LEARNER-CENTERED EDUCATION:
BRIDGING THE GAP BETWEEN IDEAL AND ACTUAL PRACTICE

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LEARNER-CENTERED EDUCATION: BRIDGING THE GAP
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ABSTRACT

LEARNER-CENTERED EDUCATION: BRIDGING THE GAP
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This quantitative study identified the teaching style of associate degree
nursing faculty at Kettering College as teacher-centered or learner-centered (N=10) using
the Principles of Adult Learning Scale (Conti, 1990). The researcher used an adapted
version of the Principles of Adult Learning Scale to determine how 256 nursing students
perceived their instructors used learner-centered modes. Content analysis established the
extent to which nursing faculty designed courses in alignment with learner-centered
principles. The researcher also examined differences between national NCLEX-RN®
passage rates and those of Kettering College. Results from the faculty and student
surveys demonstrated teacher-centered tendencies in regard to faculty use of learner-
centered principles. While content analysis of course syllabi showed a propensity for
learner-centered instruction, a one-sample t-test indicated no significant difference
between Kettering College NCLEX-RN® pass rates and national pass rates ($t(10) = .157,$
Results of this study indicated no major changes would be necessary from an administrative perspective at this time, given that passage rates remain high in spite of the general nature of instructional delivery. However, faculty development for Kettering College nursing educators should continue as usual to cover best teaching and learning practices in nursing education as recommended by the National League for Nursing Accrediting Commission and the National League for Nursing.
This work is dedicated to my grandmother, Amy Spahr, who taught in a one-room schoolhouse and instilled in me the value of education, to my mother, Betty Sowers, who taught me that perseverance pays, and to my husband, Richard Ervin, who has supported me throughout every step of this journey.
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CHAPTER I

INTRODUCTION

In the United States, admission into nursing practice is regulated by licensing authorities within state jurisdictions. In order to practice, graduates of nursing schools are required to pass the examination overseen by the National Council of State Boards of Nursing (NCSBN). The purpose of this examination is to ensure public protection and competencies required of personnel to perform in a safe and effective manner as licensed, entry-level registered nurses (NCSBN, 2008). The National League for Nursing Accreditation (NLNAC) assesses NCLEX-RN® pass rates as one of the required outcome measures for accreditation of nursing programs (NLNAC, 2008).

Nurse educators have voiced concern regarding the decline in pass rates for the NCLEX-RN® examination (Bondmass, Moonie, & Kowalski, 2008; Crow, Handley, Morrison, & Shelton, 2004; Norton, Relf, Cox, Farley, Lachat, Tucker & Murray, 2006; Seldomridge & DiBartolo, 2004; Spurlock, 2006). The pass rate for first time test takers educated in the US decreased from 90.3% in 1994 to 85.5% in 2007 (NCSBN, 2008). In 2004 the examination became more difficult to pass because the National Council of State Boards of Nursing voted to increase the passing score for the NCLEX-RN® (NCSBN, 2008). One reason cited for this increase was a desire for the NCSBN to have the NCLEX-RN® examination `more closely mirror actual practice given that entry level
RNs were treating higher acuity patients. Another effort made by the NCSBN to make the test more relevant to current clinical practice involved collecting current practice data from newly licensed registered nurses regarding their work experiences. In addition, an expert panel of NCSBN nurses convened to perform a criterion-referenced standard testing procedure for the NCLEX-RN® (NCSBN, 2008).

Following implementation of these changes, the NCLEX-RN® pass rate fell from 87.0% in 2003 to 85.3% in 2004 (NCSBN, 2008). As a result of these declining pass rates and the increased need for nurses in the workforce, schools of nursing began reassessing curricula and teaching practices in order to raise student performance on this exam. The National League for Nursing (NLN, 2003) contended that many of today’s nursing programs fall short in creating learning settings that meet the needs of students who will work in today’s patient care environment. Rather than focusing on the addition of more content within the curriculum, the NLN asserted the focus within nursing education should be on significant paradigm changes which entail nursing students becoming active participants in the educational process (NLN, 2005).

Adams, Murdock, Valiga, McGinnis, and Wofertz (2004) studied the problem with nursing programs that continuously add content and never make deletions from curricula which results in crammed programs that overwhelm students. Resonating with other research studies regarding the quality of nursing education, a study by Norman, Buerhaus, Donelan, McCloskey, and Dittus (2005) emphasized the need for nursing faculty to prepare student nurses to function autonomously in meeting the challenging roles of the profession which include the ability to synthesize, apply, and translate knowledge into the clinical environment.
Research by Candela, Dalley, and Benzel-Lindley (2006) supported this shift away from increased content in nursing curricula. In their research of curricular changes for nursing programs, the authors posited nurses must be able to manage more critical patients in a rapidly changing, highly technological health care setting. Rather than learning an increasing amount of nursing content, the authors contended students need to learn how to make appropriate patient care decisions based on assessment and planning, credible evidence, critical thinking, and clinical reasoning. The literature is rich in supporting the need for nursing programs to explore new pedagogies to bridge the gap between traditional teaching and the learning needs of today’s nurses.

One way to bridge the chasm between academic preparation and nursing practice is by incorporating learner-centered education into the curriculum (Stanley & Dougherty, 2010). Terms such as learner-centered teaching, student-centered education, and learner-centered principles have been used to describe these new educational practices (American Psychological Association, APA, 1993; McCombs, 2001; Weimer, 2002). Learner-centered education precepts include collaboration, cooperation, and active inquiry (Hansen & Stephens, 2000). These tenets of learner-centered education emphasize the student as the central focus of learning. Using this model, students not only take more initiative in the learning process, but do so in cooperation with other students. Socially interactive learning environments emerge, as opposed to the teacher-centered one-way transfer of information. Candela et al. (2006) posited the objective of learner-centered education in nursing programs is the improvement of student learning coupled with the student’s ability to transfer learning to real-life situations and practice.
Statement of the Problem

Nursing education directly influences patient care and nurses’ abilities to assess, think critically, and implement change in the patient care environment. Public demand for nurses who are able to anticipate and manage patients with complex conditions in an unpredictable healthcare setting is increasing. In response to these demands, nurse educators are reevaluating historically teacher-centered curricular designs and are adopting new methods that have a greater focus on learner-centered education. Traditionally, a teacher-centered philosophy guided the delivery of educational content. This transference of knowledge from teacher to student has typically included memorization, repetition, and recitation of information. Teacher-centered programs place a high importance on delivering heavy content and focus on what faculty want to teach, not what students need to learn (Candela et al., 2006). Nursing educators currently question the appropriateness of this passive one-way transmission of knowledge from teacher to student as it inhibits students from preparing adequately for the challenges of today’s health care systems (Candela et al., 2006; Diekelmann & Lampe, 2004; Rideout, 2001; Schaefer & Zygmont, 2003; Williams, 1992).

Conversely, learner-centered programs focus on outcomes which reflect current nursing practice and produce graduates who practice nursing effectively (Candela, et al. 2006). Nursing education that is learner-centered is congruent with major philosophical principles of modern nursing practice. Learner-centered teaching is designed to develop advanced professional skills in students, such as problem solving, critical thinking, and lifelong learning skills and is what nursing educators hold to be essential for current nursing practice (Young & Paterson, 2007).
Candela et al. (2006) posited that a current challenge facing nursing education is theories, methods, and systems that are generally adopted and applied with little regard for bridging the gaps between nursing education, nursing practice, and knowledge development. These challenges have compelled schools of nursing to revise their approach to student education. Terms such as problem-based learning, critical thinking, evidence-based practice, and learner-centered teaching strategies have replaced traditional terminology of repetition, memorization, and recitation previously linked with education and practice.

The NLN position statement “Innovation in Nursing Education: A Call to Reform” (2003) called for schools of nursing to “challenge their long-held traditions by designing evidence-based curricula that are flexible, responsive to students’ needs, collaborative, and integrate current technology.” Further, the NLN position statement “Transforming Nursing Education” (2005) called for curricula supported in evidence as well as best pedagogical practice.

In their seminal article, Barr and Tagg (1995) asserted a paradigm shift has occurred in higher education that focuses on the learning produced. This learner-centered approach fosters a collaborative relationship between the teacher and learners. Adult education literature has advocated these precepts (Brookfield, 1995; Knowles, 1980). Institutions of higher education and faculty have been hesitant to recognize and implement a learner-centered style because faculty often teach in the same way they were taught (Brookfield, 1995; Gardiner, 1994; Stage, Muller, Kinzie, & Simmons, 1998). This problem continues despite the improved methods available to faculty. Teaching
method research is vital to enhance awareness of current teaching practices to determine to what extent learner-centered instruction promotes better learning outcomes.

Kettering College is a suburban campus in southwest Ohio owned by the Kettering Medical Center and chartered by the Seventh-day Adventist Church. Drawing from current theories of education, the Statement of Beliefs for the Division of Nursing at Kettering College acknowledges the value drawn from principles supporting learner-centered education (Kettering College Academic Bulletin, 2012-2014). Because the nursing program espouses learner-centered practices, it is important to examine to what extent faculty who teach nursing at Kettering College are implementing learner-centered practices and to examine the potential connection to nursing board pass rates. Nursing programs are challenged to produce more graduates who can pass the NCLEX-RN® on the first attempt to enter into practice. This study presents the national scores for the NCLEX-RN® examination and compares those scores to the pass rate of Kettering College first time NCLEX-RN® test takers. Teachers are often considered the primary facilitators of student success, as reflected in test scores and course grades and play an important role in maximizing student learning (Williams & Cavillo, 2002). Embracing learner-centered practices that promote learner-centered teaching can help nursing educators guide students in becoming independent, autonomous learners and gain entry into the health care work environment.

Schaefer and Zygmont (2003) contended learner-centered teaching improved student perceived learning outcomes and promoted improved critical thinking skills. This is a significant finding and indicates traditional teacher-centered methods may not be working. The National League for Nursing (2008) strongly advocates learner-centered
education. Therefore, a closer examination of teaching practices is warranted not only to assure learner-centered education is taking place in nursing classrooms, but to also gauge its impact on licensure passage rates.

**Purpose of the Study**

The purpose of this study is to identify the teaching styles of nursing faculty at Kettering College as teacher-centered or learner-centered using the Principles of Adult Learning Scale (PALS) and the seven factors within PALS which determine specific teaching practices (Conti, 1990). The Principles of Adult Learning Scale is a 44 item survey using a Likert scale that determines a faculty member’s style as teacher-centered or learner-centered. The researcher surveyed students to determine to what extent they perceived their instructors used learner-centered modes and examined course syllabi to determine the extent nursing faculty designed courses in alignment with learner-centered principles. The researcher also examined differences between national NCLEX-RN® passage rates and those of Kettering College.

**Theoretical Basis for the Study**

In response to the challenge of improving undergraduate education, Chickering and Gamson (1987) asserted that providing good teaching and learning should be the hallmark of every institution of higher learning. According to these authors, good practice in undergraduate education encourages contact between students and faculty which develops reciprocity and cooperation among students. Active learning techniques are utilized with the provision of prompt feedback. Time on task is emphasized and high expectations are continually communicated. Respecting diverse talents and various ways of learning are embraced. Chickering and Gamson contended that teachers and students
hold the main responsibility for improving education and require support provided by college and university leaders in order to embrace high quality practices in higher education.

As a result of paradigm shifts, higher education has witnessed the rise of classroom changes regarding student learning and classroom instructional delivery. Terminology such as “learning communities,” “lifelong learning,” and “learner-centered education” have highlighted the professional teaching literature (Gabelnik, MacGregor, Matthews, & Smith, 1990; Lenning & Ebbers, 1999). Learner-centered teaching is more likely to promote student achievement in the areas of intellectual development, critical thinking skills, and interpersonal skills. However, faculty may continue to practice an instructor-centered teaching style that delivers information-laden lectures covering course content rather than engaging students in the process of learning how to learn (Brookfield, 1995; Gardiner, 1994; Stage et al., 1998). Another challenge exists when faculty are not always compensated and rewarded for positive change and innovation. Thus, many faculty perceive themselves as performing well and do not recognize a need to change their teaching practices. Consequently, many faculty do not reflect or think critically about their teaching style, nor incorporate new innovations in teaching that could result in improved learning environments (Gardiner, 1994; Weimer, 2002).

In his book, *The Learning Paradigm College*, John Tagg (2003) challenged current practices in higher education and asserted that higher education has not reached its potential to produce student learning. According to Tagg, the learning paradigm college “should support students in pursuing their own goals, [...] require frequent student performance [...] require frequent and ongoing feedback [...] assure a long time horizon
for learning [...] provide for stable communities of practice” (p. 124). Tagg acknowledged the challenge of transforming higher education as a difficult task. “But we never embark upon important tasks because they are easy...but because it changes the world for the better. We can view the inertia of current practice as an irresistible barrier that ends our work or the clarifying challenge that guides us as we advance that work” (p. 341).

McCombs and Whisler (1997) described learner-centered education as the perspective that combines a focus on the individual learner with a concentration on best practices for learning. The authors further identified precepts of a learner-centered model to include the identification of learners as unique. These unique differences must be recognized for student learning and self-development to take place.

Parker Palmer (1998) supported tenets of learner-centered education in his book *The Courage to Teach*. Parker stated:

Good teaching comes in myriad forms, but good teachers share one trait: they are truly present in the classroom, deeply engaged with their students and their subject. They are able to weave a complex web of connections among themselves, their subjects, and their students, so that students can learn to weave a world for themselves. The connections made by good teachers are held not in their methods but in their hearts--the place where intellect and emotion and spirit and will converge in the human self. (p. 11)

Weimer (2002) in *Learner-Centered Teaching* discussed the five necessary changes in instructional practices that must occur in order to be learner-centered. Learner-centered practices focus on the balance of power, the function of content, the
role of the teacher, the responsibility for learning, and the evaluation purpose and process (Weimer). Weimer stated, “If the goal of teaching is to promote learning, then the role the teacher takes to accomplish that goal changes considerably” (p. 14). Friere (1993) asserted that the focus of learning should shift from the teacher to the student. Not only does this modification change the locus of control in the classroom, it also empowers students to take more responsibility for their education.

O’Banion (1997) focused on six principles exemplified by learning colleges: learner change, learner engagement and responsibility, options for learning, collaborative learning activities, roles of learning facilitators defined by the learners, and demonstration of measurable learner outcomes. According to O’Banion, considerable benefit will accrue to institutions that are able to successfully navigate these changes.

In addition to institutions benefitting from becoming a learning college, Fink (2003) emphasized the importance for institutions to not only “produce learning” but to produce significant learning. Fink further explained as institutions attempt to formulate a vision of what would comprise good educational goals in the face of diversity and change, it is important to be mindful to improve the quality of individual lives, prepare people to contribute to the communities of which they are a part, and to prepare people for the world of work (2003). Attempts for educational reform are intensifying with institutions focusing their efforts on a closer examination of assessing student learning. As a result, many scholars have identified learner-centered education as a means to create high standards of learning, motivation, and achievement for not only students, but for teachers as well (Comer, 1993; Gardner, 1995, McCombs, 1993, Weimer, 2002).
Research Questions

1. (a) To what extent do Kettering College nursing faculty use learner-centered modes for teaching adults?
   (b) To what extent do nursing faculty practice learner-centered modes in the seven factors within the PALS instrument? The seven factors include learner-centered activities, personalizing instruction, relating to experience, assessing student needs, climate building, participation in the learning process, and flexibility for personal development (Conti, 1990).
   (c) To what extent have nursing faculty designed their courses in alignment with learner-centered modes?

2. To what extent do students believe their instructors use learner-centered modes?

3. What is the difference between faculty self-reported use of learner-centered modes and student perceptions of their use?

4. What is the difference between national NCLEX-RN® pass rates for licensure and Kettering College NCLEX-RN® pass rates?

Significance of the Study

According to Astuto and Clark (1995), those who stand to benefit from a learner-centered environment include students, teachers, and administrators because they are concerned about the quality and effectiveness of their work. These authors posited that a learner-centered environment for students promotes self-directed work teams that can benefit society. According to Weimer (2002), when teachers and institutions function from a learner-centered perspective, student achievement is enhanced. It is critical that
educators are cognizant of their teaching style and promote active inquiry regarding more effective teaching methods. Learner-centered education has the potential to improve board passage rates. As a result, educators can reach a desired goal of students meeting rigorous academic and licensure standards which further benefit the institution and the community.

While many nursing faculty are genuinely interested in utilizing best practices as espoused by Kettering College, there seems to be a disconnect in promoting the incorporation of new innovations into their classrooms. Hansen and Stephens (2000) maintained that teaching models used in the past remain a strong influence in today’s classroom. Faculty lacking formal training in new teaching practices tend to teach the way they were taught overlooking the opportunity to integrate new learner-centered instructional delivery methods into their classes. In spite of knowing about innovative alternatives, lectures remain a convenient and common way to conduct classes (Hansen & Stephens).

Exploring best practices in nursing education is important in improving patient care and promoting the discovery of more effective teaching paradigms in educating students (Diekelmann and Lampe, 2004). This study is significant as it explores theories of teaching and learning in higher education in order to inform and expand current trends in nursing education. It is important that nurse educators recognize how their teaching styles have developed over time. The results of this study will help nurse educators compare their teaching style and practices with learner-centered strategies and help promote active inquiry regarding more effective teaching methodologies common to learner-centered education.
Assumptions

The following assumptions have been made by McCombs and Whisler (1997) regarding learner-centered education: (a) Learners are distinct and unique; (b) Learners unique differences must be considered if learners are to be provided with the necessary tools for learning and self-development; (c) Learning is a constructive process which occurs best when material is relevant and meaningful to the student, and the students create their own meaning from prior experience; (d) Learning occurs best in a positive setting; (e) Learning is basically a natural process.

The researcher has made the following assumptions regarding this study: (a) Faculty and student responses to the survey instrument reflect their honest evaluation, (b) Faculty hold the same perceptions of learner-centered education for various courses they might teach, (c) Not all faculty are interested in adopting and practicing learner-centered education in their classes due to lack of information and lack of time to commit to a new pedagogy, (d) Learner-centered education is considered a valuable model the institution is interested in supporting, and (e) Learner-centered modes of instruction may have a positive effect on KCMA nursing licensure passage rates.

Scope and Limitations of the Study

The setting for this study is Kettering College, a small, private, faith-based institution located in the Midwest. Kettering College focuses on teaching and service as opposed to research. The results from this study may be generalized to private faith-based institutions only or to similar nursing programs.

The study was limited by the number of participants who chose to complete the survey. This study was also limited to the nursing faculty and students at Kettering
Data collection was achieved through the use of faculty and student survey instruments, accumulated nursing licensure passage rates kept by the college, and a syllabus rubric. The researcher assumed that responses accurately reflected faculty and student perceptions of actual practice.

**Definition of Terms**

*Constructivism* - The view that emphasizes the active role of the learner in building understanding and making sense of information (Woolfolk, 2004).

*Learner-centered* - Strategies that support diverse learner needs and perspectives that allow critical reflection, and opportunities for educators to co-create practices with their students that enhance learning, motivation, and achievement (Darling-Hammond, 1996).

*Full time faculty* - Persons whose job descriptions include responsibility for facilitating the learning of students and who have been appointed to academic rank (Kettering College Faculty-Staff Handbook, 2009).

*Teacher-centered* – In the teacher-centered model, the role of the teacher is to transfer course content to students and ensure they have the facts and skills they need (Guskin, 1994).

*Learner-centered activities* – Reflects the extent to which an instructor supports a more collaborative mode by practicing behaviors that encourage students to take responsibility for their own learning. The classroom focus is on the learner (Conti, 1985).

*Personalizing instruction* – Personalizing instruction reflects the extent to which instructors employ various strategies that personalize learning to meet the unique needs
of each student. Cooperation rather than competition is emphasized (Conti, 1985).

**Climate building** - Refers to whether teachers set a friendly and favorable environment in the classroom. Dialogue and interaction with other students is encouraged. Taking risks is also encouraged and errors are viewed as part of the learning process (Conti, 1985).

**Participation in the learning process** - Reflects the degree to which an instructor relies on students to identify the problems they wish to solve and permits students to participate in making decisions regarding the topics that will be covered in class (Conti, 1985).

**Flexibility for personal development** – Reflects an instructor’s role as a facilitator rather than a provider of knowledge. Flexibility is maintained by adjusting the classroom environment and curricular content to meet the needs of the student (Conti, 1985).

**Teaching style** – Teaching style refers to the distinct qualities displayed by a teacher that are persistent from situation to situation regardless of the content (Conti, 1990).

**Summary**

The main purpose of this study was to assess the teaching style of nursing faculty at Kettering College as more teacher or more learner-centered, and the results of this study may be used to promote educational change regarding learner-centered principles as they relate to licensure passage rates. Learner-centered teaching has the potential to improve nursing student critical thinking and help students learn how to make appropriate patient care decisions based on assessment and planning, credible evidence, critical thinking, and clinical reasoning (Candela et al., 2006) as well as affecting their scores on
nursing licensure exams. In addition, data obtained may provide a catalyst for faculty development and institutional change to increase the practice of learner-centered education.

**Organization of the Study**

This study was organized into five chapters. Chapter I provides an introduction to the problem, statement of the problem, purpose of the study, theoretical basis for the study, justification, research questions, significance of the study, assumptions, scope and limitations of the study, and definition of terms.

A review of the literature and historical perspectives of learner-centered education and current research is presented in Chapter II.

Chapter III describes design of the study, sample participants, the survey instrument, methodology, data collection procedures, and treatment of the data.

Chapter IV provides a presentation of study results.

Chapter V provides a summary of the study, discussion of the findings, future implications, and recommendations for future research.
CHAPTER II
REVIEW OF RELATED RESEARCH AND LITERATURE

Historical Overview

According to Henson (2003), learner-centered education can trace its roots to the fifth and fourth centuries B.C. with Confucius and Socrates who were the first educators to place emphasis on the learner. Later, Aristotle’s philosophy of inductive reasoning and learning from real world experiences dominated for the next two millennia.

Counter to Aristotle’s methods, Francis Bacon (1561-1626) introduced the scientific method as a way of thinking and learning. Believing Aristotle’s methods to be flawed, Bacon contended that the use of problem solving should not begin with uncontested assumptions, but rather with inductive thinking that considered all possibilities (Henson, 2003).

In the 1600s, English educator John Locke introduced the concept of experiential education promoting learning through one’s experience. Two hundred years later, European educators Pestalozzi, Hegel, Herbart, and Froebel promoted learner-centered education (Palmer, 2001). Johann Pestalozzi opened a school with a learner-centered curriculum. He believed in a holistic approach in educating the whole child by incorporating family-like nurturing with the experience of learning by doing. In
Germany, Friedrich Froebel used learner-centered, experience-based ideas to develop the world’s first kindergarten.

From a historical perspective in America, Brubacher and Rudy (1997) described the beginnings of learner-centered education in America. Pioneers in learner-centered education were shifting practices that once focused on the teacher, to a model that concentrated on the needs of the student. According to Henson (2003), one such pioneer, Colonel Francis Parker, returned to his home state of New Hampshire following the Civil War where he accepted a principalship in Manchester. Later in 1868, unhappy with the rote memorization occurring in schools, Parker accepted a principalship in Dayton, Ohio, where he headed Dayton’s first normal school, providing lessons to help teachers learn how to use learner-centered methods. At this time, however, Parker found the local educators to be rigid in clinging to their older methods of teaching which incorporated isolated drill and rote learning. Parker believed in teaching students to think for themselves in order to become independent people (Campbell, 1967).

In 1872 Parker traveled to Berlin to study those who a century earlier had implemented learner-centered education (Campbell, 1967). There he studied the works of Pestalozzi, Hegel, Herbart, and Froebel. In 1875 Parker returned to Quincy, Massachusetts, in the role of superintendent where he provided teacher education in learner-centered techniques. These replaced rote memorization and drill with active inquiry in the seven Quincy schools (Campbell, 1967). Parker was asked to bring his “Quincy System” to Boston schools in 1880 and later to Chicago schools in 1882. In 1901 Parker served as Dean of the School of Education at the University of Chicago. At this time Parker’s contemporary, John Dewey served at the same institution as head of
the department of Philosophy, Psychology, and Pedagogy. Parker and Dewey were instrumental in bringing the inception of the learner-centered paradigm into American schools.

As a learner-centered practitioner, Dewey (1938) contended that teachers must continually evaluate their teaching and its effect on students. Dewey believed all significant learning was grounded in experience. Dewey’s view of learner-centered education supported the premise that each learning experience should leave each student motivated. Furthermore, the problem-solving should lead the learner to further inquiry.

Continuing evidence of learner-centered education was noted prior to World War II with the launching of The Eight Year Study (1932-1940) sponsored by the Progressive Education Association (Aikin, 1942). This study demonstrated that a curriculum designed to meet the needs and interests of students was just as effective, if not better, than the traditional curriculum in preparing students for entry into college. According to Aikin, results from the Eight Year Study demonstrated advantages of learner-centered education over traditional teacher-centered education as shown by the students’ ability in achieving higher grades, attaining more academic honors, and developing superior intellectual curiosity. Further, Aikin noted while students exposed to the learner-centered curriculum developed superior drive and leadership skills, they also developed a higher order of objectivity and were more aware of world events. While it was noted that investigators supported a progressive curriculum, pedagogical practices did not change.

The progressive educational philosophy of John Dewey fostered an appreciation of learner-centered education and further asserted that mindful learning is best
accomplished by incorporating practical tasks, collaboration, and application of learned information (Dewey, 1913; 1916; 1938).

Swiss psychologist Jean Piaget (1970) posited that the individual learner’s process is constantly undergoing change as the individual constantly strives to make sense of the world through biological maturation, activity, social experiences, and equilibration. Later, with roots in constructivism, twentieth century Russian sociologist Lev Vygotsky (1978) explained how new learning is built upon the building blocks of what was previously learned. These early theories are important to learner-centered educators because by understanding ways in which students learn, innovative teaching can occur to promote productive learning environments (Woolfolk, 2004).

During the past 30 years significant changes occurred that impacted higher education in the areas of teaching and learning. These changes helped shape attitudes, created opportunities, and promoted shifts in policy and practice (Dezure, 2000). For example, the introduction of publications such as Change and the Chronicle of Higher Education provided a venue for discussion of issues and created a common discourse about higher education while introducing new developments in teaching and learning. Focusing on the student, the new millennium has also seen proliferation of living-learning communities, residential colleges, and learning communities.

According to Dezure (2000), current market trends demand graduates with skills in problem solving, communication, teamwork, cultural sensitivity and ethical decision making. Academic focus has been placed on new conceptions of knowledge, specifically in regard to the social construction of knowledge rooted in active learning. As a result, faculty are shifting paradigms from teaching to learning. The literature has
witnessed a proliferation of topics on college teaching and learning, faculty development, and avenues that support the scholarship of teaching. Many of these significant changes may help explain how many of the learner-centered methods advocated 30 years ago are now taking root and coming to fruition in academic environments today (Dezure).

The interest in learning versus teaching is not a new one. Roots of this discussion are seen in the progressive education movement of the early twentieth century (Pulliam & Van Patten, 1999) and the work of Carl Rogers (1969) in the 1960s. Gardner (1999) summarized the differences in learners when he wrote, “human minds do not all work in the same way, and human beings do not have the same cognitive strengths and weaknesses” (p. 166). This concentration on the learner and the learning process is the center of a paradigm shift facing educators today (Reynolds, 2000).

According to Ertmer and Newby (1993), three schools of thought play a role in learner-centered concepts: behavioral, cognitive, and constructivist. Many features of learner-centered instruction focus on constructivism. Ertmer and Newby contended that the three schools of thought can be used in categorizing learning. Behaviorist concepts employ an appropriate response following a specific stimulus and can be utilized to teach facts. Cognitive strategies concentrate on making knowledge meaningful and helping the learner relate new information to existing knowledge. Constructivist theories stress the importance of instruction going from a passive transfer of facts to an active application of ideas in problem-solving.

**Constructivism.** Constructivism is a learner-centered educational theory that emphasizes the active role of the learner in building understanding and making meaning of information from past experiences (Woolfolk, 2004). The major premises of
constructivism posits that an individual learner must actively "build" knowledge and skills (Bruner, 1990) and that information exists within these constructs rather than in the external environment. Learner-centered approaches are consistent with constructivism in the value placed on the learner’s point of view and on the development of meaningful constructions of learning. Constructivist approaches place a greater emphasis on problem-solving rather than memorizing procedures and using them to derive the correct answers (Slavin, 1997). Constructivism has two sub-groups which focus on psychological and social aspects of learning (Palinscar, 1998; Phillips, 1997).

Bruner (1990) and Piaget (1972b) are considered the chief theorists among the psychological constructivists, while Vygotsky (1978) is the major theorist among social constructivists. From a learner-centered perspective, Piaget (1972a) focused his attention on the learner as an individual. A Piaget inspired curricula emphasizes a learner-centered educational philosophy and active discovery in schools. According to Piaget (1972a), instruction should be individualized for the student as much as possible, and teachers should play the role of facilitator, guiding and stimulating student learning. In his book *To Understand is to Invent*, Piaget (1972b) expressed the basic principle of active learning as follows: "to understand is to discover, or reconstruct by rediscovery, and such conditions must be complied with if in the future individuals are to be formed who are capable of production and creativity and not simply repetition" (p. 20).

From a social constructivist perspective, Russian psychologist and sociologist Lev Vygotsky (1978) studied children's interactions. Vygotsky believed that social interaction, cultural tools, and activity shaped individual development and learning. He noted when students worked in small groups to solve problems, and by discussing
problems, the learners were able to talk each other through to reaching solutions. In other words, through the social interaction of helping other group members, students solved problems more efficiently when compared to working alone. This learner-centered system was a sharp contrast to traditional teacher-centered methods because it focused on an active problem-centered approach to learning and emphasized cooperation over competition.

According to Stage, Muller, Kinzie, and Simmons (1998), constructivism’s emphasis on the active role of the student in the construction of their own learning is consonant with learner-centered education. This model moves the locus of the learning activity from the teacher and toward the student, and has influenced many of the current reforms in education where the teacher helps students discover meaning. In these classrooms, the instructor’s role is characterized as guiding students’ inquiry and stimulating reflection (Stage et al., 1998). Although this approach may seem relatively new, educators have long applied the concepts of constructivism, but they have done so informally, without the guidance of an official theory of instruction (von Glaserfeld, 1995).

This historical background demonstrates that forms of learner-centered education have been in existence for over 5000 years and continue to evolve. Because of its rich history, learner-centered education is present in many of today’s theoretical frameworks of education.

**Teacher-centered Education**

According to McDonald (2002), the transmission of knowledge is the hallmark of a teacher-centered approach. McDonald further maintained that the work of teachers is
dependent upon the abilities, skills, and efforts of their students, and while student achievement is a major tenet of a teacher-centered curriculum, teachers are often driven to meet accountability standards and often must sacrifice the needs of students to ensure exposure to those standards. McDonald contended that teachers in a teacher-centered environment focus more on content as opposed to helping students learn how to process information.

In teacher-centered education, Weimer (2002) asserted that faculty control course content, the learning process, and the conditions for learning. This leads to dependent, unmotivated students. According to Huba and Freed (2000), within the teacher-centered paradigm knowledge is transmitted from teacher to passive students, and teaching and assessing are separate. An emphasis is placed on right answers and the learning culture is individualistic and competitive. The role of the professor is to be the primary information giver, and learning is assessed through objectively scored tests. The classroom culture is considered competitive and individualistic, while only the students are viewed as learners.

**Learner-centered Education**

Learner-centered education is an educational model that places the student in an active role within the learning process (Pascarella & Terenzini, 2005; Weimer, 2002). When educators utilize a learner-centered approach, the focus shifts from instructors merely delivering content, to actively engaging students in creating their own learning (Barr & Tagg, 1995). Being learner-centered means promoting a collaborative, supportive classroom environment, not a competitive one (McCombs & Whisler, 1997).
According to McCombs (2001), learner-centeredness is a construct and philosophy built on the American Psychological Association’s 14 learner-centered psychological principles (APA, 1993). It is a perspective which combines a focus on individual learner’s uniqueness and needs with a focus on learning. This coupling informs and guides educational decision-making.

Darling-Hammond (1996) and Sparks and Hirsch (1997) described “learner-centered” in terms of learning new beliefs and new visions of practice that focus on the distinct needs of students and teachers as learners. The authors’ theoretical premise incorporates learning which is built upon strategies supporting the diverse needs of the learner with the use of critical reflection.

Within the learner-centered classroom, professors and students learn together through stimulating thought-provoking experiences (Chickering & Gamson, 1987). As institutions of higher education seek best practices for learning, many educators are leaving teacher-centered paradigms as they embrace a learner-centered philosophy (Weimer, 2002). As today’s educators hold the highest responsibility for introducing and assessing best methodologies in learning environments, a closer examination of learner-centered education is warranted by faculty for the purpose of meeting the diverse needs of students.

Milambiling (2001) broadened the definition of learner-centered, distinguishing learner-centered education as context-sensitive. Milambiling posited that the culture of the learning context is as paramount to learning as the content and methods used. The author supported curriculum that speaks to the culture of the learner. The author contended that teacher educators should be mindful of the various backgrounds,
concerns, and aspirations of their students and create curricula that address these aspects. By doing this, teachers become strong student advocates and learners themselves, while enriching their own knowledge base and infusing their instructional practices with actions that speak louder than any words.

**Theoretical Frameworks**

McCombs and Whisler (1997) described learner-centered education as a model that focuses the learner’s experiences, perspectives, backgrounds, talents, interests, capacities, and needs. The major focus is placed on learning, the best available knowledge about teaching and learning, and how it occurs. They asserted that the evidence is prevalent that motivation, learning, and achievement are enhanced when learner-centered principles are practiced which address the personal domain. McCombs and Whisler contended that learners are distinct and unique, and the learner’s emotional state of mind, learning rate, learning style and stage of development are some of the attributes that must be considered in order to provide him or her with opportunities for learning and self-development. Learning is a constructive process, occurring best in a positive environment and is a fundamentally natural process (McCombs & Whisler).

According to Chickering and Gamson (1987), good practices in undergraduate education encourage student-faculty contact, encourage cooperation among students, encourage active learning, give prompt feedback, emphasize time on task, communicate high expectations, and respect diverse talents and ways of learning. Chickering and Gamson posited that while each practice has the ability to stand alone, collectively they form six powerful forces: activity, expectation, cooperation, interaction, diversity, and responsibility. In addition, the authors contended that teachers and students hold a shared
responsibility for improving undergraduate education, and support is needed from administrators and faculty leaders for funding and creating policies consistent with the principles of good practice.

As a result of heightened attention devoted to education, educators are motivated to study aspects that can positively influence student learning (Brown, 2003; McCombs, 2003). While classroom management, student motivation, grouping arrangements, scheduling configurations, teaching techniques and the use of technology in teaching have been well researched, educators realize that promoting student success would be the result of creating learner-centered conditions in their classrooms. These needs motivated the American Psychological Association (APA, 1993) to create and publish Learner-centered Psychological Principles: Guidelines for School Redesign and Reform. One category within the Learner-centered Psychological Principles focuses on cognitive and metacognitive factors that deal with the nature and goals of the learning process. Knowledge construction and strategic thinking are both identified as a context of learning.

The Learner-centered Psychological Principles (APA, 1993) also focus on motivational and emotional influences on learning, intrinsic motivation to learn, and the effects of motivation on effort. The importance of the development of social factors and their influence on learning are addressed along with respecting individual differences in learning. Finally, standards and assessment are considered. As the demand for ensuring student success continues, educators continue to employ several different approaches to teaching and learning (Brown, 2003). These approaches may incorporate new methods, techniques, and strategies in learning facilitation but may also revisit basic learning
principles. The Learner-centered Psychological Principles are deeply rooted in basic pedagogy, and learner-centered classrooms that incorporate these standards have the potential to greatly impact students’ success in learning (Brown, 2003).

Aligning with the Learner-centered Psychological Principles, a joint report by the American Association for Higher Education, the American College Personnel Association, and the National Association of Student Personnel Administrators (1998) recognized that learner-centered education is based on making and maintaining connections that take place in the context of a compelling situation. The active search for meaning is developmental involving the whole person who is tied to others as social beings. Strongly affected by the educational climate, frequent feedback is required along with opportunities to use what was learned. Learning can take place informally and is grounded in the experience of students who have the ability to monitor their own learning.

Focusing on learner-centered teaching, Weimer (2002) introduced five key changes in practice that help create a learner-centered classroom. According to Weimer, a paradigm shift must occur where the balance of power changes, where formal power is relinquished by the teacher and inherited by the student. Weimer also challenged the notion of increasing content to courses and debunked the concept of “more is better.” The author did not support content free courses, but contended learner-centered course objectives allow a re-examination of content. Also changing is the role of the teacher, allowing students to take the lead in their learning with the responsibility for learning largely shifting to the students. Lastly, the role of assessment is changed in a learner-
centered environment to incorporate more formative feedback mechanisms which specifically focus on learning, rather than grades.

**Previous Studies on Learner-centered Education**

There are extensive works on learner-centered practices by McCombs and her colleagues using the Assessment of Learner-Centered Practices (ALCP) studies (McCombs & Lauer, 1997; McCombs & Pierce, 1999, McCombs & Quiat, 2000). From their research, data on more than 20,000 students and their teachers from kindergarten to graduate school was examined using the ALCP surveys. These studies noted teacher beliefs and discrepancies between teacher and student perceptions regarding classroom practices. These data allowed teachers to reflect on potential change practices in their classrooms and helped them identify personal needs. Concerning the classroom, the studies concluded that the best predictor of student motivation and achievement, at all age levels, was a common domain of practice that creates positive connections between students and teachers and a positive environment for learning.

In a quantitative study using a benchmarking research methodology, Mancuso (2001) used surveys and site visits to identify best practices in adult learner-centered institutions. The benchmarking group was comprised of experts from U.S. and Canadian higher education institutions, representatives from the Council for Adult and Experiential learning (CAEL), and benchmarking specialists from the American Productivity and Quality Center (APQC). Sixty-three higher education institutions in North America and Europe nominated as potential best practice institutions were mailed a screening survey comprised of 33 items. Thirty-three institutions responded to the survey and six best practice institutions were identified. The major finding from this study identified that
adult learner-centered institutions have a culture that incorporates flexibility, individualism, and adult centered learning which drives institutional practice.

McCombs and Pierce (1999) created the Assessment of Learner-centered Practices (ALCP) for Higher Education. The ALCP is a survey for self-assessment and professional development. With this instrument, instructors utilized surveys describing their beliefs, practices, self-efficacy, and reflective self-awareness. The study obtained student perceptions through the use of a survey as they reported on their own motivation for the class assessed.

Weinberger and McCombs (2002) conducted a quantitative study gathering data from 1,707 students and 70 faculty from two universities in the United States using the Assessment of Learner-centered Practices (ALCP). The researchers discovered that learner-centered beliefs of teachers were positively correlated to student perceptions of classroom practices. Specifically, student motivation and perception of classroom practices were positively correlated with their achievement. The study determined that if students perceive their instructors as learner-centered, they are more motivated to learn, and as a result, achieve more in class.

Another quantitative study on learner-centered education focused on practices in teacher preparation programs (Pierce, Kalkman, & Dean, 2002). This study focused on students’ perceptions of their professors’ practices to see if a relationship existed with the students’ own beliefs and practices as student teachers. Student teachers rated practices of their higher education instructors, reported on their own efficacy as students, and completed the ALCP for teachers of grades four through eight. The researchers identified
a significant correlation with students’ perceptions of professor practices and student self-efficacy for their performance in education classes.

In a quantitative study on learning styles, August, Hurtato, Wimsatt, and Dey (2002) examined attitudes, beliefs, and experiences of faculty and students regarding the use of innovative pedagogies. The study focused on active learning, collaborative/cooperative learning, and the support of active student participation in learning. Data were derived from surveys from faculty (n=136) and students (n=676). This investigation was conducted through the National Center for Postsecondary Improvement at seven institutions during the winter and fall of 2000. Results from the study demonstrated both faculty and student groups agree on the value and desirability of active engagement in learning, collaboration with student peers, and productive student/faculty relationships. However, the authors discovered statistically significant differences between how often these practices were actually integrated into the classroom setting.

In a qualitative study focusing on innovative learner-centered pedagogies, Vega and Tayler (2005) identified learner-centered techniques from various disciplines and educational levels. Survey participants were comprised of 30 teachers in public schools, university-level educators in the arts and sciences, and teacher education faculty who were past participants in Leadership Associates, a program that emphasized the learner-centered classroom environment. Fourteen respondents taught at the university level and 16 taught in the K-12 setting. The respondents provided examples and critiques of peer evaluation effectiveness, small group learning, and community of inquiry. Major findings from this study revealed high levels of transferability across disciplines and
educational levels for the learner-centered classroom. For example, one aspect of the study noted that an activity based on readings originally designed for an elementary class could easily transfer to a college-level science class where students could read and discuss a research article.

A qualitative study by Ovando (2001) explored teachers’ perceptions regarding a learner-centered teacher evaluation system. Questions guiding the study included support available as a result of teacher evaluation. The study also included the potential benefits and pitfalls of a learner-centered teacher evaluation system to enhance professional growth. The researcher analyzed teacher’s written responses to open-ended questions and used emerging themes to categorize responses. Findings from this study suggested teachers believe a learner-centered teacher evaluation provides opportunities for professional growth, feedback, and learner-centered dialogue. The author contended that further studies would be helpful in hearing teachers’ voices associated with evaluations and development to expand understanding of emerging teacher evaluation formats aimed at student success.

A qualitative study by Bollinger (2004) posited that the use of constructivist approaches in educational settings contribute to active learning and knowledge transfer for students. The study provided an overview of constructivist methodologies utilized in a graduate-level media production course at a Midwestern university. Bollinger examined perceptions and student learning in a setting where students and content were the central aspects of the learning experience. The findings revealed active learner-centered approaches in which students have the opportunity to interact with peers and instructors
and provide an opportunity for discussion and that reflection on learning experiences contribute to student learning.

Paris and Combs (2000) conducted a qualitative study on the meaning of learner-centeredness from the perspectives of elementary, secondary, and postsecondary teachers. Data sources included teacher interviews and a review of the literature on learner-centeredness. Respondents discussed what learner-centeredness meant to them and their teaching. From the data analysis a descriptive definition of learner-centeredness emerged comprising five elements where the teacher: (a) focuses on the learner, (b) guides and facilitates learning, (c) promotes active learner engagement, (d) promotes learning through active decision making, and (e) is a reflective life-long learner.

**Learner-centered Education in Nursing**

**Historical overview of nursing education.** The first organization for nursing in the United States, The American Society of Superintendents of Training Schools for Nurses was formed for in 1893 for “the establishment and maintenance of a universal standard of training” for nursing (National League for Nursing, n.d.). In 1912 this organization was renamed the National League for Nursing Education (NLNE) and later in 1917 released the first Standard Curriculum for Schools of Nursing. The National League for Nursing Education, the National Organization for Public Health Nursing, and Association for Collegiate Schools of Nursing combined in 1952 to establish the National League for Nursing (NLN). The organization is responsible for accrediting nursing education programs. In 1992 the National League for Nursing led the movement that promoted Nursing's Agenda for Health Care Reform. In 1997 the National League for Nursing Accrediting Commission (NLNAC) was established and held the responsibility
for all accreditng activities. It is at this point that the NLNAC was accountable to the NLN directly through the NLN's Board of Governors. The Board of Governors reiterated its mission in 1998 “to promote quality nursing education to prepare the workforce to meet the needs of diverse populations in an ever changing health care environment.” Currently the NLN plays the role of bridging the gap between nursing education and practice.

**Learner-centered nursing education studies.** Current literature exists describing the precepts and benefits of learner-centered nursing education (Ben-Zur, Yagil, & Spitzer 1999; Ironside, 2003; Schmitz, 1994). The following studies provide a review of the literature for learner-centered nursing education. The following studies are inconclusive regarding learner-centered nursing education. Not all nursing faculty are practicing its precepts. Barriers and constraints to its use are identified in studies and additional research is warranted to further investigate this modality.

Using a quasi-experimental design, Parfitt (1989) sought to determine whether creative learner-centered teaching methods would be effective when included in a nursing program. Four introductory nursing courses with twenty students in each class at two schools were used as the sample. Two groups served as control groups and two groups served as the experimental groups. For this study, fact learning, intervention, and skill learning were identified for areas of study. Participants in the experimental group were provided work sheets and facilities for self-learning, while those in the control group maintained a traditional lecture/demonstration format for learning. All four groups were tested using multiple choice objective tests, essays, problem solving and nursing intervention exercises and practical assessments. Results showed the experimental
groups did no better in the multiple choice objective tests or in the essays than the control groups. However, the experimental groups did perform significantly better in problem identification and planning for the nursing intervention exercise. No difference existed between groups in skill performance but the experimental groups were significantly better able to apply theory compared to the control groups.

Using a mixed methods design, Schaefer and Zygmont (2003) examined the teaching style of BSN nursing faculty. The authors used a descriptive correlation design to achieve the study goals of describing the predominant teaching style of nursing faculty and compared faculty teaching style to their stated philosophies of teaching and learning. Surveys were completed by 187 nursing faculty for a return rate of 37.4%. The mean age of participants was 50, 95% of the faculty were female, and the mean for teaching experience was 14 years. The Principles of Adult Learning Scale (PALS) was used to measure the teaching style of faculty that is teacher or learner-centered. The authors developed a demographic questionnaire to determine faculty profiles and participants were asked to describe their philosophy of teaching and learning and the extent they believe their teaching is consistent with their philosophy of teaching. Schaefer and Zygmont examined course syllabi for evidence of teacher or learner-centered teaching style. Findings from the PALS survey revealed a predominantly teacher-centered approach to instruction. Themes emerging from teaching philosophy statements demonstrated a preference for the teacher-centered style. Barriers to using a learner-centered approach included academic structure, system problems, and an outcome versus process orientation.
A quantitative study by Jeffries, Rew, and Cramer (2002) compared an interactive, student centered methodology with traditional lectures and demonstrations. A repeated measures, experimental design was augmented using qualitative and questionnaire data. The researchers recruited students ranging in age from 19 to 51 years enrolled in junior and senior years of a baccalaureate nursing program for the study. In comparing the student-centered with traditional methodology in basic nursing skills training no significant differences existed between the groups’ pretest and posttest cognitive gains. However, results indicated significant differences (p = 0.01) by group in student satisfaction. In addition, the results showed the interactive, student centered group was more satisfied with their learning methodology than the traditional group.

In a qualitative study by Johnson-Farmer and Frenn (2009) 17 nursing instructors were asked “What do you do to bring nursing to life with your students” (p. 269)? The study utilized line by line coding and the constant comparative method to discover five emerging themes of engagement, relevance, student centeredness, facilitation of learning, and dynamic process of becoming a nurse educator. The authors posited that becoming an excellent teacher involved transformation from instiller to facilitator.

In a qualitative study by Greer, Pokorny, Clay, Brown and Steele (2010), the authors examined the learner-centered teaching characteristics of nursing faculty. The primary research question was: “What learner-centered teaching characteristics are reflected in nurse educators who self-report usage of contemporary pedagogy at least 50% of the time?” Emerging themes fell into the categories of power, role of the teacher, learner responsibility, and philosophy of evaluation stated in Weimer’s (2002) conceptual framework for learner-centered teaching. The original study was funded by the National
League for Nursing and a respondent sample of 956 was obtained from a pool of 10,467 nurse educator members of Sigma Theta Tau International, an honor society for nursing. The online questionnaire consisted of demographics, pedagogical approach survey, and open-ended questions. The study sample represented nurse educators from North America, Europe, and Asia. Results indicated that learner-centered power surfaced. Teachers valued students, and students were held accountable for assessment. The learner-centered role of the teacher included enthusiasm, belief in students, expertise, partnership, adaptability, creativity, and positive self-perception. Respondents perceived learner responsibility as engaged, self-directed partners who gained insight through peer interaction. Regarding philosophy of evaluation, respondents voiced the need for students to have a responsibility to collaborate in the evaluation process. A final theme emerged of perceived learner-centered inhibitors which included administrative issues, learner issues, and lack of understanding.

**The Learner-centered Syllabus**

Learner-centered education has been examined extensively in the literature from student and instructor perspectives (Angelo & Cross, 1993; Barr & Tagg, 1995; McCombs, 2001; Weimer, 2002). While many of the basic tenets are becoming better understood in higher education, faculty are challenged with incorporating precepts of learner-centered education into their courses.

According to Diamond (1998), the more clear and articulated the performance goals described in a syllabus, the more effective students will be at achieving them. Use of a learner-centered syllabus sets a framework for knowledge, clarifies expectations, and encourages responsibility for learning (Grunert O’Brien, Mills, & Cohen, 2008). The
authors posited that a learner-centered approach sets a framework of knowledge for instructors by challenging them to think about their teaching philosophy, how courses relate to programs of study, and determining ways in which learning will be assessed. Expectations are clarified in the syllabus through course objectives. In addition to students being informed of what they will know by course end, they will also be aware of the skills that will be learned in order to achieve those competencies. Encouraging responsibility for learning focuses on the extent to which instructors can support and challenge students to assume more responsibility for their learning with the understanding that students will be learning independently throughout life.

Peer and Martin (2005) asserted the role of instructor and student should be clearly defined in the course syllabus. Course expectations, parameters, and goals help students better understand their roles in the class. From an allied health perspective, the authors contended the course syllabus can provide a framework for redesigning ways in which instructors educate in the clinical and didactic settings through communication and content delivery.

Using a descriptive, qualitative design, Eberly, Newton, and Wiggins (2001), examined general education syllabi at a midsized, mid-western university in order to gain an increased understanding of syllabi characteristics and attributes, to identify ways in which syllabi reflected and communicated university goals and objectives, and to identify ways in which syllabi communicated an implicit contract. Three faculty members from the School of Nursing, College of Arts and Sciences, and the School of Education from academic units within the university comprised a committee to assess general education syllabi using content analysis (n = 145). Their findings revealed knowledge transmission
was a primary focus, with skills and attitude development being less emphasized. The authors stressed that these results were not congruent with goals of general education, and the university mission statement was not addressed in course syllabi. The authors contended that the effort instructors place into their syllabi is directly related to the value students place on the syllabus as a learning tool. In addition, the authors maintained syllabus analysis is a useful tool for assessing curricula in individual academic units.

**Strategies to Increase NCLEX-RN® Pass Rates**

Several approaches have been put into practice in an effort to improve success on the NCLEX-RN®. Strategies include an emphasis on test-taking techniques and coaching, the use of study groups, review courses, self-assessment books, time management, and relaxation techniques (Brewer, 2002; Morrison, Free, & Newman, 2002; Nibert & Young, 2001; Washington & Perkel, 2001). The literature also advocated that faculty adapt teaching methods which utilize critical thinking skills in the classroom setting and on exams, while also incorporating tests similar to the NCLEX-RN® (Daley, Kirkpatrick, Frazier, Chung, & Mosher, 2003).

McKenzie (1987) studied nursing faculty teaching styles and licensure examination results. Using the Principles of Adult learning Scale (PALS), nursing faculty were surveyed to determine the degree to which they practiced adult education learning principles congruent with learner-centered precepts. The study used 36 (90%) associate degree nursing schools in Texas. Findings revealed 150 (63%) nursing instructors supported a teacher-centered mode of instruction. In addition, the study developed a descriptive profile of participating nursing instructors. Analysis of variance (ANOVA) was used to examine each institution’s overall faculty teaching style and
school pass rates for first time test takers. Data analysis did not demonstrate any significant difference between institutional instructor teaching mode and licensure examination pass rates. Since 1987 nursing education has experienced many changes in nursing curriculum coupled with many changes with the NCLEX-RN® examination. Because of these factors, a reexamination of this research is warranted.

A quantitative study by Quillin (2004) examined the teaching style of University of Alaska Anchorage School of Nursing teaching faculty, and demographic factors that may be related to teaching style using the Principles of Adult learning Scale (PALS). Relationship, age, years in teaching, time since employed providing patient care, academic background, and teaching critical thinking with the seven PALS factors were investigated using a convenience sample of 50 UAA nursing faculty of whom 36 completed the survey. Results indicated the faculty were significantly teacher-centered. The demographic factors assessed were not suggestive of a relationship affecting overall teaching style.

Higgins (2005) designed a study to identify approaches to increase the NCLEX-RN® pass rate and lower the attrition rate in a community college nursing program. Using an ex-post facto design, he collected data from 213 student nursing records. Qualitative data were collected from 10 full-time faculty, 30 new graduates, and 45 directors of associate degree nursing programs in Texas. The study linked completion of the nursing program to the academic variables of two biology courses and three components of a program preadmission test. The research noted a relationship between one biology course, the science component of the preadmission test, the HESI Exit Examination score, and the nursing skills course to passing the NCLEX-RN®. Qualitative data
indicated preadmission requirements, campus counselors, remediation, faculty, test-item writing, and teaching method were instrumental in completion of the program and passing the NCLEX-RN®. Comments related to teaching method included increasing the use of case studies, critical thinking exercises, and application of theoretical information into the clinical setting.

Using a review of intervention studies that promote NCLEX-RN® success of baccalaureate students, DiBartolo and Seldomridge (2005) acknowledged that while several studies identified factors to predict NCLEX-RN® success, few have evaluated interventions that actually promote success. In their research the authors identified that as pass rates increased, it was difficult to link success to the interventions used. The researchers suggested further investigation incorporating more rigorous designs with larger, diverse student groups to evaluate interventions.

Carrick (2011) studied at-risk students and NCLEX-RN® failure using systems theory to study the relationship between the nursing education systems and the nursing student learning system. The author used the student’s approach to learning to assist in identifying effective strategies. Carrick noted that the literature supports an approach targeting the teaching and learning environment and observed the limited amount of research on the nursing student’s approach to learning, the benefits of innovative student-centered learning environments, and the most effective use of NCLEX-RN® assessments.

Resistance to Learner-centered Education

According to Weimer (2002), “Student and faculty resistance is all but a guaranteed response to learner-centered teaching” (p. 149). Weimer established the reasons for student resistance including the learner-centered approach is more work, more
threatening, involves losses, and may be beyond students. For example, more work is realized by the students when they must come up with five examples to illustrate a concept rather than the teacher listing those examples for them. Students become actively engaged with content and are empowered as learners. Students also feel threatened when the old roles of teacher and student no longer apply. When students take more responsibility for their learning, they sense the loss of being told what to do. Learner-centered approaches may be beyond what students can initially handle when they have been so accustomed to being passive, disconnected, and dependent learners.

Weimer (2002) established that the basis for faculty resistance emanated from the threatening aspects of learner-centered approaches which test teachers’ views of their power and authority in the classroom and in the grading process. With learner-centered approaches, more power and authority for learning become a student responsibility. Another aspect of faculty resistance stems from the concern of diminishing the amount of content in courses, allowing students to help set course policies, employing fewer rules and requirements, and increasing student involvement in assessment.

Barriers to learner-centered approaches are also prevalent in nursing education. Brown, Kirkpatrick, Mangum, and Avery (2008) described their findings of incorporating the emerging narrative pedagogy approach in nursing education. With this model, the student becomes a more self-directed, participative learner. The faculty role changes from being teacher-centered to becoming more learner-centered. Barriers preventing such innovations from implementation include higher education itself, known for its time-consuming curriculum committees and administrative hierarchies (Bellack, 2008; Coonan, 2008). Coonan further asserted two barriers for supporting learner-centered
principles as cited by nurse educators involve not having enough time and the cost of implementation.

Summary

This chapter examined the evolution of learner-centered education from a historical perspective and explored various theoretical frameworks for its incorporation in educational settings. During the past 30 years significant changes have occurred creating shifts in educational paradigms as educators seek best practices for their institutions. While the literature is rich on the topic of learner-centered education, much of the focus lies in distance education and K-12 settings. Although a great deal of literature exists for qualitative studies, quantitative studies focusing on faculty and student perceptions in relation to institutional espoused values in the higher education realm is lacking along with teaching methods that promote passage on the NCLEX-RN®. As learner-centered education continues as a model embraced by nursing programs within institutions of higher education, future research is necessary on this topic to fill existing gaps in the literature.
CHAPTER III
STUDY PROCEDURES

Introduction/Review of the Study

The purpose of this study was to identify the teaching styles of nursing faculty at Kettering College as teacher-centered or learner-centered using the Principles of Adult Learning Scale (PALS) and the seven factors within PALS which identify specific teaching practices. The study analyzed course syllabi to determine the extent and length of time nursing faculty designed courses in alignment with learner-centered principles. The researcher examined student surveys to determine the extent to which they perceived their instructors used learner-centered modes. The study examined the relationship between faculty self-reported use of learner-centered modes and student perceptions of its use. The researcher analyzed the difference between national NCLEX-RN® pass rates and Kettering College NCLEX-RN® pass rates. Candela et al. (2006) posited that the objective of learner-centered education in nursing programs is the improvement of student learning coupled with the student’s ability to transfer learning to real-life situations and practice.

This study utilized quantitative methods to examine the teaching styles of Kettering College Nursing faculty. According to Gay, Mills, and Airasian (2006) “Quantitative research is the collection and analysis of numerical data in order to explain,
predict, and/or control phenomena of interest” (p. 9). Krathwohl (1998) defined quantitative research as “Research that describes phenomena in numbers and measures instead of words; the focus of the research is usually predetermined and deduced from prior research” (p. 690). The researcher used concepts of content analysis to analyze course syllabi for learner-centeredness and establish the existence and frequency of concepts (Busch et al. 2011). This chapter described the introduction of the study, presentation of research questions, the design of the study, the participants, and instrumentation. In addition, data collection and analysis were explained. Included are references to appendix items used in this study. The researcher provided the rationale for utilization of a quantitative research design by each research question.

The Setting/Population of Sample Participants/Learner-centered Culture

Setting. Kettering College is a private, coeducational, faith-based college located in a suburb of a moderate sized Midwestern city. Kettering College is an integral component of what is currently known as Kettering Health Network which is comprised of seven hospitals, a behavioral medicine center, numerous ambulatory health centers and physician office buildings, and a retirement center. Kettering College provides graduates who staff many of the network facilities (Kettering College Nursing Reaccreditation Self Study Report, 2009).

During winter semester 2012, Kettering College enrolled 888 students and employed 64 full time faculty members. The college offers four certificate programs, an associate of science degree, three baccalaureate degrees, and a master’s degree in physician assistant studies. All 5 degrees and 12 majors offered by the college are health-care related. The majority of the Kettering College student body is comprised of
residents from southwest Ohio. Students represent a diverse geographic area, including some international students associated with the religious faith of the college which is Seventh-day Adventist. The majority of students at the college commute with only 108 students living in the residence hall. The student body is a mix of traditional and older students. Many students are returning to school to further their education or to change careers, with 26 as the average age. The majority of the student body of Kettering College is female (79%) and White (80%). The majority of the student body declares religious affiliation with a Christian denomination, of which 11% are Seventh-day Adventist (Kettering College Opening Report, Winter 2012).

Kettering College opened in 1967 with the nursing program as one of the first associate degree programs offered in the state of Ohio. At the time of this study the Division of Nursing at Kettering College included the associate of science in nursing and the online BSN-completion degree. With the exception of general studies, nursing represented the largest department on campus, with 310 students totaling 35% of the campus enrollment. The AS nursing major was comprised of 215 students and the online BSN-completion nursing degree had 54 students enrolled as of winter 2012. The nursing program also had 41 students enrolled in advanced placement. (Kettering College Opening Report, Winter 2012).

Winter semester 2012 the Division of Nursing employed 17 faculty. Two carried full-time administrative responsibilities and one served full-time as curriculum coordinator for the new three-year BSN curriculum. Two faculty taught part-time in both the AS and BSN-completion program while two faculty members taught in the BSN-
completion program. Ten primary faculty taught in the nursing associate degree program for winter 2012 (C. Gersch, personal communication, October 30, 2012).

**Population.** For the purposes of this study, the researcher surveyed a population of 10 associate degree nursing faculty teaching winter semester 2012 and 256 associate degree nursing students. The majority of nursing students were enrolled in two nursing courses. In addition to studying the extent to which Kettering College nursing faculty describe use of learner-centered modes in their teaching, nursing students evaluated the extent to which they believe their instructors incorporated learner-centered precepts into their teaching. Nursing administration from Kettering College approved this study. In fact, survey participation is a common aspect of the culture at Kettering College. Nursing faculty confirmed their willingness to participate and agreed to commit class time for the student completion of the student survey. The BSN-completion program at Kettering College is exclusively online and was not within the scope of this study.

**Learner-centered culture.** With the use of standardized syllabi, all associate degree nursing course syllabi include a description of learner-centered principles which engage the student using activities that foster learning through discovery and critical reflection. The syllabus explains participation and expectation in integrating prior learning with the acquisition of new learning as being vital to the learning process. Further, both students and faculty share the responsibility and accountability for learning.

**Research Instrumentation**

**Use of PALS.** The researcher obtained permission to use the Principles of Adult learning Scale (PALS) by the instrument developer, Dr. Gary Conti (see Appendix A). The Principles of Adult Learning Scale was designed to assess the degree to which
respondents utilize various principles of learner-centered modes for teaching adults (see Appendix B). According to Conti (1979), construct validity for the PALS was established by a national panel of adult educators and was later verified by factor analysis. Content validity was established through field testing in public school programs. The test-retest method established a reliability coefficient of .92. Criterion validity was determined by comparing PALS scores to the Flanders Interaction Analysis Categories (FIAC). Conti (1979) used the FIAC as the external criterion because it is a validated system for measuring initiating and responsive classroom actions. Further, the actions described in Flanders’ definition of initiating are highly congruent with the characteristics of the collaborative mode. In order to link these instruments, the national jury members evaluated the action in each item as either initiating or responsive. Conti used scores derived from actual observations to evaluate PALS concurrent validity and to assess the degree to which accepting a mode and practicing it are congruent. Correlations of \( r = .85 \) on the Teacher Response Ratio, \( r = .79 \) on the Teacher Question Ratio, and \( r = .82 \) on the Pupil Initiation Ratio confirmed the congruence between PALS and FIAC (Conti, 1978, 1979).

The Principles of Adult Learning Scale (PALS) assesses the teaching style of nursing faculty. This 44-item instrument measures the frequency of utilization of teaching/learning principles which are discussed in adult education literature. A high score on PALS demonstrates support for a learner-centered teaching approach, while a low score supports a teacher-centered approach. Scores falling in mid-range of 126 to 146 reveal a teaching approach which draws from each extreme (Conti, 2004).
Items on PALS utilize a six-point Likert scale ranging from Always (0) to Never (5). Responses on the survey indicate the frequency with which faculty practice the behavior in each item. Scoring incorporates converting the values for the positive items and then adding the values of the responses to all items. Scores will range from 0 to 220. The average score for PALS is 146 with a standard deviation of 20. The scores for PALS have maintained consistency across various groups that utilize adult education practices (Conti, 2004).

An individual score can be interpreted by relating it to the average score for the instrument (146). An individual’s teaching style and level of commitment to that style can be judged by comparing a participant’s score to 146. Scores greater than 146 reveal a tendency toward the learner-centered mode while scores less than 146 indicate support for teacher-centered modalities (Conti, 2004). Standard deviations refer to how observations are spread around the mean on the standard bell-shaped curve. The majority of scores will fall within one standard deviation of the mean between 126 and 166. Movement toward these values indicates an increased tendency toward a specific teaching style. Scores falling within the second standard deviation of 20 to 40 points from the mean demonstrate a very strong and consistent support of either a teacher-centered or learner-centered teaching style. Scores falling at least 40 points from the mean fall within the third standard deviation and indicate an extreme commitment to a particular style (Conti, 2004). The total PALS score demonstrates the overall teaching style and the strength of faculty members support for that style, but does not identify the specific classroom behaviors that comprise that style. Sample survey questions are discussed later in this chapter. Demographic information and additional questions
accompany the PALS survey which includes age, years of college teaching, highest level of education and current academic rank (see Appendix C).

Factors within PALS.

The Principles of Adult Learning Scale may be divided into seven factors. Each factor holds a similar group of items which comprise a major component of teaching style. Each factor title reflects the support for each collaborative mode. High scores within the various factors demonstrate support for the learner-centered principle within the factor name while low scores support the opposite concept. Factor scores are obtained by summing the points for each item in the factor.

Factor 1: Learner-centered activities. This factor comprises 12 of the negative items in the instrument and has a mean score of 38 and a standard deviation of 8.3 (Conti, 1985). These statements relate to assessment by formal tests and to a comparison of students to outside standards. If faculty score low on this factor, it points to support for the teacher-centered mode with a preference for formal testing over informal evaluation techniques and heavy reliance on standardized tests. Faculty scoring low in this factor support exercising control in the classroom by assigning desk-work, using disciplinary action when deemed necessary and by determining the educational objectives for each student. Value is seen in practicing one teaching method and supports the theory that most adult learners have a similar learning style. Conversely, a high score obtained for this factor reveals support for the collaborative mode and rejection of teacher-centered practices. It also notes that students are encouraged to take responsibility for their learning and the classroom focus is on the learner. An example item from this factor is “I determine the educational objectives for each of my students.”
Factor 2: Personalizing instruction. Six positive items and three negative items are contained in this factor. For this factor the mean score is 31 with a standard deviation of 6.8. High scores reveal incorporation of a variety of activities that personalize learning to meet the distinctive needs of every student. Objectives are established on individual motives and abilities and instruction is self-paced. Numerous methods, materials, and activities are utilized. Lecturing is deemed as a poor method of subject presentation to adult learners and cooperation is favored over competition. A positive item for this factor is “I use different techniques depending on the students being taught.” Conversely, a negative item states, “I use lecturing as the best method for presenting my subject matter to adult students.”

Factor 3: Relating to experience. This factor consists of six positive items. The mean score is 21 with a standard deviation of 4.9. High scores indicate a proclivity for the use of learning activities that consider students’ prior experiences and how they relate to new learning experiences. To increase learning relevance, learning is organized according to problems encountered in everyday life. Students are encouraged to ask questions. A positive item from this factor states, “I plan learning episodes to take into account my students’ prior experiences.”

Factor 4: Assessing student needs. Four positive items comprise this factor. Faculty scoring high in this category treat students as adults based on finding out what each student needs and wants to know. This is ascertained by conducting individual conferences and informal counseling sessions. Next, faculty make a diagnosis regarding existing gaps between student goals and their present levels of performance. Students are then assisted in identifying short-term and long-term objectives. A positive item example
for this factor is “I have individual conferences to help students identify their educational needs.” The mean score for this factor is 14 with a standard deviation of 3.6.

**Factor 5: Climate building.** Factor five also contains four positive items with high scores indicating a preference for faculty setting a friendly and informal environment as the initial stage in the learning process. Faculty promote interaction and discussion with other students, allow breaks, and eliminate barriers with the use of existing student competencies. The instructor encourages risk taking, and mistakes are considered a natural process in learning. Students are free to experiment in the classroom setting and explore components of self-concept, problem-solving, and interpersonal skill development. Failures serve as a mechanism in providing feedback that directs future positive learning. A positive item from this factor is “I allow my students to take periodic breaks during the class.” The mean score is 16 with a standard deviation of 3.0

**Factor 6: Participation in the learning process.** This factor contains four positive items and addresses the degree of student involvement in establishing the nature and evaluation of content material. High scores in this area indicate a strong desire for student input in decision making regarding course content and evaluating classroom performance. A positive item from this factor is “I allow students to participate in developing the criteria for evaluating their performance in class.” The mean score is 13 with a standard deviation of 3.5.

**Factor 7: Flexibility for personal development.** Factor seven contains five negative items with low scores for this factor indicating faculty seeing themselves as being providers of knowledge rather than facilitators. Classroom discipline is paramount with course objectives being determined only by faculty. The instructor avoids
discussions relating to student self-concept. Conversely, high scores show flexibility favored with an emphasis placed on personal fulfillment. Student needs are placed in the forefront with issues relating to values addressed to stimulate understanding and advance personal growth. A negative item from this factor is “I provide knowledge rather than serve as a resource person.” The mean score is 13 and the standard deviation is 3.9

**Learner-centered education and course syllabi.** For this study another method used to determine learner-centeredness of faculty is by examining their course syllabi. Course syllabi review provides a useful way to determine the degree to which a professor is trying to develop a learner-centered environment (Cullen & Harris, 2009). Cullen and Harris developed a rubric for assessing learner-centered qualities in course syllabi (see Appendix D). The researcher obtained permission to use this rubric from Roxanne Cullen, Ph.D. (see Appendix E). Cullen and Harris developed a mechanism that incorporate characteristics of best practices in learner-centered teaching and brain function research (Chickering & Gamson, 1987; Grunert O’Brien et al., 2008; Vygotsky, 1978; Weimer, 2002, Zull, 2002.) The rubric is organized into three categories: (1) community, (2) power and control and (3) evaluation/assessment.

**Course syllabus rubric.** Category one of the rubric for determining degree of learning-centeredness in course syllabi examines community. Teacher accessibility, learning rationale, and collaboration are the sub categories within this grouping. The rubric awarded one to four points based on degrees of learning-centeredness in each grouping. Cullen and Harris (2009) contended a sense of community is a hallmark of a learner-centered class. Instructor accessibility serves as a gauge of community in that it signifies an investment of time and energy by the instructor that demonstrates a
responsibility to student learning. Another feature of community involves relevance. According to Cullen and Harris (2009), this can be demonstrated by the instructor’s efforts to provide a sense of purpose and a rationale for learning that fosters a sense of purpose, trust, and community. Collaboration is the third subcategory under community. The pedagogical strategy of Vygotsky (1978) posited that individuals learn more via collaboration and group work. The role of the teacher is that of facilitator while the role of the student is that of active social participator. As a result, students are able to learn more through collaboration than independent problem-solving.

Power and control is the second rubric category and examines the teacher’s role, the student’s role, outside resources, and syllabus focus. Weimer (2002) noted when teaching is learner-centered, power is shared rather than transferred. In a learner-centered course, students share the responsibility for course activities, course policies, course content, and evaluations. Cullen and Harris (2009) asserted that a syllabus review can reveal an instructor’s intent to create an environment of shared control. This shared control is evidenced by the amount of choice provided to students thereby embracing the student as a partner in the learning experience rather than a recipient.

The third rubric grouping examines evaluation and assessment. Grades, feedback mechanisms, evaluations, learning outcomes and opportunities for revision are assessed. Cullen and Harris (2009) distinguished between evaluation and assessment. Assessment is ongoing and formative feedback reciprocated between instructor and student to gauge progress and determine if learning is taking place. Evaluation is used as an examination in determining if specific learning outcomes have been met. Cullen and Harris (2009) used this rubric to develop a benchmark for determining the degree of learner-
centeredness used in current teaching practices through a systematic review of course syllabi. Rather than examining outcomes, this instrument focuses on the instructors’ intent to create a learner-centered classroom environment. The results were later used for planning professional development.

**Use of Adapted Principles of Adult Learning Scale (APALS).** Clow (1986) made modifications to the PALS instrument to obtain data from students’ perspective regarding instructor use of learner-centered modes. A review of the literature showed concurrent use of PALS and APALS by Brooks (1988), Wilson (1994), McCollin (1998), and Hajduk (2000). In order to measure student perceptions of instructor use of learner-centered modes, questions on the PALS instrument were restated to change the perspective of the question from the teacher to the student. For example, the first question on the PALS instrument states, “I allow students to participate in developing the criteria for evaluating their performance in class.” Using the APALS instrument the question was reworded to “My instructor allows students to participate in developing the criteria for evaluating their performance in class.” The instrument developer, Dr. Gary Conti (see Appendix A) granted permission to adapt the PALS instrument (see Appendix A).

**Data Collection**

In order to protect human subjects, the Institutional Review Boards of both Kettering Medical Center and the University of Dayton granted permission to carry out this study prior to data collection (see Appendices F and G). For data collection, the researcher sent an e-mail to nursing faculty informing them of the research study and an invitation to participate by taking a paper copy of the PALS survey at the end of a
specified faculty meeting. A cover letter accompanied the survey explaining the purpose, goals, and risks of the research (see Appendix H). The letter also included an assurance of confidentiality and informed consent. Participants were informed that participation in the study was voluntary.

The researcher obtained permission to administer the Adapted Principles of Adult Learning Scale to students during the time faculty completed their Principles of Adult Learning Scale survey. The investigator requested class time for student completion of the adapted student survey. A student cover letter accompanied the survey and explained informed consent (see Appendix I).

The investigator distributed voluntary and anonymous paper questionnaires to nursing faculty and students in Kettering College’s associate degree program. A cover letter distributed to faculty and students explained the study’s purpose, benefits, risks, and privacy and rights protections. The cover letter provided researcher contact information if participants had questions related to the study. The cover letter served in place of a consent form and completion of the questionnaire implied consent. The researcher requested a waiver of signed consent because the only record linking the subject and the research would be the consent document, with the principal risk being harm from a breach of confidentiality.

Prior to survey completion the researcher provided a brief description of the study and described learner-centered education. Faculty members completed the questionnaire, placed it in a provided envelope and returned it to the nursing office at Kettering College. Students completed surveys, placed them in an envelope, and returned the surveys to the principle investigator. For the purpose of correlating student responses to faculty
instructors, faculty responses were confidential and known only to the principle investigator. Student responses were anonymous. Participants were not coerced or deceived to participate. The investigator assured participants that non-participation would not affect work relationships, employment, or continuance in the nursing program. The principle investigator kept surveys in a locked file in her office. At a later date, the researcher reviewed, statistically analyzed, and then destroyed the data.

Following faculty and student survey completion, the researcher collected surveys and maintained them in a secured file. The investigator then tabulated results using SPSS (Statistical Package for the Social Sciences), which is a software program that assists with converting raw data into useful information (Field, 2009).

Data Analysis

**Research question 1(a).** The first research question 1 (a) “to what extent do Kettering College nursing faculty use learner-centered modes for teaching adults?” utilized the Principles of Adult Learning Scale (Conti, 1990), (see Appendix B). The researcher used descriptive statistics and derived scores to answer this question. The Principles of Adult Learning Scale (PALS) provided an overall score which represented an instructor’s teaching style as either teacher-centered or learner-centered. The PALS instrument contained 44 items describing a teaching action using a Likert scale. Scores on PALS ranged from 0-220 with a mean of 146 and a standard deviation of 20. A high score on PALS demonstrated support for a learner-centered teaching approach, while a low score supported a teacher-centered approach. Demographic information and additional questions accompanied the PALS survey which included age, years of college
teaching, highest level of education, and training in the use of learner-centered principles (see Appendix C).

**Research question 1(b).** “To what extent do nursing faculty practice learner-centered modes in the seven factors within the PALS instrument?” Each factor comprised a major component of teaching style which included learner-centered activities, personalizing instruction, relating to experience, assessing student needs, climate building, participation in the learning process, and flexibility for personal development (Conti, 1990). The researcher used population percentages, frequency distribution, mean, median, and standard deviation of overall PALS scores and the Seven Factor scores to analyze results. These scores were then compared to Conti’s (1990) established set of “standard” values for the overall PALS scores and each of the Seven Factors.

**Research question 1(c).** To what extent have nursing faculty designed their courses in alignment with learner-centered modes? Cullen and Harris (2009) designed a rubric for assessing learner-centered qualities in course syllabi to determine the degree of learning-centeredness in course syllabi (see Appendix D). The researcher used content analysis to analyze Kettering College course syllabi. Krippendorf (2004) described content analysis as a research technique for making inferences from communications. The investigator obtained nursing course syllabi from the college shared hard drive and examined them. The basic content analysis precepts utilized determined the presence of certain words or concepts within the course syllabi and assigned tasks. Using the Cullen and Harris rubric, the researcher quantified and analyzed the presence of learner-centered principles in the syllabi. In addition to categorizing syllabus content, the
researcher tallied frequency counts for each category. A key goal of this data analysis was to determine to what extent the content of the course syllabi and assignments aligned with learner-centered principles. The researcher used correlation to determine whether, and to what degree a relationship exists between faculty self-assessment PALS scores and results of faculty syllabi assessment.

**Research question 2.** The second research question “to what extent do students believe their instructors use learner-centered modes?” utilized an adapted version of the PALS instrument to facilitate analysis. The Adapted Principles of Adult learning Scale (APALS) is a companion instrument to the PALS survey designed to measure student perceptions of a teacher’s teaching mode (see Appendix J). Questions on PALS use the first person in order for instructors to evaluate their own teaching style, while questions on APALS use the third person to allow students to evaluate the teaching style of their instructors. The researcher used descriptive statistics and derived scores to answer this question. The Adapted Principles of Adult Learning Scale (APALS) provided an overall score which represented a student’s perception of an instructor’s teaching style as either teacher-centered or learner-centered. The APALS instrument contains 44 items describing a teaching action using a 6-point Likert scale. Scores on APALS range from 0-220 with a mean of 146 and a standard deviation of 20. A high score on APALS demonstrates support for a learner-centered teaching approach, while a low score supports a teacher-centered approach.

**Research question 3.** The third research question “What is the difference between faculty self-reported use of learner-centered modes and student perceptions of their use?” utilized an independent samples t-test to examine the difference between
instructor use of learner-centered modes and student perceptions of its use using PALS and APALS respectively. The researcher used independent samples t-test to test if two sample means differ from one another. For this study the results of the independent samples t-test determined the difference between the instructors’ PALS score mean and the students’ APALS score mean. Alpha level was set at 0.05. For this study the two independent samples were faculty (PALS) and student (APALS) responses to surveys. Faculty provided a self-reported evaluation of their teaching using the Principles of Adult learning Scale and their students used the Adapted Principles of Adult Learning Scale to evaluate their perceptions of instructor use of learner-centered modalities.

**Research question 4.** The fourth research question stated “What is the difference between national passage rates for licensure and Kettering College NCLEX-RN® pass rates?” NCLEX-RN® passage rates are important to the accreditation of nursing programs and the nursing profession encourages faculty to use learner-centered teaching strategies. In order to develop baseline data for Kettering College, it is important to recognize where Kettering College nursing students stand in comparison to the national passage rates. The researcher used a one-sample t-test to compare NCLEX-RN® pass rates of Kettering College nursing students with national pass rates. The one-sample t-test compares the mean score of a sample to a known value. Alpha was set at 0.05.

**Summary**

This chapter described the introduction of the study, presentation of research questions, the design of the study, the participants, and instrumentation. The researcher explained data collection and analysis and referred to appendix items for this study. The investigator described the rationale for the utilization of a quantitative research design.
Chapter Four presents the data analysis and research findings. Chapter Five contains the discussion of the research findings, conclusions, and recommendations for future research.
CHAPTER IV
REPORT OF FINDINGS

Introduction

The purpose of this study was to identify the teaching styles of nursing faculty at Kettering College as teacher-centered or learner-centered using the Principles of Adult Learning Scale (PALS) and the seven factors within PALS which determine specific teaching practices. The researcher surveyed students to determine to what extent they perceived their instructors used learner-centered modes and also examined course syllabi to determine the extent nursing faculty designed courses in alignment with learner-centered principles. The investigator also compared Kettering College and NCLEX-RN® board passage rates.

The researcher collected data for this study during winter semester 2012 from Kettering College associate degree nursing faculty, associate degree nursing students, relevant course syllabi, and board pass rates from 2001-2011. The investigator administered a total of ten faculty surveys with a 100% response rate. The faculty survey contained demographic data and the Principles of Adult Learning Scale. The researcher collected data from associate degree nursing faculty during a March nursing faculty meeting.
The investigator used an adapted version of the Principles of Adult Learning survey (APALS) to examine student perceptions of instructor use of learner-centered modes. Restated questions on the PALS instrument changed the perspective of the question from the teacher to the student. For example, the first question on the PALS instrument states, “I allow students to participate in developing the criteria for evaluating their performance in class.” The APALS instrument reworded the question to “My instructor allows students to participate in developing the criteria for evaluating their performance in class.” Students completed 375 of a possible 455 surveys for a response rate of 82.4%. According to Babbie (2007), 82.4% is considered a very good response rate.

The researcher used course syllabi examination to determine learner-centeredness of faculty in their course design. Cullen and Harris, (2009) developed a rubric for assessing learner-centered qualities in course syllabi (see Appendix D). The rubric is organized into three categories: (1) community, (2) power and control and (3) evaluation/assessment.

Demographics

Faculty demographic data included age, years of teaching experience, level of education, and academic rank. Additional demographics included use, level of experience, and length of using learner-centered principles in coursework, as well as training and location of learner-centered training.

Age. Kettering College associate degree nursing faculty ages ranged between 30 and 59 years with 60% falling into the 40-49 year age bracket.
**Years of teaching.** Teaching experience for nursing faculty spanned 1-30 years with 50% of faculty possessing 6-10 years teaching experience.

**Level of education.** Eight respondents reached a master’s degree in nursing while two achieved the Ph.D. or Ed.D. level.

**Academic rank.** Five nursing faculty respondents held the rank of assistant professor while three possessed associate professor rank. One nursing faculty held instructor rank and one respondent achieved the rank of professor.

**Learner-centered education use.** All associate degree nursing faculty reported designing their courses using learner-centered education principles. Sixty-percent of associate degree nursing faculty described themselves as experienced with learner-centered education. Twenty-percent self-reported the use of learner-centered principles at the novice level while 20% described themselves as at the expert level. Faculty reported their use of incorporating learner-centered education into their coursework as ranging from 1 semester to 11-15 years with the majority of faculty describing their use between 2-5 years.

**Learner-centered education training.** Ninety-percent of faculty reported obtaining training in learner-centered education. Of the nine faculty who received training in learner-centered education, seven reported receiving training in a college class, one reported obtaining training at a conference and one faculty member reported obtaining training at Kettering College.
Research Question 1(a)

The first research question 1 (a) “to what extent do Kettering College nursing faculty use learner-centered modes for teaching adults? ” was investigated utilizing the Principles of Adult Learning Scale (Conti, 1990), (see Appendix B).

Scores can range from 0 to 220. The average score for PALS is 146 with a standard deviation of 20. Scores greater than 146 reveal a tendency toward the learner-centered mode while scores less than 146 indicate support for teacher-centered modalities (Conti, 2004).

For this study, survey items left blank were assigned a neutral value of 2.5 in agreement with PALS scoring procedures (Conti, 1990). The total PALS score demonstrates the overall teaching style and the strength of faculty members support for that style, but does not identify the specific classroom behaviors that comprise that style.

Kettering College Associate degree nursing faculty scores for the Principles of Adult Learning Scale ($\alpha = .73$) ranged from 109-151 with a mean score of 130.05 and standard deviation of 15.07. The mean for nursing instructors was 15.95 points below Conti’s established mean of 146 for PALS. This indicated a general tendency of the faculty to adopt a teacher-centered approach in the classroom. Only two faculty members possessed a total score of 146 or greater for PALS. Table 1 shows mean and standard deviation for Kettering College nursing faculty PALS scores.
Table 1

*Kettering College Faculty and Normative Group Scores for Principles of Adult Learning Scale*

<table>
<thead>
<tr>
<th></th>
<th>Normative Group</th>
<th>Nursing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=778</td>
<td>N=10</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PALS Scores</td>
<td>146</td>
<td>130.05</td>
</tr>
<tr>
<td></td>
<td>20.00</td>
<td>15.07</td>
</tr>
</tbody>
</table>

**Research Question 1 (b)**

The overall PALS score can be divided into seven factors. Each factor holds a similar group of items which comprise a major component of teaching style. Each factor title reflects the support for each collaborative mode. High scores within the various factors demonstrate support for the learner-centered principle within the factor name while low scores support the opposite concept. Factor scores are obtained by summing the points for each item in the factor. The seven factors are learner-centered activities, personalizing instruction, relating to experience, assessing student needs, climate building, participation in the learning process, and flexibility for personal development. Table 2 also represents PALS factor scores in the literature as compared with the PALS scores of the associate degree nursing faculty participating in this study. Kettering College associate degree nursing faculty scored lower in four of the seven PALS factors when compared to the normative group from Conti’s study. This indicated a prevalence for Kettering College associate degree nursing faculty to be more teacher-centered when compared to the normative group.
Factor 1: Learner-centered activities. In Factor 1, the Kettering College faculty mean was 38.15 and the mean for the normative group was 38. This illustrated a difference of 0.15 between the two groups for this factor.

Factor 2: Personalizing instruction. In Factor 2, the Kettering College faculty mean was 20.8 while the normative group mean was 31. This indicated, when compared to the normative group, that some instructors did not practice personalizing instruction to meet the unique needs of the students.

Factor 3: Relating to experience. Kettering College nursing faculty scored 20.1 compared to the normative group score of 21, which demonstrated a difference of 0.1 for the factor relating to experience.

Factor 4: Assessing student needs. Kettering College nursing faculty score was 14.8 for this factor compared to the normative score of 14. Therefore, as a group, the nursing instructors demonstrated a difference of 0.8 when compared with the normative group for diagnosing the individual learning needs of students.

Factor 5: Climate building. Kettering college nursing faculty score was 15.1 compared to the normative group score of 16, which indicated a lower tendency for faculty to create a friendly, informal environment encouraging interaction and risk taking when compared to the normative group.

Factor 6: Participation in the learning process. Kettering College nursing faculty score for this factor was 7.7 compared with the normative group score of 13. This indicated the nursing faculty instructors did not allow students to be as involved in selecting content, evaluating performance, and identifying problems as the normative group.
**Factor 7: Flexibility for personal development.** The Kettering College nursing faculty score for this factor was 13.4 compared with the normative group mean of 13 which indicated a difference of 0.4 for this factor.

Table 2 shows mean and standard deviation for Kettering College nursing faculty and Conti’s normative group.

Table 2

*Comparison of Kettering College Nursing Instructors’ PALS Factor Scores with the PALS Factor Norms*

<table>
<thead>
<tr>
<th></th>
<th>Normative Group</th>
<th>Nursing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=778</td>
<td>N=10</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>F1: Learner-centered Activities</td>
<td>38</td>
<td>8.3</td>
</tr>
<tr>
<td>F2: Personalizing Instruction</td>
<td>31</td>
<td>6.8</td>
</tr>
<tr>
<td>F3: Relating to Experience</td>
<td>21</td>
<td>4.9</td>
</tr>
<tr>
<td>F4: Assessing Student Needs</td>
<td>14</td>
<td>3.6</td>
</tr>
<tr>
<td>F5: Climate Building</td>
<td>16</td>
<td>3.0</td>
</tr>
<tr>
<td>F6: Participation in Learning Process</td>
<td>13</td>
<td>3.5</td>
</tr>
<tr>
<td>F7: Flexibility for Personal Development</td>
<td>13</td>
<td>3.9</td>
</tr>
</tbody>
</table>

**Research question 1(c)**

To what extent have nursing faculty designed their courses in alignment with learner-centered modes? The researcher used content analysis to analyze course syllabi. Cullen and Harris’ (2009) rubric categorizes learner-centeredness in course syllabi in
three groups: community, power and control, and evaluation and assessment. The investigator obtained nursing course syllabi from the college shared drive and examined them. According to the Cullen and Harris, basic content analysis precepts determine the presence of certain words or concepts within the course syllabi and assigned tasks. The researcher awarded one to four points based on degrees of learning centeredness in each grouping. Table 3 illustrates means and standard deviations for the values assigned in each category. For the Community category, syllabi could have a high score of 12. For the Power and Control category, a high score of 16 is possible. For the Evaluation and Assessment category, a high score of 20 is possible.

Table 3

<table>
<thead>
<tr>
<th>Descriptive Statistics of Learner-centeredness in Course Syllabi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Community</td>
</tr>
<tr>
<td>Power/Control</td>
</tr>
<tr>
<td>Evaluation/Assessment</td>
</tr>
</tbody>
</table>

The examination of Kettering College course syllabi revealed the scores for community category was relatively high compared to the possible score for the syllabi rubric. The other syllabi rubric category scores power/control and assessment showed a delineation from highest possible rubric scores. Figure 1 demonstrates the comparison of possible syllabi scores with observed scores. This figure illustrates that characteristics of Kettering College were learner-centered.
The investigator used correlation to determine whether, and to what degree, a relationship existed between faculty self-assessment PALS scores and results of faculty syllabi assessment. Table 4 represents the relationship between PALS factor scores and faculty syllabi. Analyses illustrated one significant relationship between Climate Building and Evaluation/Assessment ($r(9) = -.69, p < .05$). This represents a moderate negative correlation and illustrates that as Climate Building increased, Evaluation/Assessment decreased.
Table 4

_Pearson’s Correlations for PALS Factor Scores and Syllabi Categories_

<table>
<thead>
<tr>
<th>PALS Factors</th>
<th>Community</th>
<th>Power/Control</th>
<th>Evaluation/Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learner-centered Activities</td>
<td>-.51</td>
<td>.33</td>
<td>.07</td>
</tr>
<tr>
<td>Personalizing Instruction</td>
<td>.18</td>
<td>-.14</td>
<td>.14</td>
</tr>
<tr>
<td>Relating to Experience</td>
<td>.03</td>
<td>.37</td>
<td>.04</td>
</tr>
<tr>
<td>Assessing Student Needs</td>
<td>.14</td>
<td>.29</td>
<td>-.28</td>
</tr>
<tr>
<td>Climate Building</td>
<td>.54</td>
<td>.08</td>
<td>-.69*</td>
</tr>
<tr>
<td>Participation in the Learning Process</td>
<td>-.04</td>
<td>-.09</td>
<td>.10</td>
</tr>
<tr>
<td>Flexibility for Personal Development</td>
<td>-.34</td>
<td>.188</td>
<td>.34</td>
</tr>
</tbody>
</table>

_Note._ * = p ≤ .05.

**Research Question 2.**

The second research question “to what extent do students believe their instructors use learner-centered modes?” utilized an adapted version of the PALS instrument. The Adapted Principles of Adult learning Scale (APALS) is a companion instrument to the PALS survey designed to measure student perceptions of a teacher’s teaching mode (see Appendix J). The Adapted Principles of Adult Learning Scale (APALS, for this study α=.62) provided an overall score which represented student’s perception of an instructor’s teaching style as either teacher-centered or learner-centered. Nursing students completed 375 APALS surveys and results are presented in Table 5. Student
mean was 115.25 with a standard deviation of 15.90. The mean for this study (115.25) was considerably lower than Conti’s mean of 146 and the Kettering College nursing faculty mean of 130.05. These findings indicated that the students perceive their instructors to be less learner-centered than nursing faculty self-reported.

Table 5

Comparison of Kettering College Associate Degree Nursing Student APALS Scores and Faculty PALS Scores

<table>
<thead>
<tr>
<th></th>
<th>APALS Scores</th>
<th>PALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td></td>
<td>115.25</td>
<td>15.90</td>
</tr>
<tr>
<td>F1: Learner-centered Activities</td>
<td>27.82</td>
<td>8.28</td>
</tr>
<tr>
<td>F2: Personalizing Instruction</td>
<td>18.84</td>
<td>6.35</td>
</tr>
<tr>
<td>F3: Relating to Experience</td>
<td>19.71</td>
<td>6.17</td>
</tr>
<tr>
<td>F4: Assessing Student Needs</td>
<td>14.29</td>
<td>4.29</td>
</tr>
<tr>
<td>F5: Climate Building</td>
<td>14.00</td>
<td>3.69</td>
</tr>
<tr>
<td>F6: Participation in Learning Process</td>
<td>11.55</td>
<td>4.50</td>
</tr>
<tr>
<td>F7: Flexibility for Personal Development</td>
<td>9.11</td>
<td>3.64</td>
</tr>
</tbody>
</table>

Research Question 3

The third research question “What is the difference between faculty self-reported use of learner-centered modes and student perceptions of their use?” The researcher used an independent samples t-test to examine the difference between instructor use of learner-centered modes and student perceptions of its use using PALS and APALS respectively. Levene’s Test for Equality of Variances indicated that the variance in both groups
(faculty, students) was equal. Results of the independent samples $t$-test indicated student APALS scores were significantly lower than faculty PALS scores ($t(383)=2.91, p<.05, \eta^2=.02$). The low effect size of 0.02 is not of concern because the study examined two independent groups.

The investigator conducted further analyses to determine whether students’ perceptions of learner-centeredness aligned with faculty possessing high PALS scores. According to MacCallum, Zhang, Preacher, and Rucker (2002), a common form of dichotomization is the median split, where the independent variable is split at the median to form high and low groups which are then compared to the dependent variable. Using the median split runs the risk of yielding misleading results. Therefore, the researcher used a conceptual split rather than a median split to categorize faculty as either high learner-centered or low learner-centered. Two faculty scores greater than or equal to Conti’s mean of 146 were coded as high, whereas the remaining eight faculty scores less than 146 were coded as low. The Kettering College faculty mean score was 130.05.

The investigator used an independent samples $t$-test with the two groups consisting of faculty with low PALS scores and the students in their classes. Levene’s Test for Equality of Variances indicated that the variance in both groups (faculty, students) was equal. Results of the independent samples $t$-test indicated there was no significant difference between the two groups ($t(285)=-1.80, p>.05, \eta^2=.01$). These results indicated that there was no difference between the mean scores of faculty with low PALS scores and their students. The researcher performed a second independent samples $t$-test, with the two groups consisting of faculty with high PALS scores and the students in their classes. Levene’s Test for Equality of Variances indicated that the variance in
both groups (faculty, students) was equal. Results of the independent samples $t$-test indicated there was significant difference between the two groups ($t(96)=-2.81$, $p<.05$, $\eta^2=.08$). These results indicated students did not perceive their faculty to be learner-centered even though faculty in this group perceived themselves to be high learner-centered.

**Research Question 4**

The fourth research question stated “What is the difference between national NCLEX-RN® passage rates for licensure and Kettering College NCLEX-RN® passage rates?” NCLEX-RN® passage rates are important to the accreditation of nursing programs, and the nursing profession encourages faculty to use learner-centered teaching strategies. The researcher obtained the national pass rates from the NCSBN (2012) website and the Kettering College NCLEX-RN® from the Ohio Board of Nursing (2012) website. The investigator used a one-sample $t$-test to compare NCLEX-RN® pass rates of Kettering College nursing students with national pass rates. Table 6 demonstrates the national and Kettering College pass rates for the past 11 years. The $t$-test indicated no difference between Kettering College NCLEX-RN® pass rates and national pass rates ($t(10) = .157$, $p > .05$). Passage percentage point differences varied possibly due to factors such as curriculum changes, changes in faculty, student ability, and changes in the NCLEX-RN® test.
Table 6

NCLEX-RN® National Passage Means Compared to Kettering College Passage Means

<table>
<thead>
<tr>
<th>Year</th>
<th>National Passage Mean</th>
<th>Kettering College Passage Mean</th>
<th>Passage Percentage Point Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>85.50%</td>
<td>88.10%</td>
<td>+2.6%</td>
</tr>
<tr>
<td>2002</td>
<td>86.70%</td>
<td>84.85%</td>
<td>-1.85%</td>
</tr>
<tr>
<td>2003</td>
<td>87.01%</td>
<td>88.24%</td>
<td>+1.23%</td>
</tr>
<tr>
<td>2004</td>
<td>85.26%</td>
<td>80.95%</td>
<td>-4.31%</td>
</tr>
<tr>
<td>2005</td>
<td>87.30%</td>
<td>89.06%</td>
<td>+1.76%</td>
</tr>
<tr>
<td>2006</td>
<td>88.10%</td>
<td>87.01%</td>
<td>-1.09%</td>
</tr>
<tr>
<td>2007</td>
<td>85.47%</td>
<td>85.11%</td>
<td>-0.36%</td>
</tr>
<tr>
<td>2008</td>
<td>86.73%</td>
<td>84.75%</td>
<td>-1.98%</td>
</tr>
<tr>
<td>2009</td>
<td>88.42%</td>
<td>91.67%</td>
<td>+3.25%</td>
</tr>
<tr>
<td>2010</td>
<td>87.41%</td>
<td>82.00%</td>
<td>-5.41%</td>
</tr>
<tr>
<td>2011</td>
<td>87.89%</td>
<td>96.33%</td>
<td>+8.44%</td>
</tr>
</tbody>
</table>

Summary

Chapter Four presented the faculty demographic data for the study coupled with a description of the data collection instruments. The researcher used the Principles of Adult Learning Scale, an adapted version of the Principles of Adult Learning Scale, and a syllabus rubric to collect data from ten associate degree nursing faculty and 375 associate degree nursing student surveys. The investigator used data obtained from the National Council of State Boards of Nursing and the Ohio Board of Nursing to examine Kettering College NCLEX-RN® passage rates compared to national passage rates.
An analysis of the data revealed a general tendency of the faculty to adopt a teacher-centered approach in the classroom evidenced by faculty self-report and by comparison of faculty scores within the seven PALS factors with Conti’s normative group. A correlation between the seven PALS factors and the three categories of course syllabi illustrated one significant relationship between Climate Building and Evaluation/Assessment respectively. Students perceived faculty to be less learner-centered than faculty self-reported. No significant difference was found between Kettering College associate degree nursing student passage rates and the national average.

In Chapter Five the researcher provided a discussion of the results, examined implications of the findings, identified limitations, and provided recommendations for future research.
CHAPTER V
CONCLUSIONS AND RECOMMENDATIONS

Introduction/Summary

The purpose of this study was to identify the teaching styles of nursing faculty at Kettering College as teacher-centered or learner-centered using the Principles of Adult Learning Scale (PALS) and the seven factors within PALS which identify specific teaching practices. The researcher surveyed students using an adapted version of PALS to determine the extent to which they perceived their instructors used learner-centered modes and examined course syllabi to determine the extent nursing faculty designed courses in alignment with learner-centered principles. The investigator examined the difference between Kettering College NCLEX-RN® board passage rates and national pass rates. Ten associate degree nursing faculty and 375 associate degree nursing student surveys were used in this study during winter semester 2012 at Kettering College.

Discussion

Results of this study indicated a general tendency of the faculty to adopt a teacher rather than learner-centered approach in the classroom; likewise, students perceived faculty as teacher-centered rather than learner-centered. Only two faculty members possessed a total score of 146 or greater for PALS, overall indicating a learner-centered teaching approach. The findings of this study mirrored those of Clow (1986) who
discovered similar inconsistencies between faculty and student perceptions when comparing PALS and APALs scores. McCollin (1998) discovered that faculty fell into the teacher-centered category as indicated by PALS, and students rated faculty at a lower level than faculty rated themselves. A study by Wilson (1994) determined little difference existed between faculty and student perceptions while studying the use of learner-centered teaching and learning modes. The researcher noted inconsistencies between Conti’s original work and this study which may be the result of the current study focusing on a health care educational environment whereas previous research was conducted in different settings. The inconsistencies suggest that even though the faculty might wish to be learner-centered philosophically, their actions in the classroom still mirror teacher-centered delivery.

Several questions remain unanswered from this study. Future research at Kettering College would benefit from use of an adapted survey instrument with a more specific focus on higher education. This study was limited to survey administration to faculty and students and an examination of course syllabi. Future study should consider observation in nursing classrooms, on-line course activities, skills lab, and clinical environments to help gain a clearer perspective of nursing education at Kettering College. Perhaps faculty use clinical time more than class time to engage students in learner-centered activities. In the overall analysis, some aspects of both approaches could be present in the curriculum. Conducting interviews with students, faculty, and administrators would foster insight regarding what occurs in nursing education at Kettering College both in the classroom and in the clinical setting. This data could yield additional information that could reveal that the nursing program is in fact more learner-
centered than results of this study indicated. Personal interviews could also shed light on whether faculty are supportive or resistant to learner-centered education. This information could uncover the paradox revealed in this study as to why Kettering College NCLEX-RN® pass rates are so high while faculty learner-centeredness is low.

The literature supports learner-centered education in nursing curricula (Ben-Zur, Yagil, & Spitzer, 1999; Greer, Pokorny, Clay, Brown & Steele, 2010; Ironside, 2003; Schaefer & Zygmont, 2003; Schmitz, 1994). Kettering College espouses a learner-centered nursing program. According to the Kettering College Academic Bulletin (2012), “Nursing education draws on the theories of education and principles of learning to provide a learner-centered environment conducive to growth and change” (p. 84). However, the data collected from faculty and students in the Kettering College associate degree nursing program revealed a more teacher-centered environment. Ninety-percent of nursing faculty reported obtaining training in learner-centered education in various settings, and the extent of that training was likely to vary.

For this study, all associate degree nursing faculty reported using learner-centered education in their course design as indicated in the demographic question and syllabi components. However, the descriptive results from the faculty PALS and student APALS demonstrated teacher-centered tendencies. Interestingly, the two high learner-centered faculty measured by PALS had no distinct difference in course syllabi content as measured by the Cullen and Harris syllabi rubric. This gap may be explained by a lack of knowledge by faculty and students in regard to knowing what constitutes learner-centered principles. In spite of being more teacher-centered, board passage rates fall into alignment with national board pass rates.
The results of this study indicated the average years of teaching experience for Kettering College associate degree nursing faculty is six to ten years. According to Weimer (2002), a novice faculty member may be less confident and lack the complex skills required to actualize the learner-centered teacher role. This may also be the case for Kettering College nursing faculty. The majority of Kettering College associate degree nursing faculty self-reported they obtained learner-centered education in their college education. Interestingly, the two faculty who ranked high against Conti’s norm were relatively new faculty.

The Division of Nursing at Kettering College espouses learner-centered education, and it is endorsed by the National League for Nursing Accrediting Commission and the National League for Nursing. However, learner-centered education may have different meanings among Kettering College nursing faculty. In order for nursing education to align with its espoused values, it would be beneficial to provide consistent and on-going learner-centered instruction for all nursing faculty to ensure a shared vision of what learner-centered precepts are and discuss various ways to incorporate those principles into the classroom setting. According to Hansen and Stephens (2000), faculty who have not had formal training in new teaching practices tend to teach the way they were taught and often overlook the opportunity to integrate new learner-centered instructional delivery methods into their classes. Interestingly, for this study, Kettering College nursing faculty self-reported receiving learner centered training. However, results of this study established that Kettering College nursing faculty actually teach in a teacher-centered mode. In addition, educating students as to what learner-centered education is would be beneficial to students in establishing partnerships with
faculty for their education (Weimer, 2002). The Division of Nursing at Kettering College supports exploring new teaching pedagogies and makes advances to this end by holding faculty development seminars weekly that incorporate learner-centered and other active teaching strategies for nursing faculty.

Nursing administration at Kettering College is mindful of carrying out what is documented as the espoused incorporation of learner-centered education (B. Cobb, personal communication, August 21, 2012). Nursing leadership wants to continue the exploration of learner-centered education. However, it should be recognized that moving in any new direction should be taken in small increments to prevent any negative consequence to current high NCLEX-RN® pass rates. In addition, large class sizes may prohibit faculty from using new innovations in the classroom. The majority of associate degree nursing courses have an enrollment of between 30 and 40 students. Administrators can continue their support for the exploration of effective teaching paradigms by reducing faculty workloads to allow time for research, collaboration, mentoring, professional development, and peer review.

For classroom assessment, Kettering College currently uses Pathwise® which is a classroom observation system that incorporates peer review in the classroom setting and examines precepts of learner-centered education (Educational Testing Service, 2001). Currently, this peer review is voluntary and will later become a mandatory faculty requirement. The intent is that the findings are formative, not summative in nature. According to Bolman and Deal (2003) and Daresh (2001), faculty professional development is best initiated as a non-threatening and ongoing process promoting professional growth.
In addition to allocating resources for faculty education, faculty development sessions can also explore learning communities, learning theory, and students’ learning style. This information could be useful to study alongside learner-centered principles, and this information could be useful for faculty as they explore new educational modalities and outcomes. According to McCombs and Whisler (1997), because many teachers were exposed to a didactic teaching model in their own education, staff development programs must help them see why a change in their own similarly didactic practices is necessary, feel a sense of ownership of such a change, and create a network of support for change with other teachers. Conti (1978) developed the PALS instrument to measure the learner-centered mode for adult basic education instructors. His sample (1983) consisted of adult educators in General Educational Development (GED) and Adult Basic Education (ABE) programs, business and industry, and health facilities. While Conti’s sample and the sample from Kettering College are different, they share some characteristics, such as both groups are educators. However, the sample for this study is comprised of associate degree nursing faculty. This may account for differences in findings. In addition, only ten associate degree nursing faculty were used for this study. A larger sample is needed for future study. The low number of participants for this study may be a limitation and may explain the difference between this study’s Cronbach’s alpha of .73 compared to Conti’s Cronbach alpha of .92.

Conti (1989), the developer of the PALS survey instrument, advised taking unique situations of faculty into consideration and stated that

Although the adult education literature supports the collaborative mode as the most appropriate way to teach adults teachers cannot blindly accept the major
tenets of the literature…they are general in nature and do not take into
consideration the unique situations in which many adult educators find
themselves. (pp. 5-6)

Demonstrating those unique situations, previous studies using the PALS instrument arrive at various conclusions.

Six previous studies using the PALS instrument in a higher education setting reported mean scores of instructors falling below the PALS mean (Brooks, 1988; Clow, 1986; McCann, 1988; Premont, 1989; Scotney 1986; Sornkaew, 1990). The results of this study and others that used the PALS instrument in higher education indicate the norms established by Conti may not be standard in all applications. Kettering College associate degree nursing faculty scored lower than Conti’s normative group in four of the seven PALS factors which included relating to experience, assessing student needs, climate building, and participating in the learning process.

In regards to relating to experience, Kettering College nursing faculty did not have a high proclivity for the use of learning activities that consider students’ prior experiences and how they relate to new learning experiences. A positive item example for this factor is “I have individual conferences to help students identify their educational needs.” This may indicate that because of faculty workloads and large class sizes, faculty are unable to complete individual conferences with every student. This may be attributed to a challenge faculty face in finding time for conducting individual student interviews with large class sizes.

The lower scores for climate building suggest that promoting interaction and discussion, allowing risk taking, and experimentation fell below Conti’s norms. This
may imply that faculty may be so focused on content delivery that they do not structure their courses to incorporate these modalities. This observation is supported in the literature as faculty may continue to practice an instructor centered teaching style that delivers information-laden lectures covering course content, rather than engaging students in learning experiences to teach the process of learning how to learn (Brookfield, 1995; Gardiner, 1994; Stage et al., 1998). High importance placed on NCLEX-RN® passage rates may also influence this finding and explain reluctance for change.

Participation in the learning process involves a strong desire for student input in decision making involving course content and evaluating classroom performance. According to Weimer (2002), when teaching is learner-centered, power is shared rather than transferred. In a learner-centered course, students share the responsibility for course activities, course policies, course content, and evaluations. The low score in this area for Kettering College associate degree nursing faculty may be indicative of the nursing faculty’s need to assure board pass rates and feel a reluctance to turn over control of content and evaluation to students. However, according to Weimer (2002), relationships between the teacher and student are developed with a shared power structure thus changing both roles in relation to the learning process and evaluation of learning outcomes.

For this study an adapted version of Conti’s PALS instrument was used for students at Kettering College. The adapted version of PALS (APALS) is found in the literature (Brooks, 1988; Clow, 1986; Hajduk, 2000; McCollin, 1998; Wilson, 1994). The majority of participating nursing students were enrolled in two associate degree nursing classes during winter semester. Most student participants for this study
completed the APALS survey twice, focusing on different faculty instructors from two
different courses. However, students are accustomed to taking end-of course surveys for
multiple instructors at the end of each semester. Another concern for validity for the
student survey was that in some cases, students were asked to complete the APALS
survey at the end of a major nursing examination. These factors may explain the low
Cronbach alpha obtained for this study.

Conclusion

Exploring best practices in nursing education is important in improving patient
care and promoting the discovery of more effective teaching standards in educating
students. Nursing education makes efforts to meet this challenge by focusing on
research. Results of this study indicated no major changes would be necessary from an
administrative perspective at this time, given that passage rates remain high in spite of the
general nature of instructional delivery. However, continued faculty development for
Kettering nursing educators should continue as usual to cover best teaching and learning
practices in nursing education as recommended by the National League for Nursing
Accrediting Commission and the National League for Nursing. This study is significant
as it explored learner-centered theories of higher education in order to inform and expand
the basis of nursing education. Perhaps the results indicate that in order for students to
pass licensure examinations, teacher-centered strategies in the classroom may be as
helpful if not more than learner-centered techniques. Exploring the clinical side of
nurse’s training may reveal that learner-centered strategies prevail there to provide
greater instructional balance. It is important that nurse educators promote active inquiry
regarding more effective teaching methodologies common to best practice in both the
classroom and clinical settings, thereby helping to bridge the gap between ideal and actual practice while still ensuring consistently high exam passage rates.
REFERENCES


Kettering College Faculty-Staff Handbook 2009.

Kettering College Nursing Reaccreditation Self-Study Report 2009


Schaefer, K., & Zygmont, D. (2003). Analyzing the teaching style of nursing faculty: Does it promote a student-centered or teacher-centered learning environment?

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Zull, J., (2002). *The art of changing the brain: Enriching the practice of teaching by*
Appendix A

PERMISSION TO USE PALS INSTRUMENT

From: Gary J. Conti [gjconti@earthlink.net]
Sent: Friday, January 09, 2009 1:54 PM
To: Ervin, Bev
Subject: Re: Permission to use PALS Instrument
Attachments: Adult Literacy Article on PALS.pdf; Answer Sheet for PALS.pdf; Factor Scores Worksheet.pdf; Identify Your Teaching Style--3rd Edition.pdf; OK to Use.pdf; PALS articles packet.pdf; PALS with adult removed.pdf; PALS with Answer Column.pdf; SPSS Scoring Program for PALS.pdf

Beverly:
It is always exciting to hear that researchers have found PALS and have a use for it. Certainly, you have permission to use it and its adaptation. Attached are some materials that you may find useful. Notice that permission to use PALS is granted at the end of the chapter in the book edited by Michael Galbraith. Let me know if I can be of any further help...
---Gary

-----Original Message ----From: Ervin Bev To: g.conti@earthlink.net Sent: Friday, January 09, 2009 12:45 PM Subject: Permission to use PALS Instrument

Dear Dr. Conti,
My name is Beverly Ervin and I am a Ph.D. candidate at the University of Dayton in Ohio. The subject of my dissertation involves learner centered education practices in nursing education. I am seeking your permission to use the Principles of Adult Learning Scale (PALS) for my research. I have appreciated reading your works and found your survey instrument to be of great interest. Thank you in advance for any assistance you are able to offer. It will be greatly appreciated.

Sincerely,
Beverly Ervin
Appendix B

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. 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.

1. I allow students to participate in developing the criteria for evaluating their performance in class.
   0 1 2 3 4 5

2. I use disciplinary action when it is needed.
   0 1 2 3 4 5

3. I allow older students more time to complete assignments when they need it.
   0 1 2 3 4 5

4. I encourage students to adopt middle-class values.
   0 1 2 3 4 5

5. I help students diagnose the gaps between their goals and their present level of performance.
   0 1 2 3 4 5

6. I provide knowledge rather than serve as a resource person.
   0 1 2 3 4 5

7. I stick to the instructional objectives that I write at the beginning of a program.
   0 1 2 3 4 5

8. I participate in the informal counseling of students.
   0 1 2 3 4 5

9. I use lecturing as the best method for presenting my subject material to adult students.
   0 1 2 3 4 5

10. I arrange the classroom so that it is easy for students to interact.
    0 1 2 3 4 5

11. I determine the educational objectives for each of my students.
    0 1 2 3 4 5
12. I plan units which differ as widely as possible from my students' socio-economic backgrounds.
0 1 2 3 4 5

13. I get a student to motivate himself/herself by confronting him/her in the presence of classmates during group discussions.
0 1 2 3 4 5

14. I plan learning episodes to take into account my students' prior experiences.
0 1 2 3 4 5

15. I allow students to participate in making decisions about the topics that will be covered in class.
0 1 2 3 4 5

16. I use one basic teaching method because I have found that most adults have a similar style of learning.
0 1 2 3 4 5

17. I use different techniques depending on the students being taught.
0 1 2 3 4 5

18. I encourage dialogue among my students.
0 1 2 3 4 5

19. I use written tests to assess the degree of academic growth in learning rather than to indicate new directions for learning.
0 1 2 3 4 5

20. I utilize the many competencies that most adults already possess to achieve educational objectives.
0 1 2 3 4 5

21. I use what history has proven that adults need to learn as my chief criteria for planning learning episodes.
0 1 2 3 4 5

22. I accept errors as a natural part of the learning process.
0 1 2 3 4 5

23. I have individual conferences to help students identify their educational needs.
0 1 2 3 4 5

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.
0 1 2 3 4 5

25. I help my students develop short-range as well as long-range objectives.
0 1 2 3 4 5

26. I maintain a well-disciplined classroom to reduce interferences to learning.
0 1 2 3 4 5

27. I avoid discussion of controversial subjects that involve value judgments.
0 1 2 3 4 5

28. I allow my students to take periodic breaks during the class.
0 1 2 3 4 5

29. I use methods that foster quiet, productive, deskwork.
0 1 2 3 4 5

30. I use tests as my chief method of evaluating students.
0 1 2 3 4 5
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.
Appendix C

QUESTIONS FOR NURSING FACULTY TO ACCOMPANY PALS SCORES

Name: ______________________________

Nursing Course ______________________

1. How do you rate yourself in using learner-centered education in your classroom teaching?
   ___ Inadequate ___ Novice ___ Experienced ___ Expert

2. Have you obtained training in the use of learner-centered principles for classroom instruction?
   _____ Yes
   _____ No

3. If you did receive training, where was it obtained?
   _____ College Classes
   _____ Conference
   _____ Webinar
   _____ At Kettering College
   _____ Other (Specify) __________________________

4. Do you currently use learner-centered education in the courses you teach?
   _____ Yes
   _____ No

5. If not, why not?
6. If you answered “yes” to number 3, how long have you used learner-centered education in your courses?
   _____ 1 semester
   _____ 1 academic year
   _____ 2-5 years
   _____ 6-10 years
   _____ 11-15 years
   _____ 16-20 years
   _____ 21-25 years
   _____ 25-30 years
   _____ greater than 30 years

7. What benefits do you perceive with the use of learner-centered education in your courses?

8. What barriers do you perceive exist for using learner-centered education in your courses?

9. What needs to be in place in this institution for you to incorporate learner-centered education in your teaching?

10. What else do you need to make learner-centered education in nursing courses possible?

11. Age
   _____ 20-29
   _____ 30-39
   _____ 40-49
   _____ 50-59
   _____ 60-69

12. Years of College Teaching
   _____ 1-5
   _____ 6-10
   _____ 11-15
   _____ 16-20
   _____ 21-25
   _____ 25-30
   _____ greater than 30
13. Highest Level of Education
   _____ Bachelor’s
   _____ Master’s
   _____ PhD/EdD
   _____ Other (Please specify)________________________

14. Current Academic Rank
   _____ Instructor
   _____ Assistant Professor
   _____ Associate Professor
   _____ Professor
## Appendix D

### RUBRIC FOR DETERMINING DEGREE OF LEARNING-CENTREDNESS IN COURSE SYLLABI

<table>
<thead>
<tr>
<th>Community</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility of teacher</td>
<td>Available for prescribed number of office hours only; discourages interaction except in class or for emergency</td>
<td>Available for prescribed number of office hours; provides phone and email but discourages contact</td>
<td>Available for more than prescribed office hours; offers phone, email, fax, home phone; encourages interaction</td>
<td>Available for multiple office hours, multiple means of access including phone(s), email, fax; holds open hours in locations other than office (e.g. library or union); encourages interaction</td>
</tr>
<tr>
<td>Learning rationale</td>
<td>No rationale provided for assignments or activities</td>
<td>Explanation of assignments and activities but not tied directly to learning outcomes</td>
<td>Rationale provided for assignments and activities; tied to learning outcomes</td>
<td>Rationale provided for assignments, activities, methods, policies and procedures; tied to learning outcomes</td>
</tr>
<tr>
<td>Collaboration</td>
<td>Collaboration prohibited</td>
<td>Collaboration discouraged</td>
<td>Collaboration incorporated; use of groups for work and study</td>
<td>Collaboration required; use of groups for class work, team projects; encourages students to learn from one another</td>
</tr>
<tr>
<td><strong>Power and Control</strong></td>
<td><strong>Teacher’s role</strong></td>
<td><strong>Student’s role</strong></td>
<td><strong>Outside resources</strong></td>
<td><strong>Syllabus focus</strong></td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------</td>
<td>------------------</td>
<td>----------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td><strong>Teacher’s role</strong></td>
<td>No shared power. Authoritarian, rules are written as directives; numerous penalties; no flexibility in interpretation; not accommodating to differences</td>
<td>No shared power; while teacher is ultimate authority, some flexibility is included for policies and procedures; some accommodation for differences among students</td>
<td>Limited shared power; students may be offered some choice in types of assignments or weight of assignments or due dates</td>
<td>Shared power. Teacher encourages students to participate in developing policies and procedures for class as well as input on trading, due dates and assignments.</td>
</tr>
<tr>
<td><strong>Student’s role</strong></td>
<td>Student is told what he or she is responsible for learning</td>
<td>Student is told what he or she is responsible for learning but encouraged to go beyond minimum to gain reward</td>
<td>Student is given responsibility for presenting material to class. Some projects rely on student-generated knowledge</td>
<td>Students take responsibility for bringing additional knowledge to class via class discussion or presentation</td>
</tr>
<tr>
<td><strong>Outside resources</strong></td>
<td>No outside resources other than required textbook. Teacher is primary source of knowledge</td>
<td>Reference to outside resources provided but not required</td>
<td>Outside resources included with explanation that students are responsible for learning outside of the classroom and independent investigation</td>
<td>Outside resources included with explanation that students are responsible for learning outside of the classroom and independent investigation. Students expected to provide outside resource information for class</td>
</tr>
<tr>
<td><strong>Syllabus focus</strong></td>
<td>Focus is on policies and procedures. No discussion of learning or outcomes</td>
<td>Weighted towards policy and procedures with some reference to content covered</td>
<td>Includes course objectives. Balance between policies and procedures and focus on learning</td>
<td>Syllabus weighted towards student learning outcomes and means of assessment; policies are minimal or left to class negotiation</td>
</tr>
<tr>
<td>Evaluation/Assessment</td>
<td>Grades</td>
<td>Feedback mechanisms</td>
<td>Evaluation</td>
<td>Learning outcomes</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Grades</td>
<td>Focus is on losing points; grades used to penalize</td>
<td>Mid-term and final test grades only. Students not allowed to see or to retain copies of tests</td>
<td>Tests are not comprehensive</td>
<td>No outcomes stated</td>
</tr>
<tr>
<td></td>
<td>Emphasizes the accumulation of points disassociated from learning performance</td>
<td>Mid-term and final test grades with minimal other graded work. Tests not cumulative. Students may see but not retain copies of tests</td>
<td>Tests, quizzes, and other summative evaluation</td>
<td>Goals for course stated but not in the form of learning outcomes</td>
</tr>
<tr>
<td></td>
<td>Grades are tied directly to learning outcomes; students have some options for achieving points</td>
<td>Grades and other feedback in the form of non-graded assignments, activities, opportunities to conference with teacher</td>
<td>Summative and formative evaluation, written work required</td>
<td>Learning outcomes clearly stated</td>
</tr>
<tr>
<td></td>
<td>Grades are tied to learning outcomes; option for achieving points; not all work is graded</td>
<td>Periodic feedback mechanisms employed for the purpose of monitoring learning (lecture response slips, non-graded quizzes, graded quizzes, tests, papers, SGID or other feedback on learning</td>
<td>Summative and formative evaluations including written and oral presentation, group work, self-evaluation and peer evaluation</td>
<td>Learning outcomes stated and are tied to specific assessments</td>
</tr>
</tbody>
</table>

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Appendix E

PERMISSION TO USE RUBRIC FOR DETERMINING DEGREE OF LEARNING CENTEREDNESS IN COURSE SYLLABI

Dear Ms. Ervin,
I'm delighted to have you use the rubric and I'm pleased to know that you find it useful. I'd be interested in hearing the results of your work. Please keep me informed! Best of luck.

Roxanne Cullen, Ph.D.
Professor of English
BIS Program Coordinator
ASC 1009
FerrisStateUniversity
Big Rapids, MI 49307

phone 231-591-2713
Appendix F

KETTERING HEALTH NETWORK IRB APPROVAL

DETERMINATION OF EXEMPT STATUS

DATE: February 9, 2012
TO: Beverly Ervin, MSA
FROM: Kettering Health Network Institutional Review Board
IRB REFERENCE #: 12-005
STUDY TITLE: [304367-1] Learner-Centered Education: Bridging the Gap Between Ideal and Actual Practice
SUBMISSION TYPE: New Project
ACTION: DETERMINATION OF EXEMPT STATUS
DECISION DATE: February 8, 2012
REVIEW TYPE: Exempt Review
REVIEW CATEGORY: 45 CFR 46.101(b)(1) and (b)(2)

Thank you for your submission of the materials referenced above for this research study. The Kettering Health Network Institutional Review Board has determined this project is exempt from IRB oversight according to federal regulations. Although the project is exempt from IRB oversight, other federal, state, local or institutional requirements may apply.

In making this determination, the following items were reviewed:

- Application Form - Application for Project Evaluation (UPDATED: 01/24/2012)
- Cover Sheet - Student Survey Cover Letter (UPDATED: 01/31/2012)
- Cover Sheet - Nursing Faculty Cover Letter (UPDATED: 01/31/2012)
- Investigator Agreement - PI Agreement - Ervin (UPDATED: 01/25/2012)
- Letter - Advisor Letter (UPDATED: 02/3/2012)
- Letter - IC Submission Letter to IRB (UPDATED: 01/26/2012)
- Letter - Permission to Use Syllabi Rubric (UPDATED: 01/24/2012)
- Other - Investigator Checklist (UPDATED: 02/3/2012)
- Other - E-mail Script for Nursing Faculty Participation (UPDATED: 01/31/2012)
- Other - IC Electronic Submission Signature Memo (UPDATED: 01/26/2012)
- Protocol - Protocol 1.0 (UPDATED: 02/3/2012)
- Questionnaire/Survey - Scantron Answer Sheet (UPDATED: 01/24/2012)
- Questionnaire/Survey - Student Survey (UPDATED: 01/24/2012)
• Questionnaire/Survey - Nursing Faculty Demographic Questions (UPDATED: 01/24/2012)
• Questionnaire/Survey - Nursing Faculty Survey (UPDATED: 01/24/2012)

This protocol does not involve protected health information (PHI) and does not have HIPAA implications.

Changes to the project may affect the project's exempt status. Therefore, please submit any revisions to the IRB for review prior to implementation. Please include any applicable forms, your study title, and the KHIN IRB reference number with any submissions to this office.

Thank you for submitting your proposal to the IRB for review and determination.

Should you have any questions or need further information, please contact Patti Brodbeck at (937) 395-6309 or patti.brodbeck@khnetwork.org.
Appendix G

UNIVERSITY OF DAYTON IRB APPROVAL

From: mconnolly1@udayton.edu on behalf of IRB Mailbox [irb@udayton.edu]
Sent: Wednesday, August 22, 2012 10:04 PM
To: Ervin, Bev; Beverly Ervin
Cc: IRB Mailbox; Darla Twale
Subject: *IRB Approval* (B. Ervin; Exemption B-1, B-2)

August 22, 2012

Ms. Beverly Ervin
University of Dayton
300 College Park
Dayton, OH 45469

SUBJECT: “Learner-Centered Education: Bridging the Gap Between Ideal and Actual Practice”

Dear Bev,

The Institutional Review Board has reviewed the subject proposal and has found this research protocol is exempt from continuing IRB oversight as described in 45 CFR 46.101(b)(1) and (b)(2).* Therefore, you have approval to proceed with the study.

REMINDERS TO RESEARCHERS:

- As long as there are no changes to your methods, and you do not encounter any adverse events during data collection, you need not apply for continuing approval for this study.
- The IRB must approve all changes to the protocol prior to their implementation, unless such a delay would place your participants at an increased risk of harm. In such situations, the IRB is to be informed of the changes as soon as possible.
- The IRB is also to be informed immediately of any ethical issues that arise in your study.

Please let me know if you have any questions. Best of luck in your research!
Best regards,

Mary S. Connolly, PhD  
Chair, Institutional Review Board (IRB)  
Office for Research  
University of Dayton  
Dayton, OH 45469  
(937) 229-3493  
Email: IRB@udayton.edu  
Web site: http://www2.udayton.edu/research/compliance_irb.php

*Exempt under 45CFR46.101(b)(1): Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

*Exempt under 45CFR46.101(b)(2): Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects’ responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects’ financial standing, employability, or reputation.
Appendix H

NURSING FACULTY PARTICIPATION COVER LETTER

Dear Nursing Faculty:

Thank you for your willingness to participate in my research efforts. I am currently studying the use of learner-centered principles in nursing education. I believe the nursing faculty at Kettering College are excellent resources for information I am seeking. If you agree to participate in this research I will also survey your students regarding their perceptions of your use of learner-centered education.

I am asking that you fill out the attached questionnaire that assesses your use of learner-centered principles in your courses. The questionnaire takes 10-15 minutes to complete. Your participation in the completing the survey implies consent. Surveys will be collected at the end of this nursing faculty meeting. You are not required to participate in this research. Data obtained will be used to help faculty and administrators understand the status of learner-centered education within the Associate Degree Nursing courses offered at Kettering College. Data obtained will also add to the body of knowledge regarding learner-centered education. Data will be compiled for generalized reporting and no individual participant will be identified.

No physical or mental risks to you or others are foreseen by your participation. Results will be kept confidential.

Thank you in advance for your assistance. If you would like more information or are interested in the results, please feel free to contact me.

Sincerely,

Beverly J. Ervin, MSA, RRT
Ph.D. Candidate, University of Dayton
937-395-8601 ext. 55646
Bev.ervin@kc.edu
Appendix I

STUDENT PARTICIPATION COVER LETTER

Dear Nursing Student:

Thank you for your willingness to participate in my research efforts. I am currently studying the use of learner-centered principles in nursing education. I believe the nursing students at Kettering College are excellent resources for information I am seeking.

I am asking that you fill out the attached questionnaire that assesses your instructor’s use of learner-centered principles in your courses. The questionnaire takes 10-15 minutes to complete. Completing the survey implies consent. Surveys will be collected at the end of this nursing class. You are not required to participate in this research. Data obtained will be used to help faculty and administrators understand the status of learner-centered education within the Associate Degree Nursing courses offered at Kettering College. Data obtained will also add to the body of knowledge regarding learner-centered education. Data will be compiled for generalized reporting and no individual participant will be identified.

No physical or mental risks to you or others are foreseen by your participation. Results will be kept confidential.

Thank you in advance for your assistance. If you would like more information or are interested in the results, please feel free to contact me.

Sincerely,

Beverly J. Ervin, MSA, RRT
Ph.D. Candidate, University of Dayton
937-298-3399 ext. 55646
Bev.ervin@kc.edu
Appendix J

ADAPTED PRINCIPLES OF ADULT LEARNING

SCALE (APALS)

Directions:

The following survey contains several things that a teacher of adults might do in a classroom. For each item please respond to the way your instructor most frequently practices the action described in the item.

Your choices are always, almost always, often, seldom, almost never, and never. On your answer sheet mark “always” if your instructor always does the event; mark “almost always” if your instructor almost always does the event; mark “often” if your instructor often does the event; mark “seldom” if your instructor seldom does the event; mark “almost never” if your instructor almost never does the event; and mark “never” if your instructor never does the event. If the item does not apply to your instructor, mark “never”.

1. My instructor allows students to participate in developing the criteria for evaluating their performance in class.
   _always_ _almost always_ _often_ _seldom_ _almost never_ _never_

2. My instructor uses disciplinary action when it is needed.
   _always_ _almost always_ _often_ _seldom_ _almost never_ _never_

3. My instructor allows older students more time to complete assignments when they need it.
   _always_ _almost always_ _often_ _seldom_ _almost never_ _never_

4. My instructor encourages students to adopt accepted middle-class values.
   _always_ _almost always_ _often_ _seldom_ _almost never_ _never_

5. My instructor helps students diagnose the gaps between their goals and their present level of performance.
   _always_ _almost always_ _often_ _seldom_ _almost never_ _never_
6. My instructor provides knowledge rather than serve as a resource person.  
   __always__ __almost always__ __often__ __seldom__ __almost never__ __never__

7. My instructor sticks to the instructional objectives that he/she writes at the beginning of a program.  
   __always__ __almost always__ __often__ __seldom__ __almost never__ __never__

8. My instructor participates in the informal counseling of students.  
   __always__ __almost always__ __often__ __seldom__ __almost never__ __never__

9. My instructor uses lecturing as the best method for presenting subject material to adult students.  
   __always__ __almost always__ __often__ __seldom__ __almost never__ __never__

10. My instructor arranges the classroom so that it is easy for students to interact.  
    __always__ __almost always__ __often__ __seldom__ __almost never__ __never__

11. My instructor determines the educational objectives for students.  
    __always__ __almost always__ __often__ __seldom__ __almost never__ __never__

12. My instructor plans units which differ as widely as possible from students’ socioeconomic backgrounds.  
    __always__ __almost always__ __often__ __seldom__ __almost never__ __never__

13. My instructor gets a student to motivate him/herself by confronting him/her in the presence of classmates during group discussions.  
    __always__ __almost always__ __often__ __seldom__ __almost never__ __never__

14. My instructor plans learning episodes to take into account students’ prior experiences.  
    __always__ __almost always__ __often__ __seldom__ __almost never__ __never__

15. My instructor allows students to participate in making decisions about the topics that will be covered in class.  
    __always__ __almost always__ __often__ __seldom__ __almost never__ __never__

16. My instructor uses one basic teaching method because he/she seems to have found that most adults have a similar style of learning.  
    __always__ __almost always__ __often__ __seldom__ __almost never__ __never__

17. My instructor uses different techniques depending on the students being taught.  
    __always__ __almost always__ __often__ __seldom__ __almost never__ __never__

18. My instructor encourages dialogue among students.  
    __always__ __almost always__ __often__ __seldom__ __almost never__ __never__

19. My instructor uses written tests to assess the degree of academic growth rather
20. My instructor utilizes the many competencies that most adult students already possess to achieve educational objectives.

21. My instructor uses what history has proven that adults need to learn as his/her chief criteria for planning learning episodes.

22. My instructor accepts errors as a natural part of the learning process.

23. My instructor has individual conferences to help students identify their educational needs.

24. My instructor lets each student work at his/her own rate regardless of the amount of time it takes him/her to learn a new concept.

25. My instructor helps students develop short-range as well as long-range objectives.

26. My instructor maintains a well-disciplined classroom to reduce interference to learning.

27. My instructor avoids class discussion of controversial subjects that involve value judgments.

28. My instructor allows students to take periodic breaks during class.

29. My instructor uses methods that foster quiet, productive deskwork.

30. My instructor uses tests as the chief method of evaluating students.

31. My instructor plans activities that will encourage each student’s growth from dependence on others to greater independence.
32. My instructor gears instructional objectives to match the individual abilities and needs of the students.
   __always__almost always__often__seldom__almost never__never

33. My instructor avoids issues that relate to the student’s concept of himself/herself.
   __always__almost always__often__seldom__almost never__never

34. My instructor encourages students to ask questions about the nature of their society.
   __always__almost always__often__seldom__almost never__never

35. My instructor allows a student’s motives for participating in continuing education to be a major determinant in the planning of learning objectives.
   __always__almost always__often__seldom__almost never__never

36. My instructor has students identify their own problems that need to be solved.
   __always__almost always__often__seldom__almost never__never

37. My instructor gives all students in class the same assignment on a given topic.
   __always__almost always__often__seldom__almost never__never

38. My instructor uses materials that were originally designed for students in elementary and secondary schools.
   __always__almost always__often__seldom__almost never__never

39. My instructor organizes adult learning episodes according to the problems that students encounter in everyday life.
   __always__almost always__often__seldom__almost never__never

40. My instructor measures 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.
   __always__almost always__often__seldom__almost never__never

41. My instructor encourages competition among students.
   __always__almost always__often__seldom__almost never__never

42. My instructor use different materials with different students.
   __always__almost always__often__seldom__almost never__never

43. My instructor helps students relate new learning to their prior experiences.
   __always__almost always__often__seldom__almost never__never

44. My instructor teaches units about problems of everyday living.
   __always__almost always__often__seldom__almost never__never