was female and 7% was male. The majority of the respondents, 82%, were under 25 years of age and the remaining 18% were over 25 years old. The majority of respondents' maximum education level was grade twelve with 72% in this category. The remaining 28% of the sample had more formal education than a grade twelve standing.

#### Process Evaluation: Teacher Sample Selection

The population utilized for the process evaluation was the faculty from the same nursing program who had a role in teaching the students in the student samples. There are 23 faculty members and three coordinators involved in teaching the nursing courses within this program. These teaching personnel were considered eligible respondents for this study. The director is not involved in active teaching and was excluded from the population. This teacher population has diverse backgrounds in terms of age, number of years teaching and nursing practice, and amount and type of formal education. A random sample was not selected due to the program evaluation nature of the study and the limited

population size.

The faculty, in a faculty meeting, were informed of the purpose and scope of the study, and invited to participate by completing and submitting a biographical data sheet and a questionnaire survey regarding their teaching styles. The biographical data sheet, questionnaire and a covering letter were distributed to each teacher's staff mail slot with an expected date deadline. A time frame of three weeks was given to allow ample time for completion, but not excessive time for misplacement of the forms. Teachers were asked to return the completed or blank questionnaire packages. Blank returns would be accepted as refusal to participate in the study. Two subsequent distributions of covering letters and surveys were made, three and six weeks later, to the teachers who did not originally respond. A number was assigned to each survey so that the researcher could accurately trace the returns.

From the initial distribution, 15 of the 26 teachers returned completed forms, one returned a blank form. From the second distribution, five returned completed forms and one a blank form. From the third distribution, two returned completed forms and the remaining two did not respond to any of the requests. The total sample size was 22 of a possible 26 teachers, representing an 85% response rate.

Of these 22 respondents, 11 or 50% were older than 40 years old and 11 were younger than 40 years old; hence half

the sample was born pre-World War II and the other half was born and developed in a post-World War II society. Ten of the 22 teachers (45%) have practised nursing (including their nurse teaching experience) for over 20 years. Their basic education and experience, therefore, was from the philosophical era of pragmatism that Bevis (1982) outlined. Eleven of the 22 teachers (50%) had practised nursing for less than 20 years, a time frame corresponding to the philosophical era of humanistic existentialism (Bevis, 1982).

Five of the 22 teachers (23%) have taught for less than five years. The remaining 17 teachers (77%) have taught for over five years. Fifteen of the latter group were present in this school of nursing when the philosophy was revised in 1981. Twelve of the 22 teachers (55%) have had graduate course(s) in adult education; the remaining ten teachers (45%) have not had such education.

Diversity in this sample is shown by this biographical information. Inherent in diverse populations are diverse operational philosophies by the individual teachers. Their ability to operationalize a learner-centered philosophy may be the result of their experiential backgrounds.

#### ETHICAL CONSIDERATIONS

Written consent to conduct the study was obtained from

the director of this diploma nursing program. This consent allowed for the use of the school as a source for potential respondents. It was understood by the director that the school's philosophy would be examined in terms of its learners and teachers and the teaching-learning process. Assurance was given that the respondents' participation would be voluntary and anonymous and their individual results would be confidential.

Each sample was approached as a group to avoid the potential coercion associated with being approached singly. The student samples were informed orally and in written instructions, entitled "Directions and Biographical Data - Students" (see appendix), of the purpose of the study. They were invited to participate, informed that their participation was voluntary, and told that their individual results would not be disclosed. They were informed that the potential time involvement would be 15 to 30 minutes and to follow the directions outlined on the survey. As is appropriate with survey methodology, individual written consent was not obtained. The students who completed and returned the questionnaire packages were considered consenting. Each respondent was identified by a student number which assisted in maintaining confidentiality and obtaining the final year one grades for the first sample.

The teacher sample also was approached as a group, followed by distributions of questionnaires packages to

individual mail slots. Like the student samples, the teachers were informed orally and in written instructions, entitled "Directions and Biographical Data - Faculty" (see appendix), of the purpose of the study. They were invited to participate, informed that their participation was voluntary, and assured that their individual results would be kept confidential. They were informed that the anticipated time involvement was 15 to 30 minutes and to follow the directions outlined on the survey. The faculty who completed and returned the questionnaires were considered to be the consenting sample.

#### DESCRIPTION OF THE SURVEY INSTRUMENTS

Two questionnaires were utilized, one for each group of respondents: students and teachers. The student questionnaire measuring the students' perceived self-directed learning readiness, provided data for the context evaluation. The teacher questionnaire suitably measured the process evaluation by determining the use of principles of adult learning. The results of these questionnaires were not interrelated, except that each questionnaire's results provided data for the overall program evaluation. The results from one questionnaire were not predictive or correlative for the other questionnaire; hence, the student scores concerning their perceived



self-directed learning readiness were not related to the teachers' scores specifying their use of the principles of adult learning. Each questionnaire will be described in terms of its development, utility, validity and reliability.

### Self-directed Learning Readiness Scale (SDLRS)

Dr. Guglielmino developed this instrument as her doctoral dissertation in 1977 to determine "extent to which individuals perceive themselves to possess skills and attitudes frequently associated with self-directed learning" (Guglielmino, 1977). It has since been utilized by a variety of researchers (Mourad and Torrance, 1978; Sabbaghian, 1979; Savoie, 1979; Hassan, 1981; Wiley, 1982; Kasworm, 1982; Leeb, 1983; Long and Agyekum, 1984; Reynolds, 1984; Crook, 1985, Brockett, 1985). Savoie, 1979; Wiley, 1982; and Crook, 1985 used nursing samples. This extensive use of the instrument attests to its validity and reliability. However, its use has also encountered criticism.

The instrument is a self report questionnaire with 58 likert-type items that measure perceived readiness to be self-directed learners. It does not measure the students' abilities to be self-directed learners. As such, it will be a useful tool to measure the context but not the process aspect of evaluation. Within the scope of context

evaluation, it can measure if the program is attuned to the needs of the students being served, insofar as their perceived readiness to be self-directed. The philosophy suggests that they have this responsibility. It will not be used to measure the process aspect because it does not measure ability and actual performance.

The instrument provides an overall score for self-directed learning readiness. The range of possible scores is from 141 to 285. The mean for the norming population was 214.4, with a standard deviation of 25.6. In addition to the overall SDLRS score, the scale includes scores for the following eight factors: (1) love for learning; (2) self concept as an effective independent learner; (3) tolerance of risk, ambiguity and complexity of learning; (4) creativity; (5) view of learning as a lifelong beneficial process; (6) initiative in learning; (7) self understanding; and (8) the acceptance of responsibility for one's own learning. Guglielmino developed the instrument through a three round Delphi survey of 14 individuals considered to be experts in the area of self-directed learning. Upon revision, the instrument was administered to 307 people in Georgia, Vermont and Canada. After further revision of the scale, a reliability coefficient of .87 was estimated.

Hassan's (1981) research supports the reliability, and internal and predictive validity of the SDLRS. He found a

significant positive relationship between self-directed learning readiness and actual involvement in learning project activities in a sample of 77 randomly selected adults. Long and Agyekum (1984) offer additional support for the validity of the SDLRS from a sample of 136 black and white students from two southern colleges. They found three significant findings: (1) black students scored higher on both the SDLRS and Agreement Response Set which measures the extent to which respondents answer on the basis of perceived social desirability; hence, these students may have scored higher on the SDLRS because they thought they should; (2) no significant relationship was found between SDLRS score and faculty rating of each student's self-directedness; (3) age was positively related to the SDLRS score. An implication from this study is that the intent of the measuring instrument should not be disclosed to the participants, except to say that it is a measure of learning style. Guglielmino recommends in her written instructions that the exact purpose of the scale not be disclosed to avoid possible response bias.

Mourad and Torrance (1978) also offer support for the construct validity of the SDLRS. They identified a significant positive relationship between the SDLRS and creativity in a study of 41 graduate students in a course on creative thinking. Sabbaghian (1979), investigating the relationship between self concept and self-directedness,

concluded that there exists a significant positive relationship between self-directed learning readiness and self concept in a sample of 77 adult undergraduate students at Iowa State University. Leeb (1983) identified a relationship between self-directed learning readiness and health promoting behavior, while Reynolds (1984) described a relationship between self-directed learning readiness and motivational orientation.

Savoie (1979), Kasworm (1982), Crook (1985), and Caffarella and Caffarella (1983) offer support to the predictive validity of the SDLRS. Savoie found a significant positive relationship between the SDLRS scores and course grades of a sample of 152 nurses enrolled in a continuing education course. Kasworm examined the self-directed learning knowledge and skills of 33 graduate students of adult education. She found significant increases in SDLRS scores from the beginning to the end of the course on adult education methods and techniques. Crook measured the self-directed learning readiness of 63 first year nursing students in a baccalaureate nursing program. She found a significant correlation between SDLRS scores and peer nomination of self-directed learning behavior. She also found a significant positive relationship between the SDLRS score and the final subject grades. Caffarella and Caffarella (1983) determined there was no significant change in the pretest and posttest SDLRS scores following the use

of learning contracts with a sample of over 200 respondents. They did identify a significantly higher mean score of the sample's respondents comparative to the norm. They suggested that having an already high readiness to be self-directed would not be further influenced by the use of learning contracts.

Finestone (1984) utilized the SDLRS with a group of labour education participants. His findings demonstrated no significant relationship between age, number of years of formal education, and SDLRS scores. Caffarella and O'Donnell (1987) recommend that these demographic variables be addressed with each study using the SDLRS.

Brockett (1985-a) cites examples of inappropriate utilization of the SDLRS instrument. In his study of self-directed learning readiness and the life satisfaction of the older adult, he concludes that the instrument was difficult to administer to samples of older adults with minimal formal educational preparation. He indicates that most studies using the SDLRS use samples whose participants have a minimum of high school education; he determined this is appropriate for this instrument. In a subsequent article, Brockett (1985-b) describes methodological and substantive issues in the measurement of self-directed learning readiness. He acknowledges the various studies supporting the validity and reliability of the instrument. However, he offers some criticisms about the construct

validity of the instrument. He describes item analysis of the instrument and found that 12 of the 58 items (21%) were not significantly correlated with the total scale. He also found that 9 of the 12 items were written to be scored in the reverse. Some items were written in a double negative format which could lead to confusion in the respondents. Some confusion can result in inaccurate choice of items and contribute to a skewed item analysis. Brockett concedes that, when respondents have a minimum of high school education, these difficulties are less significant and the instrument is valid. The samples to be utilized in this study have a minimum of high school formal education.

A final substantive issue that Brockett addresses is the definition that Guglielmino utilizes as being related to self-directed learning. Guglielmino considers self-directed learning to be school or book oriented. Brockett suggests that this may be inappropriate for learners other than school based learners. The nursing program from which the sample will be selected is from a school based program. Kathrein (1981) in Caffarella and O'Donnell (1987) found that nurses tend to use informal discussion with peers and reading as their learning resources (p. 203). Such discussions and readings reflect a school and book orientation to learning. Based on this review of literature concerning the SDLKS, its use was considered appropriate for this sample to address the context evaluation of the

program's philosophy.

### Principles of Adult Learning Scale (PALS)

Dr. Conti's Principles of Adult Learning Scale (PALS) was utilized for the process evaluation. By measuring the teachers' perceptions and use of the principles of adult learning, often referred to as the facilitation of learning, this instrument was useful to determine the actual implementation of the philosophy related to the teachers. This scale was developed by Dr. Gary Conti in 1978 as part of his doctoral dissertation. He writes that his scale was developed to "fill a void concerning the lack of an adequate instrument to measure the degree of practitioner support of the collaborative mode" (Conti, 1982, p. 144). This instrument is designed to be capable of measuring the degree to which adult education practitioners accept and adhere to the adult education principles that are congruent with facilitation of learning. Conti defines the 'collaborative mode' and a "learner-centered method of instruction in which authority for curriculum formation is shared by the learner and practitioner" (Conti, 1982, p. 135).

The items of the instrument are based upon the body of theory and knowledge of the collaborative mode. There are 44 items, 24 of which are stated in positive terms and 20 that are stated in negative terms to avoid response bias.

It is a self report instrument that uses a six point modified likert scale to determine the frequency with which the respondent practises the actions described in the items. The six items range in value from 0 to 5, with a possible high score of 220. The norming mean was 146 with a standard deviation of 21. The overall PALS score can be divided into seven factors which offers more specific teacher style information: (1) learner centered activities; (2) personalizing instruction; (3) relating to experience; (4) assessing student needs; (5) climate building; (6) participation in the learning process; and (7) flexibility for personal development.

A high score on the PALS reflects a learner centered approach to the teaching-learning process. Low scores indicate a preference for a teacher-centered approach where the authority rests with the teacher. Scores near the mean indicate a combination of teaching behavior which encompasses teacher- and learner-centered approaches. Conti discovered in his interviews of teachers, who scored near the norming mean score, that they demonstrate conflicting behavior in their teaching approaches. They tend to draw elements from both learner- and teacher-centered approaches. Often their usual learning-centered approach is interrupted by constraints of the institution. The result, Conti suggests, is often confusion for the students.

Conti was able to demonstrate the construct, content



and criterion related validity and reliability of the instrument. In testing its reliability, the test-retest method establish a reliability coefficient of .92. To establish the criterion related validity, the Flanders Interaction Analysis Categories (FIAC) were used because they predict a relationship between a respondent's perception of use of a skill and the actual use of a skill. This tool is also congruent with the characteristics of the collaborative mode. The FIAC ratio scores confirmed the existence of a high degree of congruency between perception and actual utilization of the principles of adult learning (Conti, 1982, p. 142). The PALS instrument was especially useful in this study to determine the extent to which the program is being implemented as planned as far as the teachers are concerned. Conclusions are drawn regarding the faculty's perceived and actual use of the principles of adult learning.

Conti used teachers of Adult Basic Education in the public education system to demonstrate the content validity of the PALS instrument. One may suggest that there may be difficulties in administering this instrument to nurse educators whose focus is not solely on classroom instruction, but also on clinical instruction and group process. Conti identifies other studies that have successfully utilized this scale and among those respondent groups were instructors in allied health education who have

clinical as well as classroom teaching responsibilities.

Conti discusses potential utilization of the instrument in empirical studies. As well, he identifies its potential as a diagnostic tool for those with definitive philosophical views concerning the collaborative mode. He states that such views are humanistic and progressive. This instrument, therefore, is appropriate in a study that purports to discover the enactment of a similar philosophy by its curriculum.

Conti states that a program's philosophy will influence the teacher's personal style and PALS score. In his research, he discovered that, if the program espouses a learner-centered philosophy whereby the teacher functions in a collaborative manner, the PALS score will likely be higher (Conti, 1985). He also found increased evidence of this collaborative mode in respondents who had academic preparation in adult learning and the collaborative mode. Such teachers were older and had more teaching experience than those who scored lower on the PALS. Conti also found that experiential background influences teaching style and the PALS score. This finding suggests that if a nursing teacher's experience has been to practise and teach in the era of pragmatism and dependence, her/his teaching style as measured by the PALS may reflect a teacher-centered approach.

Based on this review of literature about the PALS

instrument, it was utilized as an appropriate measuring tool for the process of evaluation of a program with a humanistic philosophy.

## Chapter Four

### PRESENTATION AND ANALYSIS OF RESEARCH FINDINGS

The purpose of this chapter is to outline the research findings as they relate to the context and process evaluation research questions and hypotheses. The techniques employed in the data analysis are discussed. As well, findings supplemental to the initial research proposal are described. These supplemental findings suggest limitations related to the utilization of the instruments.

#### Context Evaluation Findings

The student samples' mean SDLRS scores were calculated for the individual samples, and, a joint sample mean score was calculated. Sample 1 refers to the sample of students upon completion of their first year in the program. This sample had the earliest involvement in the study (June, 1987). Sample 2 refers to the students at the beginning of the program (September, 1987). The demographics of these two groups were analyzed using chi square analysis to

determine similarities between their groups. Upon establishment of similar characteristics among the groups, they were collapsed into one larger group, hereafter referred to as the Joint Sample.

The chi square test is a nonparametric technique used for nominal scaled data to determine a significant difference between an observed number and an expected number of classes (Wilson, 1985, p. 461). It tests null hypotheses which suggest that any difference between group scores is due to chance or error. If the calculated chi square ratio is higher than the chi square distribution table value for  $\alpha = .05$ , the null hypothesis is rejected and the difference between the groups is not due to chance or error. An  $\alpha = .05$  was utilized as an appropriate P value for education and nursing research (Wilson, 1985 and Babbie, 1983).

Three chi square calculations were made to examine nominal data related to the samples' age, sex and amount of formal education. Age was nominally classified as over or under 25 years old. The amount of formal education was nominally classified as grade 12 or more than grade 12 formal education. Table 1 outlines the frequency of each nominal datum for each sample.

Table 1

Comparison of Student Samples  
Regarding Age, Sex, and Amount of Formal Education

## A. Age

Age	Sample 1	Sample 2	Total
< 25 years old	66	81	147
> 25 years old	9	18	27
TOTAL	75	99	174

## B. Sex

Sex	Sample 1	Sample 2	Total
Male	5	7	12
Female	70	92	162
TOTAL	75	99	174

## C. Amount of Formal Education

Amt. of Education	Sample 1	Sample 2	Total
Grade 12	50	71	121
More than Grade 12	25	28	53
TOTAL	75	99	174

From the data in Table 1, the chi square ratio for age was 0.8171. Since  $P < .05$ , the null hypothesis is not rejected. There was no significant difference between the samples concerning age. The chi square ratio for sex was 0.0389. Since  $P < .05$ , the null hypothesis was not rejected. There was no significant difference between the samples concerning sex. The chi square ratio for amount of formal education was 0.3005. Since  $P < .05$ , the null hypothesis was not rejected. There was no significant difference between the samples concerning amount of formal education. Given these chi square results and conclusions, the samples were considered to be similar in these demographic variables, hence the joint sample was considered a sample for analysis.

The SDLRS mean scores were calculated for samples 1, 2 and the large joint sample. The SDLRS mean scores for each sample were: (1) 225.21 for sample 1 with a standard deviation of 21.25 and range of scores from 172 to 272; (2) 221.55 for sample 2 with a standard deviation of 25.41 and range of scores from 157 to 267; and (3) 223.13 for the joint sample with a range of scores from 157 to 272. A summary of the raw scores and biographical data without identification numbers is presented in appendix A.

The distribution of SDLRS scores was considered to be in a normal distribution as determined by the Shapiro-Wilk test. This test is defined as "an analysis of variance type

test of normality for a complete sample where the test statistic is the ratio of the square of a linear combination of the sample order statistics to the usual estimate of variance" (Kendall and Buckland, 1971, p. 137). To reflect a normal distribution, the Shapiro-Wilk ratio should be  $> .05$ . The Shapiro-Wilk ratio for sample 1 was 0.0719 and for sample 2, it was 0.0789. These values suggest that the samples' scores exhibit normal distributions. Having established these normal distributions, parametric tests were utilized where appropriate for analysis. Such tests include t tests.

Inferential statistics were utilized, although the samples were not randomly selected. These statistics are useful "to compare two or more groups to find out if the corresponding populations are similar" (Wilson, 1985, p. 452). Such statistical tests include t tests and chi square.

Descriptive statistics were utilized to summarize and describe the characteristics of the data in the samples (Wilson, 1985). The Pearson Product Correlation is an example of a descriptive statistical test.

Each hypothesis and its related data and analysis will be presented.



Hypothesis 1

NULL: Students in a diploma nursing program that advocates student responsibility for learning, will have SDLRS scores that are similar to those of the norming population.

ALTERNATIVE: Students in this program will have SDLRS scores that are higher than those of the norming population.

Chi square analysis with an  $\alpha = .05$  was utilized to test hypothesis 1. Three chi square computations were made; one for each sample. Table 2 outlines the mean SDLRS scores and their corresponding chi square values.

Table 2  
Chi Square for SDLRS Scores

<u>Sample</u>	<u>SDLRS X</u>	<u>Chi Square</u>	<u>P Value</u>
Norming	214.4		
Sample 1	225.21	0.5451	P < .05
Sample 2	221.55	0.2384	P < .05
Joint Sample	223.13	0.3444	P < .05

Since  $P < .05$  for all samples, the null hypothesis was not rejected. The alternative hypothesis was rejected. All samples' mean SDLRS scores were similar to the norming populations' mean SDLRS score.

Hypothesis 2

NULL: Students who are over 25 years of age will have SDLRS scores that are similar to the norming population.

ALTERNATIVE: Students who are over 25 years of age will have SDLRS scores that are higher than the norming population.

A one-tailed t test with an  $\alpha = .05$  was utilized to test this hypothesis. Such parametric tests are appropriate when the data exhibit a normal distribution and the sample size is greater than 20 scores per cell. Parametric tests are used for interval or ratio scaled data (Wilson, 1985, p. 454). SDLRS scores are interval level data. t tests compare the mean scores of two similar groups. One-tailed t tests are utilized when the alternative hypothesis specifies one direction, e.g. . . . will have higher scores, rather than . . . will have different scores (Wilson, 1985).

Each sample's data was utilized to test this hypothesis. Table 3 outlines each sample's data related to age, mean SDLRS scores and t test values.

Table 3  
SDLRS Scores and Age

Age	Sample 1		Sample 2		Joint Sample	
	N	X	N	X	N	X
< 25 yrs. old	66	224.03	81	218.59	147	221.03
> 25 yrs. old	9	233.89	18	234.83	27	234.52
t test value	1.3114		2.518		2.768	
P value	P < .05		P > .05		P > .05	

For sample 1, the students at the end of their first year,  $P < .05$ ; therefore, the null hypothesis was not rejected. The students over 25 years old had similar SDLRS scores to those of the norming population.

For sample 2, the students at the beginning of the program,  $P > .05$ ; therefore, the null hypothesis was rejected. The SDLRS scores of the students over 25 years old was higher than those of the norming population. The alternative hypothesis; therefore, was not rejected.

For the joint sample,  $P > .05$ ; therefore, the null hypothesis was rejected. The SDLRS scores of the students over 25 years of age were higher than those of the norming population. The alternative hypothesis; therefore, was not rejected.

From this analysis, age has been demonstrated to have an effect in sample 2, the students at the beginning of the

program. In this sample, the students younger than 25 years old had the lowest SDLRS scores; but the students older than 25 years old had the highest scores. A plot of the effect of age on SDLRS scores between Sample 1 and 2 is outlined in Figure 1.



There is less variation in the scores of sample 1 compared to sample 2.

Hypothesis 3

NULL: Students with more than Grade 12 formal education will have SDLRS scores that are similar to those of the norming population.

ALTERNATIVE: The students with more than Grade 12 formal education will have SDLRS scores that are higher than those of the norming population.

A one-tailed t test with  $\alpha = .05$  was utilized to test this hypothesis. Table 4 outlines each sample's data in relation to amount of formal education, mean SDLRS scores and t test values.

Table 4  
SDLRS Scores and Amount of Formal Education

<u>Amount of Formal Education</u>	Sample 1		Sample 2		Joint Sample	
	<u>N</u>	<u>X</u>	<u>N</u>	<u>X</u>	<u>N</u>	<u>X</u>
Grade 12	50	224.18	71	216.30	121	219.55
> Grade 12	25	227.28	28	234.86	53	231.28
t test value	0.592		3.451		3.076	
P value	P < .05		P > .05		P > .05	

For sample 1, the null hypothesis was not rejected. The scores of the group with more than grade 12 formal

education were similar to those of the norming population.

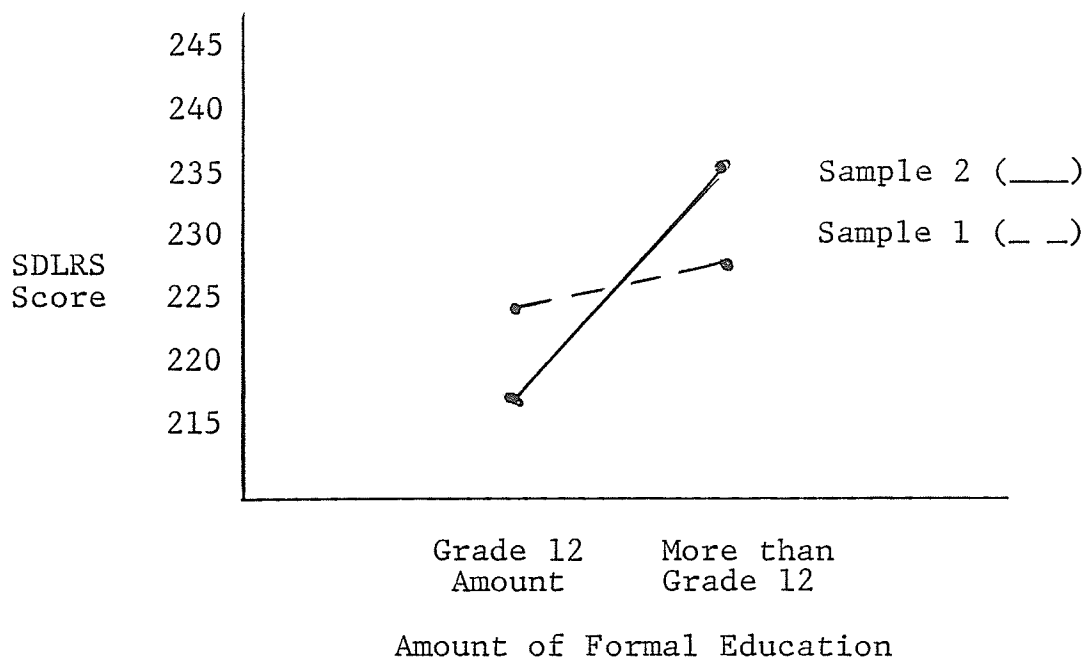
For sample 2, the null hypothesis was rejected. The group with more than grade 12 formal education also had higher SDLRS scores. The alternative hypothesis was not rejected.

For the joint sample, the null hypothesis was rejected. The group with more than grade 12 formal education also had higher SDLRS scores. The alternative hypothesis was not rejected.

From this analysis, amount of formal education has been demonstrated to have an effect in Sample 2, the beginning students. In this sample, the students with only grade 12 formal education had the lowest SDLRS scores; whereas, those students with more than grade 12 formal education scored the highest SDLRS scores. Figure 2 outlines a plot of the effect of amount of formal education on SDLRS scores between Samples 1 and 2.

Figure 2

Effect of Amount of Formal Education  
on SDLRS Scores



There is less variation in the scores of sample 1 compared to sample 2.

#### Hypothesis 4

NULL: Students who have completed one year of study in this program will have SDLRS scores that are similar to those of the beginning students.

ALTERNATIVE: Students who have completed one year of study in this program will have SDLRS scores that are higher than those of beginning students.

A one-tailed t test with  $\alpha = .05$  was utilized to test this hypothesis. Table 5 outlines the mean SDLRS scores and t test values for these samples.

Table 5  
Comparison of Samples' SDLRS Scores

	Sample 1		Sample 2	
	<u>N</u>	<u>X</u>	<u>N</u>	<u>X</u>
SDLRS Score	75	225.21	99	221.55
t test value	1.01			
P value	P < .05			

The null hypothesis was not rejected. The SDLRS scores of sample 1 were similar to those of sample 2. There was a tendency, though not statistically significant, for the students at the end of first year to have higher SDLRS scores.

#### Hypothesis 5

NULL: The students with higher SDLRS scores will have average year 1 final grades. (Average = mean of group's grades.)

ALTERNATIVE: The students with higher SDLRS scores will also



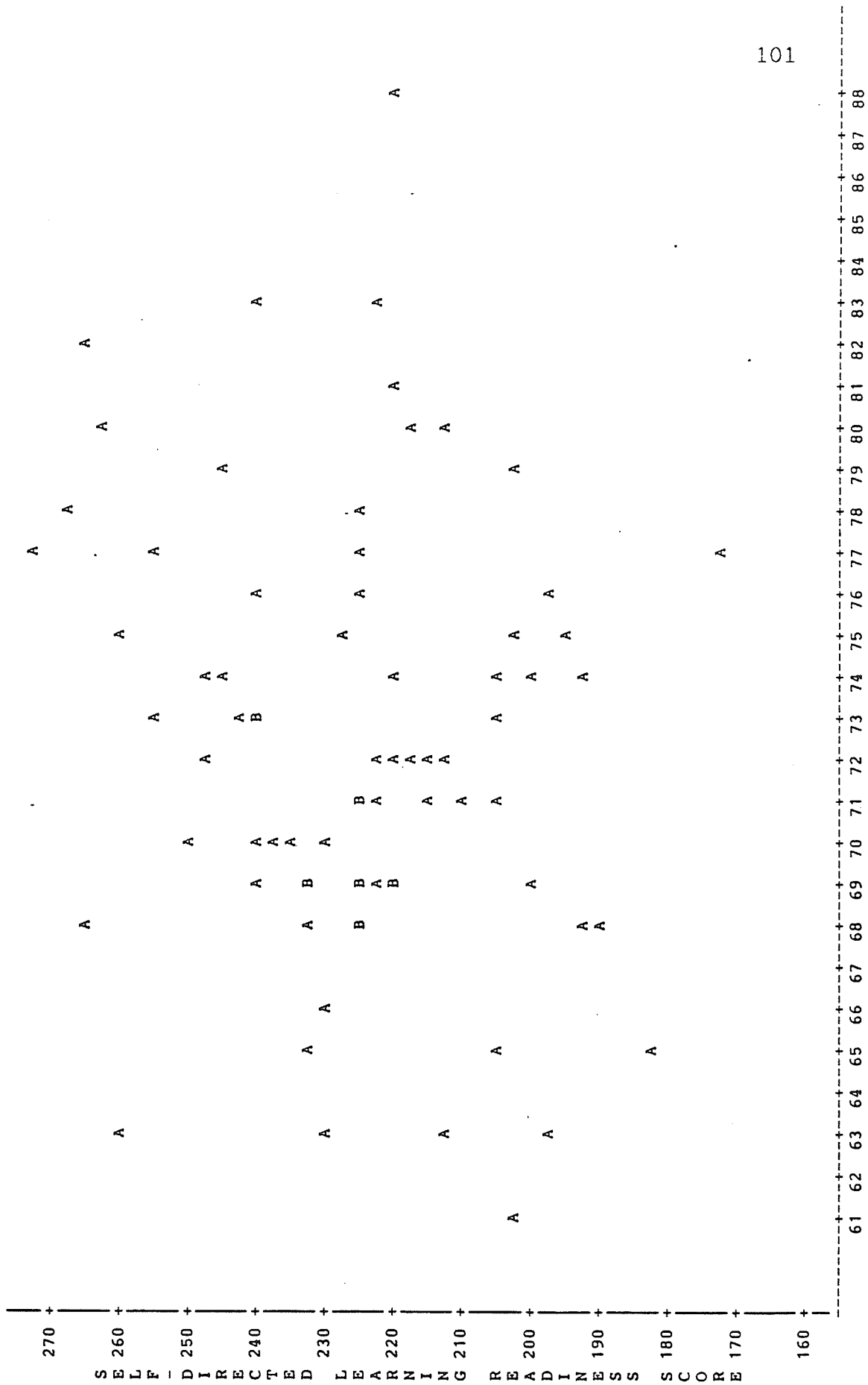
have higher year 1 final grades.

Pearson correlation ( $r$ ) co-efficient was utilized to test this hypothesis. Correlation techniques are utilized to relate performance on different measures. The Pearson  $r$  is a descriptive statistic technique utilized with interval or ratio level data; hence, it was considered appropriate for analysis of these data. The range of correlation scores is +1 to -1. The closer the correlation is to +1 or -1, the stronger the relationship. The closer the correlation is to 0, the weaker the relationship (Wilson, 1985).

The raw scores of the sample's SDLRS scores and final year 1 grades are included in appendix B. The  $r$  was calculated to be 0.1744 which suggests a weak positive correlation between the two variables. Figure 3 contains a scattergram of this relationship which further reinforces the weak correlation between the two variables.

The null hypothesis is not rejected. The students with higher SDLRS scores did not necessarily have higher year 1 final grades. The alternative hypothesis was rejected.

PLOT OF SDELS\*YRIMARK LEGEND: A = 1 OBS, B = 2 OBS



FIRST YR NURSING MARK

## SUMMARY OF CONTEXT EVALUATION RESULTS

This analysis has addressed the research questions related to the context evaluation. Specifically, the results indicated that: (1) these samples of students within this nursing program did not perceive themselves to be more or less self-directed in their learning than the norming population, despite what the program philosophy assumes about this behavior; (2) there existed a positive statistical relationship between SDLRS scores and age amount of formal education; the students who were over 25 years old or had more than grade 12 education were found to have higher SDLRS scores; (3) age and amount of formal education had more of an effect on the SDLRS scores of the beginning students than those at the end of first year; (4) there was no statistically significant difference between the SDLRS scores of each sample; those who had completed one year in this program did not perceive themselves to be more self-directed than those at the beginning of the program; and (5) there was a weak positive correlation between the students' SDLRS scores and their final year 1 grades.

Process Evaluation Findings

The PALS scores from the faculty were found to be in a normal distribution. The Shapiro-Wilk ratio was 0.978. The

mean PALS score for the sample was 144.73 with a standard deviation of 13.52 and range of scores from 116 to 172. A summary of the raw scores and biographical data without identification number is included in appendix C. The mean PALS score of the norming population was 146 with a standard deviation of 21. Each hypothesis and its related data and analysis will be presented.

### Hypothesis 1

NULL: Faculty in a diploma nursing program that purports to facilitate learning will have PALS scores that are similar to those of the norming population.

ALTERNATIVE: Faculty in this program will have PALS scores that are higher than those of the norming population.

A chi square with  $\alpha = .05$  was utilized to test this hypothesis. Table 6 lists the data utilized for the computation of the chi square.

Table 6  
Chi Square and PALS Score

	<u>Chi Square</u>	<u>PALS Score</u>
E	146	E = expected value (X of norming population)
O	144.73	O = observed value
D	1.27	D = difference E - O
D <sup>2</sup>	1.6129	D <sup>2</sup>
D <sup>2</sup> /E =	0.011	D <sup>2</sup> /E = chi square value

This chi square value suggest  $P < .05$ ; therefore, the null hypothesis was not rejected. The PALS scores of this sample was similar to those of the norming population. The alternative hypothesis was rejected. There was a tendency, although not statistically significant, for these faculty PALS scores to be less than those of the norming population. The faculty mean PALS score, being similar to the norming mean suggests that these faculty may exhibit conflicting behavior in the classroom as described by Conti (1982).

### Hypothesis 2

NULL: Faculty who are older than 40 years old will have PALS scores that are similar to those of the norming population.  
ALTERNATIVE: Faculty who are older than 40 years old will have PALS scores that are higher than those of the norming

population.

A t test with  $\alpha = .05$  was utilized to test this hypothesis although the sample cell size is small. The results suggested tendencies and not significant relationships, because of the small sample. Table 7 outlines the sample's data in relation to age, mean PALS scores and t test values.

Table 7  
PALS Scores and Age

<u>Age</u>	<u>PALS Score</u>	
	<u>N</u>	<u>X</u>
< 40 years old	11	148.45
> 40 years old	11	141
t test value	1.32	
P value	P < .05	

The null hypothesis was not rejected. The PALS scores of the group over 40 years old were similar to those of the norming population. The alternative hypothesis is rejected. There was a tendency, though not statistically significant, for the younger group to have higher PALS scores than those in the older group.

Hypothesis 3

NULL: Faculty who have had educational background in principles of adult learning will have PALS scores that are similar to those of the norming population.

ALTERNATIVE: Faculty who have had educational background in principles of adult learning will have PALS scores that are higher than those of the norming population.

A t test with  $\alpha = .05$  was utilized to test this hypothesis. Table 8 outlines the sample's data in relation to educational background in principles of adult learning, mean PALS scores and t test values.

Table 8

PALS Scores and Education in  
Principles of Adult Learning

<u>Education in PAL</u>	<u>PALS Score</u>	
	<u>N</u>	<u>X</u>
Yes	12	148.83
No	10	139.80
t test value	1.62	
P value	P < .05	

The null hypothesis was not rejected. The group with

educational background in principles of adult learning had similar PALS scores to those of the norming population. There was a tendency, though not statistically significant, for those with the educational background to have higher PALS scores.

#### Hypothesis 4

NULL: Faculty who have taught for more than 5 years will have PALS scores that are similar to those of the norming population.

ALTERNATIVE: Faculty who have taught for more than 5 years will have PALS scores that are higher than those of the norming population.

A t test with  $\alpha = .05$  was utilized to test this hypothesis. Table 9 outlines the sample's data in relation to amount of teaching experience, mean PALS scores and t test values.



Table 9

PALS Scores and Amount of  
Teaching Experience

<u>Amount of Teaching Experience</u>	<u>PALS Score</u>	
	<u>N</u>	<u>X</u>
< 5 years	5	144.40
> 5 years	17	144.82
t test value	0.00	
P value	P	.05

The null hypothesis was not rejected. Those with more than 5 years teaching experience had similar PALS scores to those of the norming population. The scores between the groups were similar. The alternative hypothesis was rejected. The use of "5 years" as the variable may be inappropriate to distinguish relationships associated with amount of teaching experience.

Hypothesis 5

NULL: Faculty with less than 20 years of overall nursing practice will have PALS scores that are similar to those of the norming population.

ALTERNATIVE: Faculty with less than 20 years overall nursing practice will have higher PALS scores.

A t test with  $\alpha = .05$  was utilized to test this hypothesis. Table 10 outlines the sample's data in relation to the amount of overall nursing practice, mean PALS scores and t test values.

Table 10

PALS Scores and Amount of  
Overall Nursing Practice

<u>Amount of Nursing Practice</u>	<u>PALS Score</u>	
	<u>N</u>	<u>X</u>
< 20 years	11	145.55
> 20 years	10	141.10
t test value	0.82	
P value	P < .05	

NOTE: overall N = 21, not 22 because one teacher had no nursing practice

The null hypothesis was not rejected. The PALS scores of the group with less than 20 years nursing practice was similar to those of the norming population. There was a tendency, though not statistically significant, for the group with less than 20 years of overall nursing practice to have higher PALS scores than those with more than 20 years nursing practice. This tendency supports the theory that nurses practice in accordance to the philosophical era from which they were taught. The group with more than 20 years

nursing practice had their basic nursing education in the teacher-centered pragmatic philosophical era described by Bevis (1982). The group with less than 20 years nursing practice had their basic education in the learner-centered humanistic existential era as described by Bevis (1982).

#### SUMMARY OF PROCESS EVALUATION RESULTS

This analysis has addressed the research questions related to the process evaluation. Although the sample size did not allow for comprehensive statistical analysis, the results demonstrate tendencies in the data. Specifically, the results indicated that: (1) the faculty in this nursing program were using principles of adult learning no more or less often than the norming population despite what the program philosophy suggests; (2) there were no statistically significant relationships between this faculty group's PALS scores and age, educational background in principles of adult learning, and amount of teaching and overall nursing practice; (3) there was a tendency, though not statistically significant, for higher PALS scores in groups under 40 years of age, with educational background in principles of adult learning and less than 20 years overall nursing practice.

## SUPPLEMENTAL FINDINGS

Supplemental findings were available regarding the items on the questionnaires and the questionnaires' factor scores. These findings suggest limitations for each questionnaire instrument. These limitations will be described, as well as other limitations to the study.

Limitations of the SDLRS Instrument

The factor scores, while designed to give a more comprehensive description of the individual respondents' self-directed learning abilities, were not helpful to that end. Analysis of the scores and their loading items demonstrated that the factors were ambiguous in their definitive items. The construct validity of these factors may be questionable. Items were found to be loading on several factors; hence they were not conclusive to define a particular factor.

Guiglielmino (1977) identified the factors as: (1) love of learning, (2) self concept as an effective independent learner, (3) tolerance of risk, ambiguity and complexity in learning, (4) creativity, (5) view of learning as a lifelong, beneficial process, (6) initiative in learning, (7) self-understanding, and (8) acceptance of responsibility for one's own learning.

Babbie (1983) identified factor analysis to be used to discover patterns among the variations in values of several variables (p. 437). Two criteria to consider in generating factors, according to Babbie are: (1) the factor must explain a relatively large portion of the variance found in the study variables, and (2) every factor must be more or less independent of every other factor. The loading ratio for the SDLRS factors ranged from .30 - .75 which suggests that the factors did not always explain half of the variance found in the study variables. A loading of  $> .50$  would be indicative of explaining more than half the variance. The factors were not necessarily independent of each other. Items identified in one factor were also found in other factors. This suggests that the factors were interdependent and not always independent. Table 11 identifies items (statement numbers) that were found to be loading on more than one factor.

Table 11  
Duplicate Item Loading  
on Factors of SDLRS

<u>Item = Statement Number</u>	<u>Factors</u>
8	1,7
9	2,3
18	6,7
25	2,4
26	1,4
31	1,3
32	1,3
35	3,7
39	1,4
41	4,6
42	2,6
43	4,5
49	1,5
51	1,5
53	1,3
54	1,5
55	4,5,7
56	3,5
58	5,6

Factors 1, 3, 4, 5, 6 and 7 are not independent as

shown by having duplicate items loading on them.

These students samples' factor scores were not analyzed and evaluated because of the ambiguity of the factors and their questionable construct validity.

Another limitation related to the SDLRS instrument was the inconsistent choice of all item responses by the samples. For sample 1, in 35 of the 58 items, all 5 responses were chosen. In 21 items, 4 of the 5 responses were chosen and in 2 items, only 3 of the 5 responses were selected. These latter two items were: (1) number 20, "If I don't learn, it's not my fault", and (2) number 54, "Learning is a tool for life". Both these statements are biased and ambiguous.

For sample 2, in 42 of the 58 items, all responses were chosen, in 14 items, 4 of the 5 responses were chosen and in 2 of the items, only 3 responses were chosen. These latter 2 items were: (1) number 49, "I want to learn more so that I can grow as a person", and (2) number 52, "I will never be too old to learn new things". Both these statements are biased and ambiguous.

Other methodological issues, raised by Brockett (1985-b), such as some items' negative wording, were not analyzed in this study.

Limitations of the PALS Instrument

The PALS factor scores provided limited utility in this study. The factors were identified by Conti (1987) as: (1) learner-centered activities, (2) personalizing instruction, (3) relating to experience, (4) assessing student needs, (5) climate building, (6) participation in the learning process, and (7) flexibility for personal development. The factor scores for the faculty did not consistently exhibit normal distributions as measured by the Shapiro-Wilk test. Table 12 outlines the factors and their distributions as being normal or not normal.

Table 12  
Normal Distribution of Factor Scores

<u>Factor</u>	<u>Distribution</u>
1	normal
2	not normal
3	normal
4	normal
5	not normal
6	normal
7	not normal

Due to the irregularity of normal distribution of the



faculty's factors, and the limited size of the faculty sample, these factor scores were not further analyzed and evaluated.

Other limitations of this instrument relate to the item statements and their responses. Although the instrument had been utilized with instructors of health sciences courses, some items were difficult to answer from a nursing instructor perspective. This difficulty suggests questionable validity for this instrument and nursing teachers. The items focused on classroom instruction. Consideration of all modes of nursing education instruction, such as small group discussion, laboratory and clinical experiences, was limited. A respondent may answer an item from a clinical experience perspective; this response may differ from considering the same item from a classroom perspective.

Ambiguities were present in several item statements. Items 2 and 26 concern the use of discipline, however, an operational definition is absent. Respondents may misinterpret discipline to be positive or negative. For item 4, "I encourage students to adopt middle class values", a respondent may question which values are assumed. Item 8, "I participate in the informal counselling of students" is also ambiguous. A respondent may ponder whether the counselling is academic or personal.

Item 19, "I use written tests to assess the degree of

academic growth rather than to indicate new directions for learning", is biased. A respondent might use written tests for both purposes.

Item 34, "I encourage my students to ask questions about the nature of their society", and item 44, "I teach units about problems of everyday living", are ambiguous concerning society and everyday living. A respondent may ponder whether these refer to life in general or specifically to nursing.

Limitations concerning the responses involve the scale as well as irregularities in the choice of responses. The use of a double meaning for response number 5 was confusing for the interpretation of results. Number 5 was utilized as "you never do the event" or "the item does not apply to you". The overall PALS score may be invalid if a respondent consistently chose number 5, "the item does not apply to you".

Further analysis of the responses demonstrated irregularities of the PALS scale. Not all responses were chosen. In only 12 of the 44 items, all responses were chosen. In 15 items, 5 of the 6 responses were chosen. In 12 items, 4 of the 6 responses were chosen, and in 5 items 3 of the 6 responses were chosen. This preponderance of choosing less than all 6 responses suggests that a choice of 6 responses was excessive, particularly for a small sample.

In the 5 items with three selected choices, there

existed ambiguities and biases in the written items. Item 12, "I plan units which differ as widely as possible from my students' socio-economic background", was biased by using the words "as widely as possible".

Item 14, "I plan learning episodes to take into account my students' prior experiences", was ambiguous in terms of "what is accounted". Item 18, "I encourage dialogue within my students", was also ambiguous in terms of type of encouragement.

Item 22, "I accept errors as a natural part of the learning process", was biased in terms of being a socially accepted statement.

Item 43, "I help students relate new learning to their prior experiences", was biased and ambiguous. One may ponder as to the quality of help given.

Based on these irregularities with a small nursing faculty sample, the PALS instrument may need further validation studies regarding construct and internal validity.

#### OTHER LIMITATIONS OF THE STUDY

Other limitations inherent in the study related to the perceptual orientation of the study, the use of two instead of one student sample, the lack of direct relationship between the student and faculty samples and the use of only

one nursing program.

The use of methods that measure perceptions rather than actual behavior are limited to the subjective responses (perceptions) of those studied. The generalizability of results was limited to the samples. As a program evaluation study, such perceptual studies are appropriate to determine the extent to which the program was meeting the perceived needs of its recipients. Its results were limited to that program.

The utilization of two student samples tested at one given time did not address questions concerning the effect of the program and its instruction on the students' behaviors, such as their self-directed learning behavior. The use of 1 sample in a longitudinal study throughout the nursing program could provide a comprehensive analysis of the effect of the program's instruction on the students' self-directed learning readiness.

Correlation studies between the students and faculty were not made. Not all teachers involved in the study were also involved in the clinical instruction of all students. The teachers' instruction techniques were not considered to be variables effecting the students' self-directed learning readiness in this study. The measuring instruments and hypothesis statements limited such lines of inquiry.

The use of only one nursing program limited the generalizability of the results. Conclusions are valid only

for this program which was appropriate for its program evaluation intent.

## Chapter Five

### SUMMARY AND CONCLUSIONS

In this final chapter, a summary of the study is presented, major conclusions are drawn and discussed in terms of implications for future study.

This study purported to explore self-directed learning in nursing education by studying the enactment of the philosophy of a school of nursing. The philosophy suggested that the learners were self-directed and responsible for their learning, and that their teachers acted as facilitators to the learning process. The study was structured around the Stufflebeam Program Evaluation Model concerning the context and process evaluation aspects. Context evaluation measured the extent to which the program was meeting the needs of those it served. Hence, student samples were used in this study for the context evaluation. Process evaluation measured the actual implementation of the program in terms of the implementation of the philosophy that teachers acted as facilitators to the students' learning. Teachers were studied to measure the process evaluation.

Two instruments were utilized in this study; one scale measured the students' self-directed learning readiness, and another scale measured the teacher's use of principles of adult learning (facilitation of learning). The samples' mean scores arising from these instruments were statistically related to demographic variables. This analysis provided a richer data base from which to evaluate the program comprehensively.

The students within this nursing program were found to perceive themselves no more or less self-directed in their learning than the norming population. Students who were older than 25 years or had more than grade 12 education were found to have higher SDLRS scores. The students with higher scores in self-directed learning readiness did not necessarily have higher year one final grades.

The faculty within this program were found to be using principles of adult learning no more or less often than the norming population. There was a tendency, though not statistically significant, for faculty under 40 years old, with an educational background in principles of adult learning, and less than 20 years of overall nursing practice to have higher PALS scores.

In terms of the context evaluation, the program, with assumptions that learners were self-directed and responsible for their learning, was not necessarily meeting the needs of those it served. In terms of the process evaluation, the

program, which suggested that teachers used principles of adult learning (facilitation of learning), was not necessarily being implemented as planned.

Such conclusions, while valuable for their descriptive intent, did not address the reasons attributable to why the philosophy was not being enacted as intended. Possible causal theories are described and are related to the literature review from chapter two.

The students may not possess the propensity to be self-directed learners for a variety of reasons. Students, in the eighties, have more career options than earlier students. There are fewer candidates for nursing in the overall student population. The nursing student candidate now applying to a diploma nursing school may possess a more dependent self concept and as such, will require a more teacher-centered approach to learning. Further research is indicated to measure these newer student candidates as to their self-directed learning readiness, cognitive maturity, learning style and motivations for choosing nursing. Their previous education experience can offer clues to explain their current orientation to learning. If they had experienced teacher-centered courses throughout their formative education period, their current orientation to learning may be teacher-centered.

A study is also warranted to determine learning trends of baccalaureate nursing students. Students with higher



self-directed learning propensities may be enrolling in the university nursing courses, instead of diploma nursing courses. A comparative study of nursing students in diploma and baccalaureate programs is indicated to determine similarities and differences in self-directed learning readiness and abilities.

It may be unrealistic to assume that nursing students enter diploma nursing programs with self-directed learning skills. They are not typically screened for these skills. Instead, the acquisition of self-directed learning readiness and ability should be the desired outcomes of the program. With current rapid technological change, a graduate nurse needs to possess an ability to learn these changes. The most logical approach to such learning is a self-directed approach. An emphasis, in a nursing program, should be on developing self-directed learning skills instead of assuming their existence. Students can learn to be self-directed learners by having an orientation to its theory, implications and responsibilities for learner and teacher.

Considering Benner's (1984) novice to expert theory, self-directedness may be inappropriate for beginning students and practitioners. Implications for future research are warranted to test this theory as an appropriate approach to optimize nursing student learning. Inherent in Benner's approach is assisting learners to attach meanings to and reflect on their observations and behaviors. Further

study and consideration of the utilization of a critical reflective approach to nursing education is necessary. Such critical reflection may be the optimal approach to assist nursing students to develop problem solving and inquiry skills, and to assume responsibility for themselves and their learning.

It may also be unrealistic to assume that these diploma nursing students will be totally responsible for their learning in a structured time limited two year program that has specified standards. The amount of theory and clinical experience required for these students to attain by graduation is phenomenal. Students need advice to determine their focus and scope of theory and clinical experience.

The entry to practice issue centers around this large amount of knowledge as being unrealistic to attain in a two year diploma program. A baccalaureate degree in nursing has been identified as being necessary for the entry to the practice of nursing. Within this four year baccalaureate program, curricula could integrate and facilitate self-directed learning more realistically. Graduates of these programs tend to be more independent, hence developing their self-directed skills is important.

Future research of self-directed learning behavior in graduates of programs that advocate self-directed learning and lifelong learning is indicated. Such research could determine whether these graduates pursue lifelong learning

by participating in continuing education programs, and whether they are self-directed in this learning.

Other future research could center on learning style theories and nursing students. Laschinger (1986) identified diversity in nursing students' learning styles. Understanding of and accommodating these styles may be an appropriate approach to nursing student learning, rather than merely assuming that all students have a self-directed learning style.

Measuring self-directed learning readiness has its limitations. It focuses on self-directed learning readiness but not on how self-directed learning occurs and is facilitated. If self-directed learning is valued, by including it in the program's philosophy, more research is indicated to: (1) determine how adults plan and organize their learning, (2) investigate fellowship and collaboration amongst learners, (3) investigate how students acquire and increase their efficiency and effectiveness in self-directed learning, and (4) investigate the role of a facilitator in self-directed learning (Caffarella and O'Donnell, 1987).

Faculty are not necessarily facilitating learning in this nursing program. A duplicate study with a larger sample is indicated to determine if these findings and the PALS scale are valid and reliable for nursing teacher populations.

Facilitation of learning may not be implemented in this

program because the teachers do not know how to facilitate learning, or are unaware that their teaching behaviors are ineffective for facilitation. An orientation to the facilitating of learning, its implications, and the responsibilities for teachers and learners is indicated for programs advocating facilitation of learning.

Teachers who have been utilizing a teacher-centered approach may encounter difficulties in assuming a learner-centered approach. Their self-concept has incorporated the teacher-centered behaviors. A change in self-concept is necessary to accommodate a learner-centered approach. Avila and Combs (1985) suggest that support and reassurance are required to assist someone to change self concept. Cooperation and collaboration are elements that require incorporation to this process of change. Peer and administrative support could be given.

Research investigating characteristics of effective and ineffective facilitation in nursing education would be valuable as a basis for the facilitation of learning. A modification of this current study could be done by studying one group of students in a longitudinal study. The study would examine the effect of the teachers' instruction on the students' self-directed learning. The SDLRS tool could be utilized quantitatively to determine changes in self-directed learning readiness as a function of the teacher's instruction. A combined qualitative and

quantitative study could be done to validate the use of principles of adult learning and determine characteristics of effective and ineffective facilitation behaviors.

Implied, when a program advocates teachers to be facilitators of learning, is the recruitment and hiring of faculty who possess this knowledge and skill. Evidence of formal preparation in adult education, rather than the utilization of the PALS instrument as a screening tool, is recommended. Faculty currently teaching in such a nursing program, but without demonstrated knowledge and skill in adult education, should be encouraged to seek resources and continuing education in this field of inquiry.

Emphasis for inquiry in nursing education and its facilitation should be on the development of problem solving and inquiry skills, and the facilitation of learning in the clinical setting. Clinical learning and instruction as areas of inquiry have received minimal documented research time.

One final implication of this study is that the philosophy of this nursing program requires revision because it is not being enacted as planned. Faculty and students may not be committed to this philosophy; hence it no longer serves its purpose. Thoughtful consideration and involvement of faculty and students is indicated. The philosophy should allow considerable scope for operationalization. Reiteration of the accepted

generalities of the day should be avoided unless they are realistic to serve as a basis for clarifying the beliefs of the group and the program. Since the approval agency affects this philosophy by specifying standards, a behavioral focus for learning may be indicated, whereby the responsibility for learning and the facilitation of learning are defined in terms of behaviors. While this notion may be antithetical to the principles of adult learning, it may be realistic for this nursing program. Emphasis in the philosophy assumptions may be on the development of self-directing learning skills instead of assuming their existence on entry to the program.

The students of today, though not necessarily demonstrating self-directed learning behaviors or readiness, are the leaders and teachers of tomorrow. Nurse educators must prepare their students to anticipate and plan for the future. Inherent in this preparation is the development and facilitation of self-directed learning. Given the resources and abilities to use the resources, these future oriented teachers and leaders will enable nursing to expand its influential position in the future health care industry.

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APPENDIX A

STUDENT RAW SCORES  
AND BIOGRAPHICAL DATA















M. O'TOOLE SELF-DIRECTED LEARNING STUDY  
SUMMARY OF FIRSTYR SCORES

AGE	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
<18YR	6	6.1	6	6.1
18-25	75	75.8	81	81.8
26-35	9	9.1	90	90.9
36-50	9	9.1	99	100.0

SEX	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
MALE	7	7.1	7	7.1
FEMALE	92	92.9	99	100.0

EDUCAT	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
HIGH SCHOOL COURSES/DIPLOMA	71	71.7	71	71.7
BACHELORS	17	17.2	88	88.9
	11	11.1	99	100.0

APPENDIX B

STUDENT RAW SCORES  
SDLRS AND FINAL YEAR 1 GRADES

M. O. "TOOLE SELF-DIRECTED LEARNING STUDY  
ECHO OF SECOND YEAR STUDENTS

Q	U	E	S	T	1	2	3	4	5	6	7	8	9	0	Q	U	E	S	T	1	2	3	4	5	6	7	8	9	0								
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2							
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3						
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4					
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5					
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6				
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7			
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8		
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0









M. O'TOOLE SELF-DIRECTED LEARNING STUDY  
SUMMARY OF SECONDYR SCORES

AGE	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
18-25	66	88.0	66	88.0
26-35	7	9.3	73	97.3
36-50	2	2.7	75	100.0

SEX	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
MALE	5	6.7	5	6.7
FEMALE	70	93.3	75	100.0

EDUCAT	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
HIGH SCHOOL COURSES/DIPLOMA	50	66.7	50	66.7
BACHELORS	17	22.7	67	89.3
	8	10.7	75	100.0

FIRST YR NURSING MARK

YR1MARK	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
61	1	1.3	1	1.3
63	4	5.3	5	6.7
65	3	4.0	8	10.7
66	1	1.3	9	12.0
68	6	8.0	15	20.0
69	9	12.0	24	32.0
70	5	6.7	29	38.7
71	6	8.0	35	46.7
72	6	8.0	41	54.7
73	5	6.7	46	61.3
74	6	8.0	52	69.3
75	4	5.3	56	74.7
76	3	4.0	59	78.7
77	4	5.3	63	84.0
78	2	2.7	65	86.7
79	2	2.7	67	89.3
80	3	4.0	70	93.3
81	1	1.3	71	94.7
82	1	1.3	72	96.0
83	2	2.7	74	98.7
88	1	1.3	75	100.0

APPENDIX C

FACULTY RAW SCORES  
AND BIOGRAPHICAL DATA



M. O'TOOLE SELF-DIRECTED LEARNING STUDY  
ECHO OF FACULTY DATA

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	A G E	E D U C A T I O N A L	Y R S T E A C H I N G	N S G R A C T I O N	P A L S	F A C T O R 1	F A C T O R 2	F A C T O R 3	F A C T O R 4	F A C T O R 5	F A C T O R 6	F A C T O R 7	Q U E S T I O N 1	Q U E S T I O N 2	Q U E S T I O N 3	Q U E S T I O N 4	Q U E S T I O N 5	Q U E S T I O N 6	Q U E S T I O N 7	Q U E S T I O N 8	Q U E S T I O N 9	Q U E S T I O N 10		
	25-30	NO	<1 YR	6-10	144	42	25	20	15	16	11	15	4	3	2	5	0	3	1	2	3	0		
	31-40	YES	11-15	16-20	159	32	30	29	16	18	17	17	1	1	2	2	0	3	2	2	4	0		
	31-40	YES	<1 YR	11-15	133	33	28	24	19	19	6	4	5	1	0	5	0	1	0	0	2	4		
	31-40	YES	6-10	11-15	157	35	30	28	19	19	12	14	4	3	1	5	0	2	2	1	2	2		
Q U E S T I O N	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4
1	5	4	1	3	3	1	0	1	2	3	0	2	3	1	3	5	2	4	4	4	2	3	4	3
1	3	4	0	1	3	1	0	2	1	3	1	3	5	0	4	4	0	2	4	0	2	4	0	1
5	5	4	0	5	4	0	0	5	1	1	0	0	1	0	1	0	0	2	3	5	0	0	2	3
2	4	4	1	1	4	2	0	2	1	1	0	1	1	1	2	4	1	1	2	2	0	2	3	2

M. O'TOOLE SELF-DIRECTED LEARNING STUDY  
SUMMARY OF FACULTY SCORES

AGE	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
25-30	1	4.5	1	4.5
31-40	10	45.5	11	50.0
41-50	8	36.4	19	86.4
51-60	3	13.6	22	100.0

EDUCATION PAL

EDNPAL	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
YES	12	54.5	12	54.5
NO	10	45.5	22	100.0

YRSTEACH	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
<1 YR	2	9.1	2	9.1
1-5	3	13.6	5	22.7
6-10	3	13.6	8	36.4
11-15	10	45.5	18	81.8
>15	4	18.2	22	100.0

OVERALL YEARS OF PRACTICE

NSGPRACT	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
6-10	1	9.5	1	9.5
11-15	5	23.8	6	33.3
16-20	4	19.0	10	52.4
21-30	8	38.1	18	90.5
>30	2	9.5	20	100.0

APPENDIX D

LETTER OF CONSENT

163-146 Portsmouth Blvd.  
Winnipeg, Manitoba  
R3P 1B6

June 5, 1987

Dean Care  
Director, St. Boniface School of Nursing  
431 Tache Avenue  
Winnipeg, Manitoba  
R2H 2A7

RE: LETTER OF CONSENT FOR STUDY

Dear Dean;

I am requesting your consent to use the St. Boniface School of Nursing as a source for my master's thesis study on Self-Directed Learning in Nursing Education: Philosophy and Program Evaluation.

The purpose of the study is to explore the enactment of the school's belief statements concerning the learners and teachers. Such belief statements indicate that the learners assume responsibility for their learning and teachers function as facilitators to this learning process. Learner perception of self-directedness and teacher perception of use of adult learning principles will be explored using established questionnaires for that purpose.

The students' participation in the study will involve their completion of the Guglielmino Self-Directed Learning Readiness Scale and provision of requested biographical data concerning age, sex, and number of years of formal education. Their anticipated involvement will be 30 minutes.

The faculty's participation will also involve their completion of a questionnaire, Conti's Principles of Adult Learning Scale. They will be requested to provide biographical data concerning age, number of years of formal education and number of years of teaching and nursing practice background. Their anticipated involvement will be 15 - 20 minutes.

All potential respondents will be given the option to refuse participation. Participation is voluntary. They will be assured that their individual scores will be kept confidential and anonymous. The findings of the study will be made available by my donation of a copy of its summary to the school's library upon completion of the study.


If you require further information, please contact me.

Sincerely,

  
Maureen M. O'Toole

CONSENT: I hereby consent to allow Maureen M. O'Toole to use the St. Boniface Diploma School of Nursing in her master's thesis study on Self-Directed Learning in Nursing Education: Philosophy and Program Evaluation.

SIGNATURE OF CONSENT

  
\_\_\_\_\_  
Dean Care, Director School of Nursing

APPENDIX E

SDLRS INSTRUMENT

Consent for Use

Directions for Use

Questionnaire

Directions and Biographical  
Data - Students



# guglielmino & associates

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Thank you for your recent inquiry concerning the SELF-DIRECTED LEARNING READINESS SCALE (SDLRS).

The SDLRS is a self-report instrument utilizing 58 items. It was developed by Dr. Lucy M. Guglielmino while at the University of Georgia. Fourteen authorities in the area of self-directed learning participated in a Delphi study which resulted in the development of the SDLRS.

The SDLRS has been used by more than 200 major organizations around the world. The instrument has been translated into six languages: French, Chinese, Japanese, Spanish, Finnish and English. It is also available on disk for the Apple II, II+, IIe and IIC computers.

More than 25,000 adults and 5,000 children have taken the SELF-DIRECTED LEARNING READINESS SCALE. National norms have been established for adults and children.

More than 35 doctoral dissertations have been completed using the SDLRS. A list of published and unpublished articles concerning the instrument is available upon request.

Three forms can be ordered\*\*:

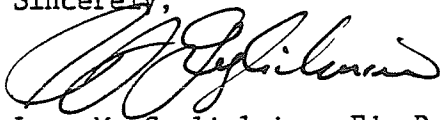
SDLRS-A FOR THE GENERAL ADULT POPULATION \$3.00 EA.  
SDLRS-E FOR CHILDREN \$3.00 EA.  
SDLRS-S A SELF-SCORING VERSION FOR WORKSHOPS AND IMMEDIATE FEEDBACK. \$3.95 EA.

\*\*Licensing the use of the instrument is available for organizations wishing to test on an on-going basis. Please write for details.

All prices include scoring. Volume discounts for the A,B,AND E forms are as follows: 100-200 \$2.50 ea.; over 200 \$2.00 ea. Discounts for the SDLRS-S are: over 50, \$3.50 ea.

Thank you for writing us.

Sincerely,



Lucy M. Guglielmino, Ed. D.  
Paul J. Guglielmino, Ed. D.

# guglielmino & associates

MS. MAUREEN O'TOOLE  
163-146 PORTSMOUTH BLVD.  
WINNIPEG MANITOBA, CANADA  
R3P 1B6

## SELF-DIRECTED LEARNING READINESS SCALE

### Administration

1. Do not inform respondents of the name or the exact purpose of the scale; this is necessary to avoid possible response bias. Use the description of the instrument which is included in the instructions printed on the scale.
2. Allow the respondents as much time as they need to complete the scale. Administration usually requires about 30 minutes. Answering vocabulary questions or reading the items for the respondents will not affect the validity of the scores.
3. Be sure that the respondents understand the configuration of the answer sheet (vertical rows). The answer sheets should be marked in pencil.
4. Return all questionnaires to Guglielmino and Associates for scoring.

Name \_\_\_\_\_ Sex \_\_\_\_\_ Birthdate \_\_\_\_\_

Date of Testing \_\_\_\_\_ Location of Testing \_\_\_\_\_

## QUESTIONNAIRE

**INSTRUCTIONS:** This is a questionnaire designed to gather data on learning preferences and attitudes towards learning. After reading each item, please indicate the degree to which you feel that statement is true of you. Please read each choice carefully and circle the number of the response which best expresses your feeling.

There is no time limit for the questionnaire. Try not to spend too much time on any one item, however. Your first reaction to the question will usually be the most accurate.

### RESPONSES

**ITEMS:**

1. I'm looking forward to learning as long as I'm living.
2. I know what I want to learn.
3. When I see something that I don't understand, I stay away from it.
4. If there is something I want to learn, I can figure out a way to learn it.
5. I love to learn.
6. It takes me a while to get started on new projects.
7. In a classroom, I expect the teacher to tell all class members exactly what to do at all times.
8. I believe that thinking about who you are, where you are, and where you are going should be a major part of every person's education.
9. I don't work very well on my own.

	<i>Almost never true of me; I hardly ever feel this way.</i>	<i>Not often true of me; I feel this way less than half the time.</i>	<i>Sometimes true of me; I feel this way about half the time.</i>	<i>Usually true of me; I feel this way more than half the time.</i>	<i>Almost always true of me; there are very few times when I don't feel this way.</i>
1.	1	2	3	4	5
2.	1	2	3	4	5
3.	1	2	3	4	5
4.	1	2	3	4	5
5.	1	2	3	4	5
6.	1	2	3	4	5
7.	1	2	3	4	5
8.	1	2	3	4	5
9.	1	2	3	4	5

	<i>Almost never true of me; I hardly ever feel this way.</i>	<i>Not often true of me; I feel this way less than half the time.</i>	<i>Sometimes true of me; I feel this way about half the time.</i>	<i>Usually true of me; I feel this way more than half the time.</i>	<i>Almost always true of me; there are very few times when I don't feel this way</i>
10. If I discover a need for information that I don't have, I know where to go to get it.	1	2	3	4	5
11. I can learn things on my own better than most people.	1	2	3	4	5
12. Even if I have a great idea, I can't seem to develop a plan for making it work.	1	2	3	4	5
13. In a learning experience, I prefer to take part in deciding what will be learned and how.	1	2	3	4	5
14. Difficult study doesn't bother me if I'm interested in something.	1	2	3	4	5
15. No one but me is truly responsible for what I learn.	1	2	3	4	5
16. I can tell whether I'm learning something well or not.	1	2	3	4	5
17. There are so many things I want to learn that I wish that there were more hours in a day.	1	2	3	4	5
18. If there is something I have decided to learn, I can find time for it, no matter how busy I am.	1	2	3	4	5
19. Understanding what I read is a problem for me.	1	2	3	4	5
20. If I don't learn, it's not my fault.	1	2	3	4	5
21. I know when I need to learn more about something.	1	2	3	4	5
22. If I can understand something well enough to get a good grade on a test, it doesn't bother me if I still have questions about it.	1	2	3	4	5
23. I think libraries are boring places.	1	2	3	4	5
24. The people I admire most are always learning new things.	1	2	3	4	5

- 25. I can think of many different ways to learn about a new topic.
- 26. I try to relate what I am learning to my long-term goals.
- 27. I am capable of learning for myself almost anything I might need to know.
- 28. I really enjoy tracking down the answer to a question.
- 29. I don't like dealing with questions where there is not one right answer.
- 30. I have a lot of curiosity about things.
- 31. I'll be glad when I'm finished learning.
- 32. I'm not as interested in learning as some other people seem to be.
- 33. I don't have any problem with basic study skills.
- 34. I like to try new things, even if I'm not sure how they will turn out.
- 35. I don't like it when people who really know what they're doing point out mistakes that I am making.
- 36. I'm good at thinking of unusual ways to do things.
- 37. I like to think about the future.
- 38. I'm better than most people are at trying to find out the things I need to know.
- 39. I think of problems as challenges, not stopsigns.
- 40. I can make myself do what I think I should.

	<i>Almost never true of me; I hardly ever feel this way.</i>	<i>Not often true of me; I feel this way less than half the time.</i>	<i>Sometimes true of me; I feel this way about half the time.</i>	<i>Usually true of me; I feel this way more than half the time.</i>	<i>Almost always true of me; there are very few times when I don't feel this way</i>
25.	1	2	3	4	5
26.	1	2	3	4	5
27.	1	2	3	4	5
28.	1	2	3	4	5
29.	1	2	3	4	5
30.	1	2	3	4	5
31.	1	2	3	4	5
32.	1	2	3	4	5
33.	1	2	3	4	5
34.	1	2	3	4	5
35.	1	2	3	4	5
36.	1	2	3	4	5
37.	1	2	3	4	5
38.	1	2	3	4	5
39.	1	2	3	4	5
40.	1	2	3	4	5

- 41. I'm happy with the way I investigate problems.
- 42. I become a leader in group learning situations.
- 43. I enjoy discussing ideas.
- 44. I don't like challenging learning situations.
- 45. I have a strong desire to learn new things.
- 46. The more I learn, the more exciting the world becomes.
- 47. Learning is fun.
- 48. It's better to stick with the learning methods that we know will work instead of always trying new ones.
- 49. I want to learn more so that I can keep growing as a person.
- 50. I am responsible for my learning — no one else is.
- 51. Learning how to learn is important to me.
- 52. I will never be too old to learn new things.
- 53. Constant learning is a bore.
- 54. Learning is a tool for life.
- 55. I learn several new things on my own each year.
- 56. Learning doesn't make any difference in my life.
- 57. I am an effective learner in the classroom and on my own.
- 58. Learners are leaders.

	<i>Almost never true of me; I hardly ever feel this way.</i>	<i>Not often true of me; I feel this way less than half the time.</i>	<i>Sometimes true of me; I feel this way about half the time.</i>	<i>Usually true of me; I feel this way more than half the time.</i>	<i>Almost always true of me; there are very few times when I don't feel this way.</i>
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	

DIRECTIONS AND BIOGRAPHICAL DATA - STUDENTSDIRECTIONS

1. The purpose of this study is to explore how the philosophy of a school of nursing is enacted by its curriculum. Belief statements of learners and teachers are included in a philosophy. This questionnaire is being used to determine how you perceive yourself as a learner.
2. Your participation in this study is voluntary. The individual results will be kept confidential and anonymous. Please use your STUDENT NUMBER for purposes of identification.
3. It will take approximately 20 - 30 minutes to complete the questionnaire. Please complete the biographical data requested below before proceeding to the questionnaire.
4. Follow the directions on the questionnaire and answer the questions in PENCIL on the provided answer sheet.
5. If you request further information regarding this study, please ask me by contacting me at St. Boniface School of Nursing, 431 Tache Ave., Winnipeg.
6. I thank you for your time and input in this study. Sincerely, Maureen O'Toole.  
Telephone: 237 2018.

BIOGRAPHICAL DATA

Please circle the appropriate answer.

STUDENT NUMBER \_\_\_\_\_

1. What is your age?
  - a. less than 18 years old
  - b. 18 - 25 years old
  - c. 26 - 35 years old
  - d. 36 - 50 years old
  - e. more than 50 years old
2. What is your sex?
  - a. Female
  - b. Male
3. What is your highest achieved level of education?
  - a. high school diploma
  - b. post secondary diploma
  - c. bachelor's degree
  - d. master's degree
  - e. other \_\_\_\_\_

APPENDIX F

PALS INSTRUMENT

Consent for Use

Questionnaire

Answer Sheet

Directions and Biographical  
Data - Faculty





Montana State University  
Bozeman, Montana 59717

180

Kellogg Project

Telephone (406) 994-5795

March 4, 1987

Maureen M. O'Toole  
163-146 Portsmouth Blvd.  
Winnipeg, Manitoba  
CANADA R3P 1B6

Dear Maureen:

It is exciting to see that you have found a new and specific use for the Principles of Adult Learning Scale. Enclosed are several things related to the instrument. Feel free to use PALS and the enclosed materials in the best way that fits the needs of your study. If you have a need for any advice concerning the instrument or its scoring as you proceed in your study, call me.

Sincerely yours,

A handwritten signature in cursive script, appearing to read 'Gary J. Conti', is written over the typed name.

Gary J. Conti  
Associate Professor  
of Adult Education

### Principles of Adult Learning Scale

*Directions:* The following survey contains several things that a teacher of adults might do in a classroom. You may personally find some of them desirable and find others undesirable. For each item please respond to the way you most frequently practice the action described in the item. Your choices are Always, Almost Always, Often, Seldom, Almost Never, and Never. On your answer sheet, circle 0 if you always do the event; circle number 1 if you almost always do the event; circle number 2 if you often do the event; circle number 3 if you seldom do the event; circle number 4 if you almost never do the event; and circle number 5 if you never do the event. If the item *does not apply* to you, circle number 5 for never.

Always	Almost Always	Often	Seldom	Almost Never	Never
0	1	2	3	4	5

1. I allow students to participate in developing the criteria for evaluating their performance in class.
2. I use disciplinary action when it is needed.
3. I allow older students more time to complete assignments when they need it.
4. I encourage students to adopt middle class values.
5. I help students diagnose the gaps between their goals and their present level of performance.
6. I provide knowledge rather than serve as a resource person.
7. I stick to the instructional objectives that I write at the beginning of a program.
8. I participate in the informal counseling of students.
9. I use lecturing as the best method for presenting my subject material to adult students.
10. I arrange the classroom so that it is easy for students to interact.
11. I determine the educational objectives for each of my students.
12. I plan units which differ as widely as possible from my students' socio-economic backgrounds.
13. I get a student to motivate himself/herself by confronting him/her in the presence of classmates during group discussions.
14. I plan learning episodes to take into account my students' prior experiences.
15. I allow students to participate in making decisions about the topics that will be covered in class.
16. I use one basic teaching method because I have found that most adults have a similar style of learning.
17. I use different techniques depending on the students being taught.
18. I encourage dialogue among my students.
19. I use written tests to assess the degree of academic growth rather than to indicate new directions for learning.
20. I utilize the many competencies that most adults already possess to achieve educational objectives.
21. I use what history has proven that adults need to learn as my chief criteria for planning learning episodes.
22. I accept errors as a natural part of the learning process.
23. I have individual conferences to help students identify their educational needs.
24. I let each student work at his/her own rate regardless of the amount of time it takes him/her to learn a new concept.
25. I help my students develop short-range as well as long-range objectives.
26. I maintain a well disciplined classroom to reduce interferences to learning.
27. I avoid discussion of controversial subjects that involve value judgements.
28. I allow my students to take periodic breaks during class.

29. I use methods that foster quiet, productive desk-work.
30. I use tests as my chief method of evaluating students.
31. I plan activities that will encourage each student's growth from dependence on others to greater independence.
32. I gear my instructional objectives to match the individual abilities and needs of the students.
33. I avoid issues that relate to the student's concept of himself/herself.
34. I encourage my students to ask questions about the nature of their society.
35. I allow a student's motives for participating in continuing education to be a major determinant in the planning of learning objectives.
36. I have my students identify their own problems that need to be solved.
37. I give all students in my class the same assignment on a given topic.
38. I use materials that were originally designed for students in elementary and secondary schools.
39. I organize adult learning episodes according to the problems that my students encounter in everyday life.
40. I measure a student's long term educational growth by comparing his/her total achievement in class to his/her expected performance as measured by national norms from standardized tests.
41. I encourage competition among my students.
42. I use different materials with different students.
43. I help students relate new learning to their prior experiences.
44. I teach units about problems of everyday living.

## Principles of Adult Learning Scale

## ANSWER SHEET

	Always	Almost Always	Often	Seldom	Almost Never	Never		Always	Almost Always	Often	Seldom	Almost Never	Never
1.	0	1	2	3	4	5	23.	0	1	2	3	4	5
2.	0	1	2	3	4	5	24.	0	1	2	3	4	5
3.	0	1	2	3	4	5	25.	0	1	2	3	4	5
4.	0	1	2	3	4	5	26.	0	1	2	3	4	5
5.	0	1	2	3	4	5	27.	0	1	2	3	4	5
6.	0	1	2	3	4	5	28.	0	1	2	3	4	5
7.	0	1	2	3	4	5	29.	0	1	2	3	4	5
8.	0	1	2	3	4	5	30.	0	1	2	3	4	5
9.	0	1	2	3	4	5	31.	0	1	2	3	4	5
10.	0	1	2	3	4	5	32.	0	1	2	3	4	5
11.	0	1	2	3	4	5	33.	0	1	2	3	4	5
12.	0	1	2	3	4	5	34.	0	1	2	3	4	5
13.	0	1	2	3	4	5	35.	0	1	2	3	4	5
14.	0	1	2	3	4	5	36.	0	1	2	3	4	5
15.	0	1	2	3	4	5	37.	0	1	2	3	4	5
16.	0	1	2	3	4	5	38.	0	1	2	3	4	5
17.	0	1	2	3	4	5	39.	0	1	2	3	4	5
18.	0	1	2	3	4	5	40.	0	1	2	3	4	5
19.	0	1	2	3	4	5	41.	0	1	2	3	4	5
20.	0	1	2	3	4	5	42.	0	1	2	3	4	5
21.	0	1	2	3	4	5	43.	0	1	2	3	4	5
22.	0	1	2	3	4	5	44.	0	1	2	3	4	5

DIRECTIONS AND BIOGRAPHICAL DATA- FACULTYDIRECTIONS

1. The purpose of this study is to explore how the philosophy of a school of nursing is enacted by its curriculum. Belief statements of learners and teachers are included in a philosophy. This questionnaire is being used to determine how you perceive yourself to teach.
2. Your participation in this study is voluntary. The individual results will be kept confidential and anonymous.
3. It will take approximately 15 - 20 minutes to complete this questionnaire. Please complete the biographical data requested below before proceeding to the questionnaire.
4. Follow the directions on the questionnaire and answer the questions on the provided answer sheet.
5. If you request further information about this study, please ask me by contacting me at St. Boniface School of Nursing.
6. I thank you for your time and input in this study. Sincerely, Maureen O'Toole.

BIOGRAPHICAL DATA

FACULTY NUMBER \_\_\_\_\_

Please circle the most appropriate answer.

1. What is your age?
  - a. 25 - 30 years old
  - b. 31 - 40 years old
  - c. 41 - 50 years old
  - d. 51 - 60 years old
  - e. more than 60 years old
2. What is your highest achieved level of education?
  - a. nursing diploma
  - b. post diploma certificate
  - c. baccalaureate degree - nursing
  - d. baccalaureate degree - other
  - e. master's degree - nursing
  - f. master's degree - other
3. How many years have you taught nursing ?
  - a. less than 1 year
  - b. 1 - 5 years
  - c. 6 - 10 years
  - d. 11 - 15 years
  - e. more than 15 years
4. How many years have you practiced nursing?
  - a. 1 - 5 years
  - b. 6 - 10 years
  - c. 11 - 15 years
  - d. 16 - 20 years
  - e. 21 - 30 years
  - f. more than 30 years

APPENDIX G

COVERING LETTERS FOR FACULTY

September, 1987

Dear Colleague:

As you know I have been working on my thesis which is one of the requirements for completing a master's degree in Educational Administration. In June, I outlined to you the premise of my thesis research. I am studying our program philosophy to determine if it is enacted by our curriculum. The data collection involves two questionnaires about teaching and learning perceptions. I have administered the questionnaire dealing with learning perceptions to two samples- the Class of '88 when they had completed the first year of the program; and the Class of '89 two weeks ago at the beginning of the program. The other questionnaire deals with teaching perceptions and is designed to be answered by faculty members.

I am, therefore, inviting you to complete this questionnaire to assist me in my data collection. Your participation is voluntary. Your identity will be kept anonymous and confidential. I have assigned a number to each questionnaire for purposes of identity. I will be the only person with access to this identification system.

If you are willing to participate, please answer these questions based on how you teach now (given the constraints, etc. of a set curriculum) and not on how you would like to teach should this be different from how you are currently teaching.

If you are not interested in completing this questionnaire, please return the package to me so that I will not be awaiting your response.

I truly appreciate any assistance and participation you may offer.  
Thank you.

Sincerely;

  
Maureen O'Toole

P.S. PLEASE RETURN TO MY MAIL SLOT OR OFFICE BY SEPTEMBER 28, 1987.

HI THERE!

IT'S NOT TOO LATE!!

I am sorry that I have not heard from you yet - I truly will welcome your response to my thesis study.

If you are interested in participating, please complete the questionnaire and return to me AT YOUR EARLIEST CONVENIENCE.

If you need another copy of the questionnaire, I'll be happy to get one for you - please ask.

The collective results from this study are going to also be helpful for the Curriculum Committee's Evaluation of the Program - so your contribution is VALUABLE for several reasons. The statistics are more reliable with a greater number of responses!!

If you are not interested in participating (your participation is voluntary) - please return the package so I'll know that you're not participating.

I TRULY APPRECIATE YOUR TIME AND CONTRIBUTION. THANKS!

MAUREEN



Nov. 6/87

Hi!

It's me again. I haven't heard from you yet re: questionnaire for thesis. Your input will be valuable if you're willing and interested to take 15-30 minutes to complete it.

I have attached a second copy of the questionnaire should you have misplaced the earlier copy.

If you DO NOT wish to participate please return the package as is, so that I'll know.

Thank-you for your time and anticipated assistance in this matter.

Sincerely,



Maureen

APPENDIX H

ETHICS COMMITTEE LETTER OF APPROVAL

ETHICAL APPROVAL OF RESEARCH AND EXPERIMENT DEVELOPMENT PROJECTS  
INVOLVING HUMAN SUBJECTS

This form is to be completed in accordance with the Faculty of Education policy on ethical review. This policy requires that Committee members take into account the relevant standards of the discipline concerned as well as, where appropriate, the standards specified by certain external funding bodies.

Project identification

(to be filled in by investigator)

Investigator(s) Maureen Mary O'Toole

Title Self-Directed Learning in Nursing Education:  
Philosophy and Program Evaluation

If applicant is a student, name the faculty member supervising the proposed research

Dr. A. Gregor

This is to certify that the Review Committee has examined the research and experimental development project indicated above and concludes that the research meets the appropriate standards of ethical conduct in research with human subjects.

Date: 10-6-1987

Signature of Chairperson: [Handwritten Signature]