

THE EFFECTS OF JOURNALING ON THE PERCEPTION OF THE OVERALL
COURSE EXPERIENCE OF COMMUNITY COLLEGE NURSING STUDENTS

by

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ABSTRACT

MARY LOUISE KOTSOKALIS. The effects of journaling on the perception of the overall course experience of community college nursing students. (Under the direction of Dr. GRACE MITCHELL)

While many educational tools are used by teachers to improve the effectiveness of the teaching-learning process, research is seldom done on whether these education tools and strategies effect the students' perception of the overall course experience. The goal of this research is to examine the effects of journaling on the perception of overall course experience of nursing students at a community college as expressed on end-of-course Teacher Evaluation Survey. In this study, 91 volunteer nursing students participated in the study and randomly were divided into experimental and control groups. The experimental groups were assigned journaling exercises, and the control groups an equivalent writing assignment. At the end of the semester, an end of course student evaluation tool was administered to all students. Analysis of results indicated no significant difference in outcomes between the experimental and control groups.

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CHAPTER 1: INTRODUCTION

Educators are always looking for ways to improve teaching and facilitate the learning experience. While many strategies are used by teachers to improve the effectiveness of the teaching-learning process, research on these strategies is most often focused on learning outcomes, not on the learning process. Understanding how the learning process affects learning outcomes is critical. In other words, does the strategy used by the teacher help the student to learn better? Are some instructional strategies more effective than others? Research on the use of teaching strategies and the effect of these teaching strategies on learning is plentiful. Equally important is how student experiences in a course are influenced by various instructional strategies. However, this research examined a particular strategy. Specifically, does the use of journaling influence student perception of course experience.

The use of journal writing as a teaching strategy used in community colleges has increased in the last few decades. Literature focuses on the best methods for using journaling within a course and how journaling may influence learning outcomes. No research exists evaluating whether the use of journal writing influences students' perception of the course experience. This study adds to the body of knowledge regarding the use of journal writing in community college nursing programs and addresses the effects of journaling on perception of the total course experience. It evaluates the effectiveness of journaling as an instructional strategy that impacts student's perception

of course experience as reported on end-of-course Teacher Evaluation Survey. The cause and effect relationship between journaling and student perception of variables relating to teaching effectiveness and course satisfaction was evaluated with nursing students enrolled at a large urban community college in the southeastern United States. As part of this study, other factors which may influence student perception of teaching effectiveness were also evaluated.

Journaling as an Instructional Strategy

Fulwiller (1982) defines journal writing as expressive, personal writing in the first person about ideas that the writer believes to be important. Journal writing is also described as a short autobiography, a personal document representing an excerpt from life of special content or events (Allport, 1942). Over the last few decades, the use of journal writing in educational settings continues to increase and has since been linked to ideas of experiential learning, self-direction and critical thinking. This strategy is tied to the concept of learning as thinking, with the belief that thinking skills can be demonstrated and taught. The use of writing helps to change the definition of learning. Learning is not just the idea of the student as a passive recipient of knowledge provided by the teacher; instead knowledge is self-generated through the writing process (Zacharias, 2001). Journal writing is now seen as a tool for learning, re-enforcing content, allowing for connection of theory and practice, adding personal meaning, and increasing critical thinking skills. New paradigms suggest the importance of nursing education to help individuals in becoming critical and innovative thinkers.

Within nursing education, the activity of reflection has been used for many years (Hannigan, 2001). Nursing instructors use journaling to improve critical thinking, which

leads to improved practice judgment. Critical thinking is important in today's rapidly changing medical technology and healthcare systems, making it even more important for nurses to be able to analyze nursing practice and develop thoughtful methods of providing nursing care. Journaling is often used in practice disciplines (those combining theory and practice) as a means of recording and reflecting on experiences, helping to merge classroom learning with practical, clinical experiences through personal insight (Daroszewski, et al., 2004; Pierson, 1998; Slade, 1995). Reflecting on clinical experiences through writing helps nursing students to more closely evaluate interactions with patient's, families, and instructors. It helps students learn to critically think about situations encountered in everyday nursing practice. Writing and reflecting on these situations improves the ability to analyze actions and reactions resulting in improved empathy and efficacy as these situations are re-encountered. It is an important tool used in developing the multiple thinking strategies that are needed in modern nursing practice and prepares students for today's nursing workforce. In addition, this works toward improving the profession of nursing by developing independent, autonomous practitioners (Diekelman, 2001; Hawks, 1992, Hettic, 1990; Kelly, 1994). Chenoweth (1998) defines this development of critical thinking as necessary for professional and personal growth, allowing the students to apply principles from specific contexts, and generalize them to situations encountered in professional practice.

Clinical practice is important in helping nursing students to develop theoretical concepts learned in the classroom. Journaling allows to review, interpretation, and rebuilding of these ideas (Moon, 1999). Nursing requires specific knowledge and skills, but where, how, and when they are used is often based on quick interpretation of

situations. When students reflect on situations through writing about situations encountered in clinical practice they are able to imagine how they might react, or how they should have reacted. An important example of this follows:

Somebody coded today and died after 45 minutes of CPR and tons of interventions by doctors. It happened in front of the elevator. She was not our patient (my preceptor and I) but just being transported from dialysis to ICU and did not make it. This was the first code I have witnessed from start to finish as an observer and not a participant. It happened at the corner of the hall from my patient. I do not wish for this to happen to my patient, but in case it does I guess my adrenaline might kick-in. My worry, is that I might get so scared that it might make me too nervous to participate. I know how to pull a code button but the rest I would rather just assist somebody. I am not as confident yet in this area, but experience and exposure might help develop confidence in the long run. Last week, there was another code in our unit, it happened in the bathroom so I was not able to see the whole scenario. I guess working in a cardiac unit means seeing “codes” a lot (Student Nurse Journal Entry, 2008).

Indeed, reflection is an integral part of these learning processes and can be defined as an ongoing awareness of everyday thinking, action, incidents and events. It promotes the ability to critique and evaluate, and writing provides the time necessary to assign meaning to experiences. This changes the environment, processes, and the focus of learning (Lauterbach & Hentz, 2005). Cox et al. (1991) expanded this concept to recommend that reflective journaling be used as a tool for examining practice to reveal “new possibilities for ourselves as nurses and as people, finding new ways to express some of our possibilities” (p. 388).

The increasing interest in the use of reflection in nursing practice is influenced by critical perspectives on the concept of “knowing.” Knowledge in any discipline is determined by general inquiry of that discipline. Carper (1975) examines the question of what it means to “know” within nursing, and what kinds of knowledge should be most valued by that discipline. She also suggests that patterns are present within the body of

nursing knowledge. These patterns provide guidance, structure and examples of ways of thinking about phenomena. The patterns are essential to the teaching and learning of nursing. Understanding these patterns does not extend knowledge, but helps practitioners to understand what it means to “know” and which knowledge is most important to the practice of nursing (Carper, 1975). The process of reflection on clinical practice is necessary to help identify patterns of knowing and to understand which patterns are most useful depending on the situation encountered in clinical practice.

Literature on journaling discusses forms of knowing and the use of reflection through writing as an instrument for both personal and social growth. The desired outcome goes beyond theory to critique practice. Practice in this sense is “not some kind of thoughtless behavior which exists separately from theory and to which theory can be applied. All practice, like all observations, has theory embedded in them and this is just as true for the practice of theoretical pursuits as it is for those of practical pursuits like teaching” (Carr & Kemmis, 1986, p. 113). An example of this personal and social growth presents itself in the following journal entry:

I did a history interview today on one of our new admits and it was all computerized. I have learned that even though the patient is obviously going to answer “No” to some of the questions like if they have an HIV or AIDS or anything at all, I should still ask each question on the screen and not assume that they do not have them based on how they present or how their previous history is like on the chart. I did not skip a single question and I had some surprising answers. As I progress in the healthcare profession, I will always make sure that I do not put people in certain categories based on previous history but listen to whatever they still can say about themselves. What is on paper does not mean that it is all there is to it (Student Nurse Journal Entry, 2008).

Within nursing education, this form of knowledge construction is seen as key in breaking down the theory-practice divide in which theoretical knowledge is seen as the main source of nursing knowledge (Grey & Forsstrom, 1991). For students, this is seen as

a way to recognize the purposes and possibilities of nursing, including having a sense of influence within the realm of practice (Hawks, 1992). Lauterbach and Hentz (2005) propose that reflective journaling should focus on student use of the nursing process (assessment, planning, implementation and evaluation), and this has important implications for practice outcomes in nursing. As seen in the above example by increasing awareness of self, the nurse will have increased ability to care for others. The use of reflective journaling can lead to discovery and development of knowledge and values that form a foundation for competent caring nursing practice.

Dewey (1933) is among the most famous philosophers concerned with the nature of reflection in the context of how people manipulate knowledge and reprocess it. Dewey associates reflection with thinking, and defines it as a process in which a person considers a subject over and over in his mind, giving it serious thought. According to Dewey, the ability to process ideas, link them together and come to new conclusions is related to aptitude and skills which can be improved by formal education. He felt that individuals use reflection to help make sense of the world in the process of effective education. Schon (1987) points to the importance of observing and reflecting on our actions, using “knowing-in-action” as a way of constructing new meaning. According to Pierson (1998) there are “many notions of reflection, and many theories and models” (p.166). Pierson views reflection as both a technique and process, in much the same way that nursing is considered a science and an art. Thus reflection may be taught as a distinct skill. Students may be taught to look at their thoughts, feelings, and understandings through written medium. Many studies exist (discussed in Chapter 2) comparing the journals of students who have received instruction on journaling techniques and those who have not,

reflecting the belief that journaling as a skill can be improved with instruction and practice. While skill in the use of journaling can be improved, improper use by instructors may lead to vaguely defined goals, the perception of little reward, and feelings of vulnerability for students and a less effective method. Despite the drawbacks of journaling, Schoen's (1987) book on educating the reflective practitioner suggests that the skills of reflective practice should be introduced in initial training. In contrast, when discussing professional education and reflective practice Moon (1999), notes that most training emphasizes the importance of learning the body of knowledge and skills with little time or effort given to developing critical reflection or creativity.

Other theorists further differentiate reflection. According to Moon (1999), reflection is a mental process that can be thought of in terms of purpose, or outcome, and reflection differs from thinking in terms of purpose. The thinking processes identified by Rath et al. (1967) can be used to link thinking processes and the purpose of reflection; these include: comparing, summarizing, observing, classifying, and interpreting. Mezirow (1981) identifies seven levels of reflectivity including perceptual awareness, affective awareness, discriminate reflectivity, judgmental reflectivity, conceptual reflectivity, psychic reflectivity, and theoretical reflectivity (Table 1.1). These levels of reflectivity demonstrate the integration of thoughts, feelings and processes that lead to improvement in critical thinking through synthesis and analysis of experiences. Interpreting and giving meaning for increased understanding is the desired outcome for students involved in reflective journaling.

While Moon (1999) differentiates between thinking and reflection based on the purpose of each, she emphasizes the processes of both are the same. The evaluation and

restructuring of thought through reflection can be freeing to the individual, and allow for

Table 1.1
Rath and Mezirow Comparison

Thinking processes of Rath et al. (1967)	Seven levels of Reflectivity, Mezirow (1981)
Comparing	Perceptual awareness
Summarizing	Affective awareness
Observing	Discriminate reflectivity
Classifying	Judgmental reflectivity
Interpreting	Conceptual reflectivity
	Psychic reflectivity
	Theoretical reflectivity

personal growth. Reflection can be thought of as an ongoing awareness of everyday thinking and action, incidents or events, and then understanding through interpretation of personal experiences (Van Manen, 1991). According to Bruner (1988), personal writing is a way to think, organize and construct meaning.

Reflective writing is often used as a way for students to self-assess through their own writing. Mezirow (1990) describes reflection as a conscious thought process that enables the correction of assumptions and distorted beliefs, leading to a review of interpretations and revision of behavior. It differs from religious reflection or journal writing, in that writing is directed in prescribed ways, such as through writing prompts. According to Scott (2005), reflective writing is founded on Vygotsky's articulation of the relationship between learning and social development. It can be used as scaffolding for students to see their own work in a more critical way, making the connection between classroom learning and clinical experiences. Reflection is identified as a vital teaching strategy since the work of Schon (1983), and journaling is described as putting the concept of reflection into action (Lauterbach & Hentz, 2005; Wellard & Bethune, 1995).

Becoming a reflective practitioner requires a lot of extra work (Jaworski, 1993). Within the culture of nursing education the expectation is to become an independent critical thinker who is a reflective practitioner. The use of journaling as an educational strategy encourages nursing students to actively reflect on experiences encountered in clinical practice. This leads to improved understanding and application of classroom theories to actual practice and improved perception of the student's overall experience with the course. .

Student Evaluation of Teaching

This study examined the effects of journaling on the perception of the overall course experience of nursing students at a community college as reported on end-of-course Teacher Evaluation Survey. According to Algozzine, et al. (2004), students' ratings of teachers should be influenced by characteristics linked to effective teaching and not by irrelevant factors. Factors identified as influencing student evaluation of effective teaching and course satisfaction includes course characteristics, student characteristics, and instructor characteristics. Other factors that may influence student evaluation of course experience are how the evaluation tool is administered and the grade the student expects to receive for the course. This will be discussed further in Chapter 2.

Purpose of the Research

The purpose of this research was to determine if the use of journaling as an educational strategy would influence student perception of the course experience. This study consisted of two groups of nursing students; each group was randomly divided into control and experimental groups, (two groups within each group, experimental and control). One group was first semester nursing students, the other, second semester

nursing students, both in an associate degree nursing program at the same large urban community college. The experimental groups were asked to participate in a journaling assignment. The control groups were given an alternate equivalent writing assignment. Participation was voluntary.

The Student Opinion Survey Tool developed by the community college is the end of course evaluation tool that was used in this study. Reliability and validity of this instrument have been determined by the Research and Planning department will be discussed in detail in Chapter 3. The Student Opinion Survey consists of 36 items broadly divided into three sections relating to the instructor, course and student. Although student satisfaction is assessed using many factors, teaching and learning factors hold the most importance in evaluating student satisfaction. Ansari and Oskronh (2004) identified four main groupings that should be considered in understanding student satisfaction; “climate” factors, a range of educational variables, an assortment of student demographic variables, and finally the interaction of these factors. Climate factors include course content, structure, teaching-learning strategies, feedback, support and assessment procedures. Educational variables are course characteristics: the level of the course, class size, the academic term in which the course runs, assessment strategies, and whether the students are full or part-time. Demographic variables include gender, ethnicity, age, disability status, entry qualifications, educational goals and expected grade. The authors conclude that all variables collectively interact to generate satisfaction and it is very challenging to really understand which variables influence any given situation with educational variables being the most significant. This study examined variables related to instructor, course and student. Table 1.2 includes a list of the 36 items included under

each variable. In addition, the relationship between grade expected and the variables instructor, course and student are investigated.

Table 1.2
Items Pertaining to Each Variable

Instructor	Course	Student
Overall the instructor is ____	Ability to understand course text	Attends class regularly
Positive attitude toward students	Value of course to future	Completes assignments on time
Enthusiasm for teaching	Overall course is ____	Arrives for class on time
Encourages learning	Tests measure understanding	Prepared for class
Communicates clearly	Student enthusiasm for course	
Encourages participation	Educationally ready for class	
Clarifies with examples	Relevancy of lab to course	
Enthusiasm for subject	Time of day course offered	
Makes material understandable	Grade expected in course	
Motivates student to do best	Convenient location	
Teaches new things		
Sensitive to student difficulty		
Organizes class time		
Communicates expectations		
Requirements applied consistently		
Assignments relevant to course		
Adequate notice of assignments		
Provides regular feedback		
Uses materials to help learning		
Available outside class		
Meets whole time		

The primary focus of the research is the effects of journaling on the perception of the overall course experience of nursing students at a community college. The following questions are also addressed:

1. Do students who participate in journaling rate the overall course score higher than

those in the control group?

2. Do students who participate in journaling rate the instructor score higher than those in the control group?
3. Do students who participate in journaling rate the course score higher than those in the control group?
4. Do students who participate in journaling rate the student score higher than those in the control group?

Many factors influence student perception of satisfaction with a course, this study also examined the effect of the grade students expect to receive on rating scores for overall course score, course score, instructor score and student score. Do students participating in the journaling exercise expect a higher grade than non-participants? Do the grades students expect to receive influence the ratings they give on the overall course, course, instructor, and student score?

Need for this Research

Journaling is an important educational strategy which may influence student perception of satisfaction with a course. Student satisfaction is important because it influences student motivation (Chute, Thomson, & Hancock, 1999; Donohue & Wong, 1997) and is a factor in student success. Bean and Bradley (1996) found that student satisfaction has a significant effect on performance. Student satisfaction is a good predictor of academic success (Donohue & Wong, 1997). Therefore research is needed to determine if the use of journaling effects student perception of satisfaction of course experience. In a broader sense, this study adds to the knowledge base of the effectiveness of instructional strategies from a student perspective.

Assumptions

The purpose of this research is to determine if the use of journaling effects student perception of satisfaction as expressed on end-of-course evaluations. The ultimate goal of this research is to support the use of instructional strategies as a means to improve the teaching-learning process for educators and students and to improve the overall course experience. These strategies are most often evaluated in terms of meeting the goals of educators. This includes changes in student behaviors, skills, attitudes or beliefs. This study is an effort to evaluate journaling from a student perspective as expressed on end-of-course evaluations. Evaluating student perception of the course experience will add to the knowledge base for educators using the strategy of journaling.

The instrument used in this study is the end-of-course student evaluation used at a community college, also known as the Student Opinion Survey (SOS). The instrument has been shown to be both reliable and valid. Details on the reliability and validity of the instrument will be provided in Chapter 2. This study relies on the assumption that the teacher responds appropriately to student journal entries and a level of trust has been established between the journal reader and the journal writer. There are factors that may influence end of course evaluation that are beyond the control of the researcher. These factors will be examined more closely in Chapter 2. A final assumption is that the student has the ability write and reflect.

Delimitations

Participants in this study are limited to nursing students enrolled in an associate degree nursing program at a large urban community college in the southeast. Participants are generally white females between the ages of 21 and 44; there are approximately 10%

males and 10% minorities. These characteristics may or may not be generalized to other associate degree nursing programs in the United States. The number of participants is limited to current enrollment in the program. Two levels of first year nursing students will be involved in this research, first and second semester students. For the purposes of this study the first semester students will be referred to as freshman students, and the second semester as sophomore. Expected enrollment for the study is approximately fifty students in each class. The attrition rate may influence the number of participants and the characteristics of the participants remaining. Participation in the study is voluntary and this may further restrict the number of participants.

Limitations

The researcher in this study was the instructor for one of the classes participating in the study. In any class, the teacher is considered to have an influence on the journaling response of students; but in this instance the group who “knows” the instructor may be more engaged in the journaling exercise than the group who doesn’t. Journaling responses may be influenced by a desire to please the instructor, or by a dislike of a particular instructor. The researcher emphasized to students that the information gathered for this study is for academic purposes, and one’s identity will not be revealed. Other factors that may influence the outcomes of this study include the quality of interaction with the instructor and institution, difficulty of material, internal motivation, relative failure or success and development of trust. The size of the sample limits the ability to generalize the study to larger populations. In addition, although there is some variability in age, other characteristics such as gender, race, and academic interests are very similar. The instrument used in this study is designed to measure student satisfaction, its

usefulness for determining the effectiveness of this instructional methodology on the overall perception of course experience may be limited.

Definitions

Clinical experience: In nursing education, it includes activities which surround the application of nursing theory and skills during hands on patient care.

Directed journaling: Writing is directed in prescribed ways, such as through writing prompts.

Educational Strategy: An education methodology used to assist students and teachers in the teaching learning process.

Journal writing: Expressive, personal writing in the first person about ideas that the writer believes to be important According to Bruner (1988) personal writing is a way to think, organize and construct meaning.

Reflection: Reflection can be thought of as an ongoing awareness of everyday thinking and action, incidents or events. Mezirow (1990) describes reflection as a conscious thought process that enables the correction of assumptions and distorted beliefs, leading to a review of interpretations and revision of behavior

Reflective journaling: Personal writing that presents a way to think, organize and construct meaning; Journaling has been described as putting the concept of reflection into action (Lauterbach & Hentz, 2005).

Random selection: Process of choosing a sample in such a way that each member of the population has an equal chance of being selected (Leedy & Ormond, 2001). In this study, experimental and control groups are randomly selected using a random selection software program.

Experimental Study: The purpose of an experimental study is to examine the possible influences that one factor or condition may have on another factor or condition (Leedy & Ormond, 2001). The experimental group receives a treatment.

Treatment: Intervention that may have an effect on the characteristics that we are studying (Leedy & Ormond, 2001). In this study the treatment is journaling and the experimental group participates in the intervention.

Control: Whenever two or more groups are compared, there may be differences in addition to the particular treatment being studied, called confounding variables. A control group is established that receives no treatment in order to control for these variables (Leedy & Ormond, 2001).

Independent variable: A variable that the researcher manipulates in an attempt to influence the outcome of the study (Leedy & Ormond, 2001). In this research the independent variables are journaling or no journaling.

Dependent variable: A variable that is potentially influenced by the independent variable is called a dependent variable. In this study the dependent variables are the student course evaluation and expected grades (Leedy & Ormond, 2001).

Posttest only control group design: Two groups are randomly assigned to control and experimental groups. Treatment is administered to the experimental group. A posttest is administered to both groups to draw inferences about cause and effect. Pretesting is not used because a suitable pretest is not available or because pretesting can influence the results of the experimental manipulation (Leedy & Ormond, 2001).

ANOVA: Statistical procedure used to look for differences among three or more means by comparing the variances both within and across groups (Leedy & Ormond, 2001).

Factor analysis: Statistical procedure used to examine how effectively one or more variables allow you to predict the value of another (dependent) variable (Leedy & Ormond, 2001).

Summary

Journal writing is described as a learning strategy used helping to students to both think and to learn to organize thinking. It is a way to connect theory and practical skills within a curriculum and assist students in finding personal meaning from experiences. Incorporating reflection into learning influences the environment, processes and focus of learning (Moon, 1999). Chapter 2 will provide a detailed review of literature concerning journal writing in education including: journaling to improve critical thinking, using journal writing in education; and evaluation of journaling writing, journaling prompts, evaluation of journaling by students and student satisfaction. Chapter 3 will describe in detail the design and methodology of the study. Chapter Four will report the results of the study. Chapter Five will conclude with a discussion of these results.

CHAPTER 2: REVIEW OF THE LITERATURE

Journaling represents a way to enhance thinking and learning behaviors by promoting review and reflection of experiences. Reflective journaling is shown to improve connections between theoretical learning and practical experiences. It allows students to assign personal meaning to experiences, promoting personal growth and self-improvement. This chapter reviews existing literature on the use of journal writing as an educational tool including the use of journaling exercises to improve critical thinking, using journaling in education, evaluation of journaling writing, the use of journaling prompts, evaluation of journaling by students, and student satisfaction.

Journaling to Improve Critical Thinking

Van Horn (2000) proposes that nursing educators face the challenge of developing strategies that will help students to solve problems, think critically, and make safe clinical decisions. Within nursing education, the activity of reflective journaling has been used for many years (Hannigan, 2001). Journaling is seen as a means to improve critical thinking thereby improving practice judgment. According to Chenoweth (1998), development of critical thinking is necessary for professional and personal growth and helps the student to apply principles from specific contexts and generalize them to situations encountered in professional practice. Landeen, Byrne and Brown (1992) find that the use of journals helps students change their attitudes towards psychiatric patients and develop more analytical thinking. Callister (1993) believes that the clinical journal

reflects nursing students' attitudes, feelings and cognitive learning in both objective and subjective student reporting. Writing in clinical journals is a common assignment for the development of critical thinking in nursing curriculum at all levels (Brown & Sorrell, 1993). Callister (1993) views journal writing as a means to improve critical thinking by making clear linkages between classroom theory and clinical practice. For example, student nurses are taught drug classifications, the actions of medications given to patients and potential complications and side effects. Although students are well versed in the theoretical side of medication administration students often can't make the connection to practice until it is experienced during patient care. The following journal entry demonstrates this concept:

One of my patients was in Atrial Fibrillation and had Digoxin on her MAR (medication administration record). However, because she had Cardizem, her Pulse went down to low 50's. I was not comfortable giving her Digoxin, so I waited about a couple of hours until her heart rate went up to 60 before I gave it. I told my preceptor about it beforehand and she said hold on to the med and just frequently monitor if the pulse goes up. She said that even if it was only 60 it should be okay because the patient had Atrial-fibrillation anyway and needs for her heart muscle to be stronger in pumping blood. I think this knowledge about frequent monitoring of VS and relating them to the drugs being given is a very good practice. Also, seeing the implications of numbers and not just looking at them as mere numbers will help me think more like a nurse. However, knowing the disease process as well will help me weigh the choices I have whether to hold a medication for good or just wait a little longer. (Student Nurse Journal Entry, 2008)

Journal writing allows students to evaluate specific subjective and objective data in a meaningful way relevant to nursing practice (Brown and Sorrell, 1993). Patton et al. (1997) discuss their experiences with student journal writing. They believe the journals demonstrate student growth in knowledge, ability, and self-assurance and improve ability to integrate theory with clinical practice. Heinrich (1992) also contends that journal writing increases self-esteem and self-confidence in decision making. Journal writing is

an important strategy that helps student use previously learned concepts and principles to improve concept development (Lashley and Wittstadt, 1993).

Thus, journal writing assists students in developing observational skills and clinical practice (Callister, 1993; Heinrich, 1992). This is especially important to nursing students, who need to develop the ability to reflect thoroughly on these experiences. In addition, it can be used as a forum from which students are able to make sense of their experiences and build relationships between the abstract and concrete (Heinrich, 1992). Through journaling students are able to evaluate and validate experiences and feelings. Journaling helps students express feelings and develop empathy while providing nursing care (Callister, 1993). As shown in the journaling quote, writing about experiences helps students to gain perspective on difficult situations, improving the ability to react appropriately and apply learned theoretical principles (Patton et al., 1997). Additional benefits to journal writing may include the opportunity to ask faculty questions they might not otherwise ask, to share thoughts, and to keep faculty informed of learning experiences (Patton et al., 1997). Important linkages exist between journal writing and prior knowledge, skill improvement, decision making, critical thinking, observation, data collection, developing empathy and releasing feelings (Patton et al., 1997).

Using Journaling in Education

An important assumption in the education of adult learners is that adults are independent, self-directed learners with important prior life experiences. When educating adult learners, the teacher should include learning activities that encourage self-direction and student participation (Taylor, 1997). Self-directed learning is important in helping to develop pro-active rather than reactive thinking, which in turn leads to professional

growth (Gillen, 1991; Saylor, 1990; Stark, 1994). This is an important aspect of nursing education, where students must learn to anticipate and prevent problems situations, as opposed to only being able to react when problems arise. Professional nurses need to act in an accountable and autonomous manner and self-directed learning is shown to enhance both of these qualities (Cameron & Mitchell, 1993). The ability to act autonomously and think critically is basic to the development of a self-directed learning process (Newell, 1992). Journal writing promotes reflection and self-evaluation. Self-evaluation allows the student to identify learning needs and provide input into the learning process. Students use evaluation and the reflective process to identify strengths and weakness and structure learning accordingly. Journaling is one type of self-directed learning, which can foster this learning.

Sharing thoughts and feelings with a teacher through writing is often a new experience for students and some discomfort may exist on the part of the students. Saylor (1990) discusses the importance of a safe learning environment in which students are able to critically examine learning experiences. They can evaluate actions and situations and identify areas for growth and improvement without fearing judgment or punishment. Reflective journal writing can be one method of providing a safe, confidential learning environment (Callister, 1993; Cameron & Mitchell, 1993; Saylor, 1990). Teachers must respond to journaling respectfully, with sensitivity and compassion (Pierson 1998). The trust between student and teacher develops as each tries to understand the perspectives and meaning of others (Heinrich, 1992; Paterson 1995).

Journal writing can be described as a form of cooperative education when used to build connections between the learner and other students. According to Johnson et al.

(1994) cooperative learning in higher education is used to assist students in the following areas: constructing knowledge through discovery; actively engaging in the learning process; learning social skills through interaction between students and teacher; and to developing student competencies and talents. Dewey promotes cooperative education as part of instruction, believing that students can teach each other and learn from each other (Johnson et al., 1994). Research indicates that cooperative learning increases academic achievement, critical thinking, self-confidence, and cooperative spirit (Gabbert, Johnson, et al., 1987; Slavin, 1988). Cooperative learning has been demonstrated to decrease anxiety, increase motivation, and change attitudes (Fitzgerald, et al.1997; Hardin & Hollingsead, 1997). In this regard, journaling facilitates the benefits of cooperative learning.

Cooperative learning in nursing education is known as a strategy that promotes critical thinking and problem solving (Van Horn, 2000). Baumberger-Henry (1998) believe that students who use problem solving skills through cooperative learning demonstrate better decision making than students who were taught using lecture methods. Van Horn's (2000) research study combines journal writing with peer collaboration and group discussion. Paired students are asked to share journal entries with their partner. After discussion between the paired students, a group discussion is conducted. The author examines the presence of reflection in unpaired students and paired students and found that paired students demonstrate greater reflective qualities in their journals. She relates that the group discussion helps all students with decision making processes.

Minghella and Benson (1995) discuss using a cooperative education approach by having students record and share perception of critical incidents with peers in a classroom

setting. In a method they describe as experiential, Riley-Doucet and Wilson (1996) present a three step-method of self-reflection, using journal writing. This method involves first using specific guidelines for journal writing and then sharing of experiences with students as part of post-clinical group meeting. Finally, students are asked to evaluate their learning experiences using specific guidelines. The results of this three step process are evaluated using student and faculty feedback. The feedback is summarized anecdotally by the authors. Students reported an increased ability to recognize their areas of strength and growth. Teachers also report an increase in student participation in collaborative decision making and autonomy.

Pierson (1998) discusses the importance of making time for students to reflect both “in action and on action” (p.107). In this context, journal writing is considered the opportunity for nursing students to become observers of their own learning, describing experiences and then reflecting on them. Pierson (1998) describes two ways of using journaling as part of nursing clinical activities. The first is described as a calculative or scientific method, in which students list the activities of the day as accomplishments. Students also list the effects of medications, disease etiologies and other knowledge related to nursing practice. The second method is to record journal entries as conversational dialogues. The dialogue takes on elements of conversation and requires the help of someone in uncovering the assumptions and deeper meanings of clinical situations. Pierson (1998) incorporates “debriefing sessions,” in which time is taken to focus on “reflection-in-action.” This occurs throughout the clinical day as brief conversations with students. The conversations are time to analyze situations to enhance understanding which may then be reflected in journal writing.

Andrews (1998) uses journaling as a method of building community and trust through dialogue. She bases this method on the work of Diekelmann (1997), who advocates narrative pedagogy, in which teachers are asked to bring dilemmas of everyday life to the classroom and clinical arena. Andrews keeps a weekly journal using the same prompts she provides to students as guidelines for maintaining their own journals. Each week, she shares her journal entries with her clinical students. As a result, the students become more open in their own journals and seem to develop empathy as they react to the situations and concerns similar to those of their instructor.

Evaluation of Journal Writing

Although journal writing can facilitate reflection, improve clinical practice and foster personal and professional growth, there is little agreement on how best to evaluate journaling activities or, even if journals should be evaluated. Scott (2005) writes of the complexity teachers encounter when evaluating student writing. Students may respond to the teacher in a ways they believe are expected and reflect “good student behavior.” This, in turn, may cause teachers to question the honesty of reflection. In addition, students may feel that they are contributing to their own evaluation and adjust writings to reflect this. At times, students feel uncertain about expectations and are compelled to write what the teacher wants (teacher dominance) (Scott, 2005). There may be feelings of antagonism and resistance to journal writing. Some students feel journaling is a personal activity which should not to be shared with others (Cameron & Mitchell, 1993).

Many teachers find that students often use journaling to merely record experiences and do not truly reflect on the experiences. In turn teachers feel it is important to assess journal writing for evidence of reflection (Pee et al., 2002; Plack et

al.2005). Others believe that evaluating the journals may lead to inhibition and loss of trust on the part of students (Bourner, 2003; Kerta, 1996). Boud et al. (2001) feel strongly that reflection requires a protected environment and any sharing of journal writing will lead to diminishing of self-exploration and reflection. They continue by saying, "The more that journal writing moves into the realm of critical reflection, that is, the questioning of taken-for-granted assumptions about one-self, one's group, or the conditions in which one operates, the more it is necessary to consider the inhibiting gaze of others."(p.15). Journal writing should be private, and not seen by anyone other than the writer. This is especially true if the primary purpose is reflection. The anticipation of writing for an external audience can intensely shape what is written and even what is contemplated Boud et al. (2001).

Teachers often find it difficult to grade journals and realize that assigning a grade can change the nature of the journal writing in that students begin working for a "grade" and no longer focus on reflecting on experiences. Even so, many instructors agree with Plack et al. (2005) who argue that although grading may influence what students write, it is more important for teachers to consider the need to develop reflective practitioners. Central to this development is the need for a mechanism to assess a nursing students' capacity to reflect. Bourner (2003) adds to this discussion by emphasizing what most teachers know; students pay the most attention to work that is graded. In addition, journal writing can be an important way for faculty to gain insight into the effectiveness of their own teaching strategies (Bourner, 2003). Another important point is made by Plack et al. (2005) is that student journals may be used to help in the documentation of teaching

outcomes necessary for program accreditation, and so are felt necessary to sound educational practice.

A number of qualitative studies exist examining the content of reflective writing (Drevdahl & Dorcy, 2002; Jenson & Denton, 1991; Pellico, 2004; Van Horn, 2000; Williams et al., 2002; Wong, et al., 1995). Each analyzes the content of journals for various themes including communication, interpersonal interactions, personal growth, professional knowledge and skills. Pee et al. (2002) describes assessing content for levels of reflection. A focus is to determine whether journal entries are just recordings of experiences on a descriptive level, or reflective exercises demonstrating analysis of experience at deeper levels. The following example illustrates a student reciting a list of activities with little time effort spent on identifying and expanding on a significant event that needs reflection.

Day 1: My preceptor and I were given 6 patients and she asked me how many did I want? Like a big dummy I said all of them. 12 hours later , 34 accucheck, 29 insulin injections, Pull 1 Dobb-Hoff, Insert 1 Dobb-Hoff, (yes, some one clogged it off by not flushing enough.), pulled 1 PICC line, sent home 2 patients, insert 1 Foley, 4 IV push, 1 Piggy back, and a restart on an infiltrated IV, and give a grand combination of 267 different doses of oral meds. I hung in there pretty well, but I will freely admit to needing more ability with multi-tasking and being able to pace myself for the entire 12 hours. (Student Nurse Journal Entry, 2007)

While some qualitative studies examine the content of journals, other studies use quantitative measures to analyze the process of reflection. Wong et al. (1995) present a mechanism to analyze journals in terms of the levels of reflection present. They use categories such as non-reflector, reflector, or critical reflector. Williams et al. (2002) utilize a six-point ordinal scale to assess the level of reflection present in physical therapy students' journals. Pee et al. (2002) employ structured worksheets to assess whether dental hygiene students show evidence of reflection in journal entries. Van Horn (2000)

identifies qualities of reflection in the journals of nursing students with a rubric. Hettich (1990) makes use of Bloom's taxonomy to identify levels of learning in the journals of psychology students. Pellico (2004) utilizes narrative analysis, identifying four archetypes in student nurse journals including; student nurse as hero, sentry, ministering angel and overwhelmed novice. Ritchie (2003) examines student journals for recurrent themes. The themes identified include building trust and saving face. Plack et al. (2005) present codes and operational definitions based on the work of Boud et al. (2001), Mezirow (1990), and Schon (1987). Plack et al.(2005) evaluate physical therapy student journals for nine themes of reflective practice including reflection in action, reflection on action, content reflection, process reflection, premise reflection, relates experience, attends to feelings, and evaluation of experience. Overall, many methods of assessing student journals are identified. Most assessments look for themes or characteristics that demonstrate some level of reflection, analysis and professional growth. Many studies report themes and the presence of degrees of reflection. Some report statistical reliability of various results. There is little consistency in evaluative techniques used in assessing journal writing but, as Boud et al. (2001) writes, at a minimum journals should show qualities of critical thinking, self-evaluation, and growth. In order to accomplish this students must understand the goals of the journal writing exercise and be provided with clear expectations, and guidelines before journaling begins.

Journaling Prompts

Most authors agree journaling is most effective if the exercise is a guided activity rather than an activity in which a student is free to write about any aspect of an experience which they feel is important (O'Connell & Dymont, 2003). Often, students are

given only general guidelines on journal writing, for the most part these guidelines are not provided in the literature. Indeed the literature only provides the general points made to students about journaling, including the importance of reflective practice to their profession and the importance of making consistent journal entries which are dated and relate to course concepts (Dye, 2005; Riley-Doucet & Wilson, 1997; Ritche, 2003; O'Connell & Dymont, 2003; Plack et al., 2005). Some articles recommend the use of specific structured prompts which are provided in the literature (Andrews, 1998; Ibaretta & McLeod, 2004; Patton et al., 1997; Ruland & Ahern, 2007).

Richie (2003) discusses the importance of journaling to maintain dialogue between students and the teacher, by giving students general guidelines and suggestions for documenting in their journals. Hettich (1990) provides psychology students with general written guidelines which emphasize the importance of focusing on concepts, not just anecdotal experiences. He asserts that this creates dialogue between the teacher and student. For nursing students the importance of the journal entry as the beginning of dialogue to promote personal and professional is evident in the following entry written during a student internship experience:

I seem to be hanging on to the student role and not letting go. For some reason I want to be told what to do instead of me just doing it because I know how to do it and can. Comparing this to clinical I guess I am just plain afraid. I fear getting kicked out of school because of some stupid thing I did or wasn't watched doing. I think back on all the other students that were not able to stay in the program because of some trivial thing (it's just what we thought). That's probably why I feel the need to be supervised in all I do. Although I feel the way I do about everything, I know that this is not what was intended for me in my preceptorship experience so I can see I'm letting go of that a little. I guess I'm just being a little extra cautious about making mistakes and all that comes along with (Student Nurse Journal Entry, 2007).

Many educators studying the use of journaling provide students with instruction on journaling through a workshop approach. O'Connell & Dymont (2003) investigate the influence of a journaling workshop on the students' perception of journaling. The researcher hypothesizes that students who had participate in the workshop have a more positive perception and experience of journaling compared to students who did not participate in a workshop. The results are inconclusive, showing a positive change in perception in one subset of students (women) in one university studied.

A unique approach to journaling is discussed by Andrews (1998). She feels that journaling can best demonstrated by first sending her own weekly journal to students. Doing this opens a dialogue with students and demonstrates reflective journaling. From personal experience she discovered that beginning the journal is difficult and so developed a list of writing prompts. Andrews further provides examples of the writing prompts used by both herself and her students in their journaling exercise. The questions given to the students include, "The one new thing I learned today was..." and "I was surprised when..." (Andrews, 1998, p.358). In her journal Andrews reflects on a significant event, conversation, or dilemma. This is shared with students. In turn, students give feedback to Andrews and dialogue is initiated. Andrews sees this as being very effective in helping students with their own journaling.

Patton, et al. (1997) also views journal writing as dialogue between student and teacher, subscribing to the view of Brown and Sorrell (1993). Journaling is described as an opportunity to make sense of mistakes and successes and is not just an accounting of hours and experiences. In their article on enhancing journal writing, Patton et al. (1997) includes the specific instructions given to nursing students on journal writing. Students

are instructed to select a clinical day and write a journal entry describing one clinical incident which they found significant. They are asked to describe the patient care episodes which stimulated thinking. For each journal entry students are asked to discuss five of the following prompts and are given one point for each that was addressed in their journals:

1. Describe what nursing interventions you or others did.
2. Describe your decision-making process.
3. Describe what you would do differently when a similar incident occurs.
4. Describe the clinical incident in relationship to the parts and the whole.
5. Identify previously learned knowledge/clinical experiences that helped you in this situation.
6. Use Benner's competency statements and describe where you view yourself.
7. Describe your areas of strengths and weakness. Include your thoughts, perceptions .and feelings.
8. Describe resources you identified and/or utilized and your rationale (Patton, et al., 1997, p. 238).

While exploring the implementation of journal writing during the second year of a baccalaureate nursing program, Ibaretta and McLeod (2004) discuss their procedure for introducing journal writing. At orientation structured guidelines on journal writing are presented to the students. Students are then asked to write weekly journals of their clinical experiences. The authors state that their guidelines are based on the work of Brown and Sorrell (1993) and Callister (1993). According to these guidelines, journal entries should provide a record of events, observations, feelings and context which the

students use as a basis for analysis, reflection, planning, and evaluation. Journal writing then becomes an intentional method of problem solving and self-directed learning. Examples of three guideline questions are provided in this article; “Identify significant events that occurred in your clinical experience,” “Identify what you have learned in your experience,” “Identify a theory or theorist you could use that is relevant to this situation” (Ibaretta & McLeod, 2004, p.135). This method encourages students to document, summarize, analyze, and evaluate important experiences from their clinical practicum.

Plack, et al. (2005) conducts research on a method of assessing reflection of physical therapy students. As part of the procedure students spend 1.5 hours in a discussion of reflective practice. In addition, students are given an operational definition of terms to be used and questions which can be used as “reflection starters.” The source the operational definitions are based on the works of Schon (1987), Mezirow (1990), and Boud (1985). The researchers use the operational definitions to develop coding schema to determine the use of reflective process in student journals, although questions used as “reflection starters” are not provided.

Ruland and Ahern (2007) examine the use of reflective writing to transform student perspectives about practice and education. In working with RN to BSN students they noticed that many students returning for further education lack open-mindedness and the ability or willingness to be reflective. The authors state that structured reflective exercises provide a framework for individuals to improve their understanding of challenging situations. It allows for reflection on assumptions, biases, and values that influence their experience. This is essential to the practice of nursing in which pre-

existing ideas easily influence the care nurses provide. The following illustrates the importance of the willingness to be open-minded and reflective.

Today I took care of a very sad patient. She was a young woman, married with two children and she has overdosed on three prescribed medications and alcohol in an effort to commit suicide. She was very pleasant person, I had no problems with her but, she was very sad and depressed. I thought about how sorry I felt for her and her family. She had a lot of questions about the medicine she was taking and why she had a sitter outside the door of the room. It was hard to be the nurse and not let my personal feelings get in the way of me doing my job and being objective. I tried to answer her questions and explain to her that with her situation she had to have a sitter. She slept most of the day and that afternoon someone from mental health came to visit her and they decided that she needed to go with them for the time being and spend some time in the mental health part of the hospital. She spoke with me about this and she was happy to get help but at the same time she had received help on previous occasions and it had never worked. I told her goodbye and hoped for the best for her. Today made me really think about a lot of things and see situations in new ways (Student Nurse Journal Entry, 2007).

Ruland and Ahern (2007) provide a series of reflective prompts designed to encourage personal reflection that is necessary to examine and improve nursing practice, including examples of eight prompts used in the course. Each reflective prompt is a broad, multi-part question. Students are asked to answer 2 different questions from the broad categories until a total of 12 of the questions are answered at least once. The directions emphasize the importance of describing thoughts and feelings more than actual activities. Details about what happened should be given only to the extent needed to put the situation into context. The directions reinforce the anonymity of the journal: the journal will not be read by anyone except the student's instructor. One of the broad reflective prompts was:

Describe a situation in which you experienced a conflict between your professional values and that of others with whom you work. Describe how you became aware of this situation, your thoughts surrounding the situation, and how you dealt with it. Remember to focus on your thinking as much as your behavior.

How effective was your thinking in this situation?” (Ruland & Ahern, 2007, p.85).

Another source of prompts used for this research is Dr. Boyd Davis, English professor at the University of North Carolina at Charlotte. Dr. Davis is a proponent of journaling for many years and has been involved in research studies on critical thinking and journaling. She provided examples of journaling prompts that could be used in a clinical nursing situation such as:

- “What I’m excited about”
- “What I’m nervous about”
- “What I’m curious about”
- “What I’ve got to prepare for”
- “What I’ve heard about it”
- “What I need to read about” (Davis, Personal Interview, November, 2006).

The purpose of this study is to determine if the use of journaling as part of a nursing course effects student perception of the course. Following guidelines and information provided in the literature, the researcher developed a series of structured journal prompts that are used as part of this experimental investigation. Chapter 3 examines how the journaling exercise are formatted and the population this study is investigating. See Appendix B for the journaling prompts developed for this research.

Evaluation of Journaling by Students

While no literature was found delineating the influence of journal writing on student satisfaction, there are studies in which students specifically evaluate the use of journaling as part of their curriculum. These studies indicate student response to journaling is positive. This is important to the basis of this study which goes beyond the

evaluation of student opinions of the use of journaling to explore whether the use of journaling influences student perception of the overall course experience.

Ritchie (2003) describes a qualitative study in which unstructured data was collected from nursing students' weekly journal entries over a seven-week period, and later from a focus group interview that occurred three months after the conclusion of the clinical experience. The journal entries are reflections of the student's clinical experiences, including reactions to patient care situations, interactions with families, and the meaning of the experience for them. The students were given guidelines and told the journal writing is intended to document their clinical experiences and to provide an opportunity to dialogue with the faculty member. Faculty responses to the journaling are non-judgmental and encouraging and the journals are not graded. Later, an hour-long focus group is conducted beginning with the question, "Tell me what it was like for you to write down your thoughts about your clinical experiences in a journal," as well as other questions that focus on understanding the experience of journal writing for the group. All journal entries and the focus group responses are transcribed into a text file. The responses are analyzed for statements or phrases which seem revealing of the experience described. Excerpts from the student journals are used to illustrate responses to the focus questions about the experience of journaling. Findings indicate that the experience of journal writing improves nursing students' personal and professional development (Ritchie, 2003).

Arrendondo & Rucinsky (1994) look at the impact of incorporating reflective journals into a graduate and undergraduate education in workshop approach. This approach consists of four key components including: reflective journals, individual

student-faculty conferences, structured small group discussions on the progress of the project with peers; and presentation of the final product to the class. Evaluation consists of a questionnaire of seven rated items and three open-ended questions answered by students. The purpose of the questionnaire is to determine the students' perceptions of the impact of the workshop approach and the reflective journals on their learning process. The study finds that student perception is generally positive. Results also indicate journaling improves self-regulation and meta-cognitive thinking. Students attribute this to their higher level of involvement.

In another study, Ibarreta (2004) asks students to write journal entries for each day of their clinical rotation. Constructive feedback on their journal entries is provided weekly. Journals are not graded. At the end of the clinical rotation students are asked to evaluate the experience of journal writing. According to Ibarreta (2004) results indicate that, although there are a variety of responses, the overall response is favorable. Students generally have two suggestions for improving the experience: first more feedback and directions from the teacher reading the journals; and second, more help identifying theories involved with the experiences documented in journals.

In a similar study, physical therapy students are asked to maintain a weekly journal as part of their clinical rotation using the Subjective, Objective, Assessment, Planning (SOAP) note format. Students submit the journals on a weekly basis and are given occasional feedback on their notes to encourage further reflection. Student perceptions of the benefits and pitfalls of the journaling activity are then gathered through a focus group interview. Results of the focus group are divided into four categories relating to clarity of format, effect of feedback, support of summative evaluations and

self-recognition of progress. Overall, the students' perceptions are that structured S.O.A.P. format improves their ability to reflect more fully on their clinical experience (Dye, 2005).

A study by O'Connell and Dymont (2003) discusses student perceptions of journaling in a university outdoor experiential education field-course. In this study, a total of 62 post secondary students from two selected university programs are randomly assigned to either a control group or experimental group. Before the field experience students in the experimental group are given a 45 minute workshop on strategies for effective journaling. The control group received no workshop. Immediately before and after their field experience, both groups completed a quantitative questionnaire containing 38 questions that explore their perceptions of journaling. Findings indicate that the students participating in the workshop have a more positive perception of the journaling experience.

Hettich (1990) also reports positive student response to journaling exercises. In his study 440 psychology students are asked to complete a two-page survey seeking their opinions about various aspects of journal writing. Journal writing is rated highly as a means of stimulating critical thinking. Students prefer writing in a journal instead of a term paper and students report journaling allows them to address a wider range of topics, is more personal in nature, and is a continuing process.

Student Satisfaction

According to Cheng & Tam (1997) higher education is increasingly recognized as a service industry with greater emphasis placed on meeting the expectations and needs of its customers, who are students. Student satisfaction is connected to improved retention,

academic, personal and professional success (Corts et al., 2000). Questionnaires eliciting student opinions are frequently used to measure of quality of service (McKeachie, 1997). Within higher education there is increased commitment to effectively applying this data to assure learning and teaching standards (Murphy & Harris, 1995). In addition, in spite of conflicting claims about effectiveness, there is an increased use of this data as part of annual review, promotion, or tenure decisions, (Algozzine et al., 2004; Boland & Sims, 1988)

Although student satisfaction is assessed using many factors, it is understood that teaching-learning factors hold primary importance in educational outcomes and student satisfaction. Ansari and Oskrochi (2004) present research examining what “really” affects students’ satisfaction with their educational experience in the health profession. Ansari and Oskrochi (2004) identify 4 main groupings that should be considered in understanding student satisfaction. These include: a variety of learning and teaching “climate” factors, a range of educational variables, an assortment of student demographic variables, and the interaction of these factors. Climate factors include: course content, structure, teaching-learning strategies, and feedback, support and assessment procedures. Educational variables include course characteristics, the level of the course, class size, the academic term in which the course runs, assessment strategies, and whether students are full or part-time. Demographic variables include gender, ethnicity, age, disability status, entry qualifications, educational goals and expected grade. At the conclusion of the study, the authors emphasize that all variables collectively interact to generate satisfaction, and it is very challenging to really understand which variables are at play in any given situation.

Overall, they discovered that educational variables are the most pronounced in influencing student satisfaction, and demographic variables are the least effective.

Teaching is the primary mission at most institutions of higher learning (Dilts, Haber & Bialikk, 1994). Peer, self, administrative, and student evaluations, as well as student outcomes are sources of data often used to document faculty teaching effectiveness. But, the historical and traditional method of evaluating teaching effectiveness in university classes is to have students provide feedback on teaching effectiveness through end of course surveys. The most common characteristics of course evaluations include:

- a) Questions about the course content and teaching effectiveness.
- b) At least one item concerns “overall” effectiveness.
- c) Written comments about the course content and effectiveness of the instructor.
- d) Anonymity of responses.
- e) The survey is conducted at the end of the term.
- f) Results are summarized across instructors, departments, and colleges as evidence of teaching effectiveness and used to make decisions about professional development.
- g) Student, course, and instructor differences across the institution are ignored in the analysis and reporting of “effectiveness” scores.

Unfortunately, although there is agreement on the importance of teaching effectiveness to students and the institution, there is no single definition of what makes an effective teacher. Johnston (1996) reports that according to faculty and administrators, the most important functions of faculty include classroom/teaching effectiveness,

attendance and reliability, innovation in teaching methods/materials, service on committees, and curriculum development. After examining faculty teaching through students' course experience questionnaires, Cowman (1996) finds that, although teaching is an important part of nursing education, performance indicators of this function are the least studied.

McKeachie (1997) supports the idea that students' ratings of instructors are valid, but believes that care should be taken to avoid judging teaching effectiveness on the basis of personal characteristics, such as enthusiasm. He also questions the student perception of what effective teaching is, noting that not all teachers are equally effective for all goals and all students. This is supported by Cowman (1996) who found significant differences exist in ratings of good teaching between students of the Republic of Ireland and students of Northern Ireland. Another example is Thompson and Sheckley (1997) who examine differences between traditional nursing students and adult baccalaureate nursing student rating of best teaching practices. The adult nursing student exhibits a stronger preference for knowledgeable and organized teachers. Although McKeachie (1997) finds that small classroom size is preferable, he believes this can be attributed to the use of discussion and essay question in this setting. Still, McKeachie (1997) concludes that student ratings are the most valid source of data on teaching effectiveness, noting that the ratings are valid but the way the ratings are used by administrative personnel is often not valid.

Marsh (1984) examines an extensive review of the validity, reliability, dimensionality, usage and inherent biases of student evaluations. This study led to the development of the Students' Evaluations of Educational Quality (SEEQ) instrument. Marsh finds that student ratings are multidimensional, reliable and stable and relate more

to the instructor who teaches the course rather than to the course taught. In addition, he concludes that student evaluations are valid against a variety of teaching effectiveness measures and relatively unaffected by potential personal biases.

In a later study, Marsh and Roche (1997) confirm that teaching effectiveness is a multi-dimensional construct with nine factors that consistently appear as a result of factor analysis of large sets of data from diverse higher educational settings. The nine factors are 1) learning/value, 2) enthusiasm, 3) organization, 4) group interaction, 5) individual rapport, 6) breadth of coverage, 7) examinations/grading, 8) assignments, and 9) workload/difficulty. These dimensions are incorporated into the SEEQ. According to Marsh and Roche (1997), student evaluation of teaching using this multidimensional approach are very useful in determining teaching effectiveness, but care must be taken not to emphasize the overall rating that combines them.

Algozzine et al. (2004) considers factors that correlate with evaluation of teaching that include the relationship between the course, student, and instructor characteristics and students' ratings of teaching. They also examine the relationship between student ratings, evaluation procedures, and student grades. Course characteristics include factors which the instructor cannot control such as class size, course requirements, and undergraduate or graduate level, and topic difficulty. They outline many studies examining the relationship between student evaluation of teaching and course characteristics with varying results. Student characteristics studied include previous experience with teachers, ability level, gender, interest in the subject matter, and attitude similarities with the teacher. Again, different studies yield different results and for the most part, either relationships are weak, or results are inconsistent. Investigations into

instructor characteristics reveal factors including gender, expressiveness, experience, and rank. As with student characteristics researchers come to the same conclusions; results are inconclusive and at times controversial (Algozzine et al., 2004).

Another set of factors that can influence the results of student evaluations are referred to as procedural characteristics. These include student anonymity, direction, and presence of the teacher (Algozzine et al., 2004). Marsh and Roche (1997) report slightly higher ratings are in evidence if student identity is not anonymous or if the teacher is present when the evaluations are being completed. They also find that higher ratings are obtained if students are aware that the evaluations are being used for tenure or promotion decisions. Other researchers have demonstrated that students' expectation of higher grade tends to favorably influence student course evaluations. They go on to report that although a grading leniency effect may produce some bias, support for this is weak and the effect is likely to be unsubstantial (Algozzine et al., 2004). Another study by Young, Delli and Johnson (1999) contradicts this, finding that the purpose of the assessment did not influence rating by students.

Although many studies have been conducted concerning the effect of multiple variables on students' course evaluations, the results have been mixed and inconsistent with no clear direct relationship defined. According to d'Apollonia and Abrami (1997) unless the variables can change the validity coefficient (the correlation between student ratings and student learning) they cannot be described as biasing variables. This has leads to many different opinions about the usefulness of students' evaluations of teaching and should serve as a reminder that many factors work together to influence student perception of teaching effectiveness.

Summary

Journal writing has been used in education to improve critical thinking which is seen as important to personal and professional growth. How nursing students perceive their experience in course work is critical to their overall satisfaction with nursing programs. In nursing education it is important to understand whether certain instructional strategies not only improve students clinical skills but also prove more meaningful to overall satisfaction with student perception of the overall course experience. This strategy helps nursing students make sense of experiences and improve critical thinking by building relationships between the abstract and concrete. It helps to build critical thinking paths through the development of subjective and objective reporting on attitude, feelings, and cognitive learning (Callister, 1993; Chenoweth, 1998; Heinrich, 1992).

Journaling is used in a variety of ways in education, especially as an activity that promotes self-direction in the learning process. Journaling is described as a form of cooperative education which develops social skills, knowledge through discovery, self-confidence, and the spirit of cooperation in ways that improve communication and understanding between teacher and student (Johnson et al., 1994).

Evaluation of journal writing has proven difficult to accomplish with many variations provided in existing literature. Many evaluation techniques focus determining if the writings contain elements of reflection on experiences or are simply recounting of activities completed within a day (Pee et al., 2002; Plack et al., 2005; Van Horn, 2000; Williams, 2002; Wong, 1995). Differences exist on whether journals should be graded activities or private and only for the benefit of the journal writer (Boud et al., 2001; Plack, et al., 2005).

It is clear that journal writing is most useful when it is directed by the instructor. A variety of writing prompts have been developed to assist students in the effective use of this strategy (Andrews, 1998; Ibaretta & McLeod, 2004; Patton et al., 1997; Ruland & Ahern, 2007). Often, studies are focused on using workshop or educational seminars to educate and direct journaling (Ibaretta & McLeod, 2004; O'Connell & Dymont, 2003). Journaling directions vary from general oral or written guidelines to detailed written prompts with point value assigned for each concept addressed by students in their journals.

As part of research studies on journaling, students are often asked to evaluate the use of journaling within their course. This is most often done in the form of questionnaires and focus groups (Arrendo & Rucinsky, 1994; Ibarreta, 20004; O'Connell & Dymont, 2003; Ritchie, 2003). Studies most often report positive results from the incorporation of journaling in their course. At times specific suggestions by students are made on how the experience could be improved (Iberetta, 2004).

Many studies exist evaluating the characteristics of good teachers and other factors which influence the perception of student satisfaction with a course. Some of the foremost studies have been done by Marsh (1984) and McKeachie (1997), both have development specific instruments for measuring student satisfaction that are widely used. Algozzine et al. (2004) conducted a comprehensive review of the history and use of student evaluation of teachers and discuss further studies which validate, or leave questionable the use of these instruments.

In summary, literature on journal writing in education focuses on journaling to improve critical thinking, how journaling is used in education, the evaluation of journal

writing, the use of prompts in journaling, and how students evaluate the use of journaling as part of a course. In, addition to examining the literature on journaling this chapter examines the components of student satisfaction and variables surrounding evaluation of student satisfaction. Chapter three will discuss the research methodology used to conduct this study, including research questions, participants, research design, instrumentation, data collection, and data analysis.

CHAPTER 3: METHODOLOGY

The purpose of this research is to determine if the influence of journaling as an educational strategy on student perception of the course experience as measured on the end of course student evaluation survey (Student Opinion Survey). This chapter describes the research methodology that was used to conduct the study. The following sections are included: research questions, participants, research design, instrumentation, data collection, data analysis, and summary.

Research questions

Research questions in this study are designed to reflect subcategories of the end-of-course student evaluation tool used to measure the influence of journaling on the perception of course experience of community college nursing students. The subcategories of the instrument are related to instructor variables, course variables and student variables. In addition, the overall score course score will be examined. Other research questions are formulated to test the relationship of student grade expectation to student scores on the end-of-course evaluation. This is done as a control measure since “grade expectation” is a variable known to have influence on student satisfaction (Algozzine et al., 2004). Participants in the study were randomly assigned to experimental and control groups. Experimental groups participated in journaling exercises. The control groups were given an alternate equivalent assignment. This study will examine the following research questions and hypothesis:

1. Do participants in the experimental group rate the overall course score higher than those in the control group?
2. Do participants in the experimental group rate the instructor score higher than those in the control group?
3. Do participants in the experimental group rate the course score higher than those in the control group?
4. Do participants in the experimental group rate the student score higher than those in the control group?
5. Is the students' rating of overall course score influenced by the grade they expect to receive?
6. Is the students' rating of instructor score influenced by the grade they expect to receive?
7. Is the students' rating of course score influenced by the grade they expect to receive?
8. Is the students' rating of student score influenced by the grade they expect to receive?

Hypothesis

The following research hypotheses are used for this study:

1. The journaling group will rate the overall course score higher than the non-journaling group.
2. The journaling group will rate the instructor score higher than the non-journaling group.

3. The journaling group will rate the course score higher than the non-journaling group.
4. The journaling group will rate the student score higher than the non-journaling group.
5. The student rating of the overall course score is influenced by the grade they expect to receive.
6. The student rating of the instructor score is influenced by the grade they expect to receive.
7. The student rating of the course score is influenced by the grade they expect to receive.
8. The student rating of the student score is influenced by the grade they expect to receive.

Research Design

According to Leedy and Ormrod (2001) in true experimental research, the researcher manipulates the independent variable and examines its effect on another, dependent variable. In this study the independent variable of journaling or no journaling is studied in relationship to the dependent variables of student course evaluation and grade expected. This experimental quantitative study employs a posttest-only control group design.

Definitions

Independent variable: A variable that the researcher manipulates in an attempt to influence the outcome of the study (Leedy & Ormond, 2001). In this research the independent variables are journaling or no journaling.

Dependent variable: A variable that is potentially influenced by the independent variable is called a dependent variable. In this study the dependent variables are the student course evaluation and expected grades (Leedy & Ormond, 2001).

Posttest only control group design: Two groups are randomly assigned to control and experimental groups. Treatment is administered to the experimental group. A posttest is administered to both groups to draw inferences about cause and effect. Pretesting is not used because a suitable pretest is not available or because pretesting can influence the results of the experimental manipulation (Leedy & Ormond, 2001).

Participants

This experimental research study was conducted using participants from one large urban community college in the southeastern United States. The sample consists of two groups of nursing students enrolled in an associate degree nursing program at this community college. This program is an entry level pre-license program preparing graduates to sit for state board examination to become a Registered Nurse. The sample for this study includes one group of first semester nursing students (n= 49) and one group of second semester nursing students (n= 42), referred to as freshmen and sophomore students respectively for purposes of this study. The first semester (freshman) students are enrolled in NUR115, Fundamentals of Nursing; and the second semester (sophomore) students are enrolled in NUR 135, Adult Medical Surgical Nursing I. Both courses are required core curriculum and must be completed successfully with a grade of “C” or better to progress in the nursing program. The nursing program at this community college is approved by the governing authority within the state for enrollment of 240 students per year. Each semester there are two courses in progress, each with approximately 55- 60

students. This sample is based on fall semester's enrollment within the School of Nursing at this community college. Enrollment varies depending on student progression to the next semester, but the semester targeted for this study (Fall 2007) was expected to be 120 students. Actual enrollment for Fall 2007 consisted of 59 freshman nursing students and 50 sophomore nursing students. Three freshman students declined to participate in the study. Randomization was based on 56 freshman students (28 randomly assigned to the experimental group, 27 randomly assigned to the control group). Six freshman students left the program, for either personal reasons or due to failing grades, before the study was completed resulting in a final sample size of $n = 49$. Two sophomore students declined to participate in the study. Randomization was based on 48 sophomore students (25 randomly assigned to the experimental group and 23 randomly assigned to the control group). Six students left before the study was completed, (for either personal reasons or due to failing grades), resulting in a final sample size of $n = 42$. Students were randomly assigned to experimental and control groups early in the semester, before student attrition. A random number generating computer software program was used to generate the random number assignments.

The usual distribution of students in the nursing program is approximately 90% women and 10% male. Each course has two full-time and multiple part-time instructors. The researcher of this study is a full-time nursing faculty member and an instructor of students enrolled in first semester course, NUR 115, Fundamentals of Nursing. Each course consists of both classroom and clinical components.

Participation in the study was voluntary and did influence the sample size. Non-journaling students were provided with an alternate equivalent assignment which is

discussed in greater detail later in this chapter. The post-test measurement consists of completion of the end of course evaluation (Student Opinion Survey- SOS) (Appendix A). The following table illustrates the design of this study (Table 3.1)

Table 3.1
Study Design

Random Assignment	Treatment	Control	Posttest
Group 1 Experimental Freshman nursing students	Journaling treatment		SOS
Group 1 Control Freshman nursing students		Alternate assignment	SOS
Group 2 Experimental Sophomore nursing students	Journaling treatment		SOS
Group 2 Control Sophomore nursing students		Alternate assignment	SOS

The research study was explained to the students by the researcher and students were asked to sign an informed consent document agreeing to participate in the study. The instructor departed from the room while the informed consent document was signed. This is a safeguard to help prevent any feelings of coercion to participate. A student collected the consent forms, placed them in an envelope, sealed the envelope and gave the envelope to the instructor. A list of names from each group agreeing to participate in the study was compiled by the nursing program chair. The list was forwarded to a member of the researcher's dissertation committee, who agreed to assign members of both the freshman and sophomore groups randomly, using computer software, to either the experimental group or the control group. This method of random assignment was done to control for instructor bias, since the researcher is an instructor in one of the

courses. Even if students choose not to participate in the study, all students were required to complete an assignment. Students who did not wish to participate indicated this unwillingness to participate on the informed consent document, and then indicated their chosen assignment. They were able to choose between the journaling assignment and the alternate equivalent assignment and indicated their choice through a check box on the informed consent document. Students were also asked to give consent to the use of journal excerpts. It was explained by the researcher that any excerpts used would be anonymous and could not be connected to the student author. Institutional review board approval was obtained from the researcher's university prior to the beginning of the study. Approval from the participating community college was obtained from the college administration prior to the study.

See Appendix C.

Procedure

The treatment in this study consists of the completion and submission of seven journaling exercises based on instructor provided prompts which ask for reflection on the nursing students' clinical experiences. All students randomly assigned to the experimental group were provided written directions on completion of the journaling assignment. Students were asked to buy a small spiral notebook in which they are asked to record weekly responses to the prompts. Participants were asked to record a weekly journal entry each week for seven weeks. Specific prompts were provided for each of the first four weeks; then students were allowed to choose which prompt was used for the remaining three weeks. The time-frame for the journaling exercises is based on the length of clinical experiences for the two courses. The writing prompts and directions are

developed by the researcher and are based on a review of literature (see Chapter 2). Appendix B provides the directions for students and weekly writing prompts. Time required to complete the journaling assignments varies per student but is not expected to take more than a total of 15-20 minutes per prompt or no more than two hours of participant time.

Participants in the control group were asked to complete an alternate equivalent assignment. The alternate assignment consisted of participants writing a brief definition of five words or concepts they encountered during class or in readings every week for seven weeks. Students were asked to record these definitions on a weekly basis in a spiral notebook. The definition notebook completion date was the same as the due date for the journaling exercises of the treatment group. The time required to complete word definitions depends on the student but is not expected to take more than 15- 20 minutes per week, or approximately a total of 2 hours of student time over the semester. The work assigned to both groups is required and 10 extra points will be added to the students quiz grade when the work is turned in. Students were reassured that written work would be read only by the course instructors.

At the end of the semester, all students completed an end of course evaluation, also known as the Student Opinion Survey. The end of course evaluation contains 36 items broadly divided into three sections relating to the instructor, course, and student. Each item is rated on a 5-point Likert scale: A = excellent/exceptional, B = above average, C = average/adequate, D = below average, E = very poor/inferior. After testing by the college, the questionnaire is considered both a reliable and valid measurement tool

(see next section, instrumentation). The tool was administered during the end of the semester after clinical sessions were complete.

The evaluation tool is the same tool used each semester to evaluate student course satisfaction. The usual procedure for college end of course evaluations is to send an email to students asking them to complete an on-line end of course evaluation. For the purposes of this study, the end of course evaluation was completed on a computer scantron sheet at the end course. Student participation in on-line evaluation has a return rate of less than 50%. The researcher hopes to improve the number of participants by using in class evaluations. The evaluations are anonymous. Students were guaranteed of anonymity as part of the informed consent document.

Instrumentation

The Student Opinion Survey Tool developed at this community college is the end of course evaluation tool that was used in this study. According to Manning et al. (2003) a critical facet of assessing teaching is student evaluation of instruction. In 1999, as a push for overall improvement of assessment of institutional effectiveness, Central Piedmont Community College began revising its process for assessing teaching. The tool was designed to provide faculty with feedback from students that can be used to improve teaching, provide feedback on consistent indicators of student perception of faculty, and to contribute to comprehensive assessment of college effectiveness. The reliability and validity of this instrument have been determined by the Research and Planning department at the college.

Following review and research a committee of faculty and staff recommended a new tool be developed. After evaluating approximately 300 items from fifteen teacher

evaluation surveys used in higher education the committee constructed a tool consisting of thirty-six items. The items were categorized following factor analysis into 3 sub-categories relating to instructor, course and student. The division of items was based on 5 subscales commonly found in literature: The Art of Teaching, The Science of Teaching, The Course and The Student (Manning et al., 2003). Each item is rated on a 5 point Likert scale: 5 = excellent, 4 = above average, 3 = average/adequate, 2 = below average, 1 = very poor/inferior. A large scale pilot study was conducted before the tool, originally named the revised Teacher Evaluation Survey (TEAS), was implemented. The committee found that most tools in current use were not evaluated for reliability and validity.

In 2000, a follow-up analysis of the Student Opinion Survey, or SOS, (also known as TEAS) was conducted by the Research and Planning department of the college to establish reliability and validity of the instrument. The study is based on a sample of 17,041 students adequately completing the SOS in fall 2000. In order to be considered valid at least 90% of each section of the survey must have been finished. The sample encompasses 1,550 course sections, seventy departments, and seven deans.

Face validity and content validity of the instrument were determined by using the judgment of experts in the field and comparing historical results to current data. A factor analysis was also completed using the principal axis method and correlation matrix with varimax rotation. As reported in Manning et al. (2003) the original analysis was forced into five factors to test the theory behind the development of five subscales, but analysis results revealed two strong factors and one weak factor that explain the 64.5% variance of responses to the items. In other words, there does not appear to be any variance in the art, science and business of teaching. The factors and item loadings for a three factor

model are presented in Table 3.2. Item number twenty-nine “The workload of this course was” was removed from the analysis because in factor analysis it did not load well into any single factor.

Table 3.2
 Factor Analysis of the Student Opinion Survey
 Survey Item Number, Item, Eigenvalues and Factor Loadings (FL)

Instructor Items Eigenvalue = 19.35	FL	Course Items Eigenvalue = 2.61	FL	Student Items Eigenvalue = 1.26	FL
21. Overall the instructor is _____	.81	23. Ability to understand course text	.66	33. Attends class regularly	.73
12. Positive attitude toward students	.80	24. Value of course to future	.65	35. Completes assignments on time	.72
15. Enthusiasm for teaching	.80	27. Overall course is _____	.64	34. Arrives for class on time	.71
13. Encourages learning	.80	22. Tests measure understanding	.58	32. Prepared for class	.62
11. Communicates clearly	.78	36. Student enthusiasm for course	.52		
10. Encourages participation	.78	3. Educationally ready for class	.50		
9. Clarifies with examples	.77	30. Relevancy of lab to course	.48		
14. Enthusiasm for subject	.76	25. Time of day course offered	.45		
8. Makes material understandable	.75	28. Grade expected in course	.43		
17. Motivates student to do best	.74	26. Convenient location	.40		
19. Teaches new things	.74				
20. Sensitive to student difficulty	.74				
2. Organizes class time	.74				
1. Communicates expectations	.73				
3. Requirements applied consistently	.73				
16. Assignments relevant to course	.73				
5. Adequate notice of assignments	.70				
4. Provides regular feedback	.70				
18. Uses materials to help learning	.69				
7. Available outside class	.63				
6. Meets whole time	.60				

According to Manning et al. (2003) single item Likert scales of 1-5 produce ratings that leave little room for improvement. To be sensitive a teacher evaluation tool must be able to spread responses among all the scale choices in order to show small differences. Ratings for this sample were positively skewed. To improve skewness subscales were created to increase the range, variation and spread of scores. After establishing the subscale, skewness at the top was still observed but more variation in the scores existed (Table 3.3)

Table 3.3
Description of the Art of Teaching, Science of Teaching, and
Business of Teaching Subcategories

Subscale	Mean	Standard Deviation	Possible Range	Actual Range	25 th Percentile	50 th Percentile	75 th Percentile
Art of Teaching	48.47	8.24	11 - 55	11 - 55	44	52	55
Science of Teaching	22.15	3.61	5 - 25	5 - 25	20	24	25
Business of Teaching	26.62	4.08	6 - 30	6 - 30	24	28	30

Data Collection

To control for confounding variables this study examined the effect of student grade expectation on student ratings of overall course score, instructor score, course score and student score. To be able to gather this data an extra question has been added to the end of course evaluation tool. The question, “What grade do you expect to receive for this course?” was added as number twenty-eight on the Student Opinion Survey. This will place the question in the last section of the questionnaire, which is titled “Based on the above scale, how would you rate yourself in the following areas in relationship to the course” (Appendix A).

The optical scantron form was coded according to the pattern of the thirty-six item Student Opinion Survey using an ascii file which can be imported into SPSS. Coding was added for students to indicate whether they are experimental or control group members and whether they are freshman or sophomore nursing students. Since the objective of this study does not include examining the relationship of demographic variables and the effects of journaling, demographic data collection will be limited to sex and grade (highest education level completed).

Directions for completing the scantron sheet were verbalized to the students by the instructor of the course. Directions are also printed on the questionnaire. Emphasis was placed on the importance of not placing individual names on the scantron sheets in order to protect anonymity. Each group was assigned identifying numbers.

Permission to conduct the study with selected students was granted by the community college. All data used in the study was collected from the students on a voluntary basis. All analyses have been done anonymously and reported in an aggregate format with no individual identifiers. The data has been evaluated by the investigator with the help of committee members. All data is locked in the researchers office at the community college campus.

Students willing to participate in the study were asked to sign an informed consent document. There is no known risk of harm to participants. There were no monetary costs to the student; nor is there direct benefit to the student. Prior to implementing this research study, approval for the project was obtained from the Internal Review Board at the researchers university.

Data Analysis

Following collection of the data the statistical software program SPSS was used to compare distribution of the data. An analysis of variance (ANOVA) was conducted within and across groups for statistically significant differences and will be reported in Chapter 4. The researcher looked for statistically significant differences among variables related to overall course, instructor, course and student scores on the end of grade evaluation in journaling and non-journaling groups. The relationship between expected grade and these variables in both groups were examined. In addition, statistics were examined to determine if students who expect higher grades rate overall course, instructor, course, and student scores higher.

CHAPTER 4: RESULTS OF THE STUDY

The goal of this study was to evaluate the effectiveness of journaling as an instructional strategy that influences the nursing students' perception of the overall course experience as reported on the end-of-course student evaluation survey (Student Opinion Survey). The cause and effect relationship between journaling and student perception of variables relating to teaching effectiveness and course satisfaction is evaluated with nursing students enrolled at a large urban community college in the southeastern United States.

Introduction

Results of the end-of-course student evaluation are examined in relation to the effect of journaling (treatment) and non-journaling (control) on the variables of overall score, the instructor score, the course score and the student score. To control for confounding variables this study also examined the effect of student grade expectations on student ratings of overall course score, instructor score, course score, and student score.

Chapter 3 details the assessment tool used for this study, the Student Opinion Survey tool developed at the community college. This instrument is the end of course evaluation tool used routinely by this community college and consists of 36 items. Reliability and validity of this instrument have been determined by the Research and Planning department at the community college. Based on factor analysis, each item can

be placed in one of three sub-categories; Instructor, Course, and Student. This is the basis for scores in each category (Manning et al., 2003). Each individual item was rated by students on a 5- point Likert scale, A through E with A being the highest score.

Participants

This experimental research study was conducted using nursing students enrolled in an Associate Degree Nursing Program. Participants consist of two groups of nursing students enrolled at different points in the Nursing Program. The sample includes one group of first semester nursing students (n= 49) and one group of second semester nursing students (n= 42), referred to respectively as freshmen and sophomore nursing students for purposes of this study. The freshman students are enrolled in NUR115, Fundamentals of Nursing, and the sophomore students are enrolled in NUR 135, Adult Medical Surgical Nursing I. The sample of freshman nursing students (n= 49) were assigned to either an experimental group or a control group using a random number generating computer software program. The sophomore students (n= 42) were also randomly assigned to either an experimental group or a control group using the same random number generating computer software program. Experimental groups participated in journaling exercises. The control groups were given an equivalent assignment. At the end of the course the 36 item Student Opinion Survey was administered to all students. Comparisons were made between responses of experimental and control group responses to grouping of items on the Student Opinion Survey tool. Relationships between and among responses of each group to the variables of overall score, instructor score, course score, student score were examined using statistical software programs. The additional variable of “grade expected” is examined as a control

measure based on the work of Algozzine et al. (2004) which identifies “grade expected” as a variable that often influences student response on end of course surveys.

Demographics included in this study are gender, education level, birth year and level within the nursing program (freshman or sophomore). The following table (4.1) breaks down demographics by group; experimental (journaling) and control (non-journaling). Each group is further broken down by gender, educational level, birth year and level within the nursing program (freshman or sophomore). The breakdown is reflective of the total nursing program enrollment which generally consists of fewer than 10% male students and students that have attended college one or more years in preparation for the nursing program. The age distribution is reflective of general community college populations which have students that are often returning to college for job retraining or established families and are usually older.

Table 4.1
Group Demographics

	Journaling		Non-Journaling	
	Number	Percent	Number	Percent
Gender				
Male	6	13	3	6.7
Female	40	87	42	93.3
Educational Level				
12			2	4.4
13	12	26.1	10	22.2
14	10	21.7	7	15.6
15	6	13	5	11.1
16	17	37	21	46.7
Age Groups				
39 -54	8	18	15	33
30 - 38	14	31	16	36
21 - 29	23	51	14	31
Level within Nursing Program				
Freshman	22	47.8	27	60
Sophomore	24	52.2	18	40

Distribution

The next table, Table 4.2 denotes distribution statistics for the whole group including means for gender, educational level, birth year, grouping (journaling = 1, and non-journaling = 2) and level within the nursing program. Gender is coded one for males and two for females. Out of 91 participants nine are male. Reported educational levels ranged from grade 12 to grade 16. Birth years spread from 1954 through 1987. The levels assigned for reporting purposes is one for freshman (F) and two for sophomore (S). The table includes means for total raw and scaled score, instructor raw and scaled scores, course raw and scaled scores, student raw and scaled scores for both the journaling (experimental) and non-journaling (control) groups. Raw scores were tallied by determining the frequency of responses to each rating including the overall score and totals of each sub-categories, (instructor, course and student). Scaled scores represent the percentage of the total for the same sets of data.

Table 4.2
Total Scores, Instructor Scores, Course Scores and Student Scores for Journaling and Non-Journaling (Raw and Scale Scores Included)

	Total Raw Score	Total Scale Score	Instructor Raw Score	Instructor Scale Score	Course Raw Score	Course Scale Score	Student Raw Score	Student Scale Score
Journaling Experimental	151	.84	89	.85	44	.80	18	.89
Non- Journaling Control	154	.85	91	.87	45	.81	18	.90

Correlations

Correlations between the variables instructor, course, and student were examined using Pearson Correlation (2- tailed). The correlations between the pairs of variables are reported in Table 4.3. Significant correlations are noted in the table with an asterisk.

Table 4.3
Pearson Correlation (2-tailed) Between Variables, P Values, n = 91

	Total Scale Score	Instructor Scale Score	Course Scale Score	Student Scale Score
Total Scale Score	1	.956	.822	.533
Instructor Scale Score	.956*	1	.638	.333
Course Scale Score	.822*	.638*	1	.577
Student Scale Score	.533*	.333*	.577*	1

Research Question 1: Do participants in the experimental group rate the overall course score higher than those in the control group?

Participants in the journaling group did not rate the overall course higher than participants in the non-journaling group. The total raw score for journaling participants was 151, with a scaled score of .84; for non-journaling participants the total raw score was 154, with a scaled score of .85. Analysis of variance (ANOVA) using SPSS on categories of Group Total Raw Score and Group Total Scale Score reports no significant values reported. The hypothesis for this question, “the journaling group will rate the overall course score higher than the non-journaling group” is not supported by this data. Results of independent-measures *t* test indicate no significant difference, $t_{(89)} = .863$, $p = .390$. Levene’s Test for Equality of Variance indicates homogeneity of variance assumption is met with $F = 1.352$ and significance of .248. The T- test shows no

significance difference between groups with $t = -.863$, $p = .309$. Table 4.3 summarizes these results with the mean and standard deviations for both groups.

Table 4.4
Overall Total Scale Score Means and Standard

Total Scale Score	Number	Mean	Standard. Deviation	Standard. Error Mean
Journal	46	.8354	.09790	.01443
Non-journal	45	.8543	.11120	.01658

Research Questions 2 through 4

Questions 2 through 4 examine the effect of the treatment on subsets of the total group. The following table, Table 4.5, examines mean and standard deviation (SD) scores for each sub-category; instructor, course, student and overall total. Univariate Homogeneity of Variance Tests reveals that the assumption is met. The overall multivariate test for group differences indicates no significance, $F_{(3,87)} = .283$, $p = .837$.

Table 4.5
Mean, Standard Deviation and Number for Instructor, Course and Student Subsets

	Journaling	Non - Journaling	Entire Sample
Instructor			
Mean	.846	.869	.857
SD	.119	.137	.128
Number	46	45	91
Course			
Mean	.791	.806	.798
SD	.092	.113	.103
Number	46	45	91
Student			
Mean	.893	.898	.896
SD	.111	.121	.116
Number	46	45	91

Question 2: Do participants in the experimental group rate the instructor score higher than those in the control group?

Mean scale scores of instructor rating vary little between the journaling and the non-journaling group. The journaling group rated instructors at 85%, the non-journaling group at 87%. The analysis of variance shows no significant difference, $F_{(1,89)} = .761$, $p = .385$. The hypothesis statement, “The journaling group will rate the instructor score higher than the non-journaling group” is not supported by this data. Further testing will be necessary to validate the hypothesis.

Question 3: Do participants in the experimental group rate the course score higher than those in the control group?

Again, as with question two, there is little difference in the mean scale scores between journaling (89%) and non-journaling (89%) students. Analysis of variance shows no significant difference, $F_{(1,89)} = .507$, $p = .478$. The hypothesis statement, “The journaling group will rate the instructor score higher than the non-journaling group,” is not supported by this analysis. Further testing will be necessary to validate the hypothesis.

Question 4: Do participants in the experimental group rate the student score higher than those in the control group?

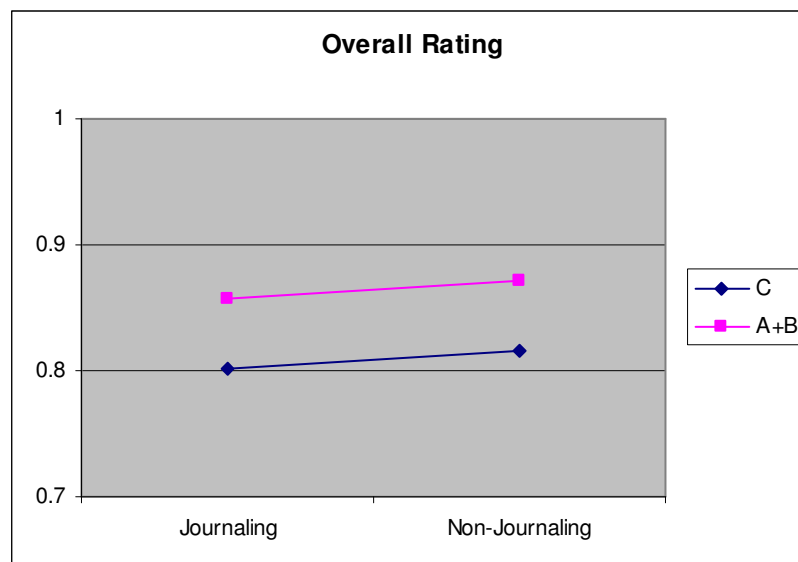
Mean scale scores for experimental and control groups are almost identical; with the experimental group at 89% and control 90%. Analysis of variance indicates no significant difference between the two groups, $F_{(1,89)} = .031$, $p = .860$. The hypothesis states, “The journaling group will rate the student score higher than the non-journaling group.” This is not supported by the data. Further research may be needed to validate the hypothesis.

Question 5: Is the students' rating of overall course score influenced by the grade they expect to receive?

In response to the question "What grade do you expect to receive in this course?" the majority of students 63%, or 57 students, believed they would receive a "B" for the course while and only 2%, or 2 students believed they would receive an "A". The remaining students, 35%, or 32 students expected to receive a "C". Graph 4.1 demonstrates the linear relationship between these variables. The statistics for A and B are reported together because only two students expected to receive an "A" for their grade. Students expecting "A" or "B" grades rated the overall total score higher for both the experiment and control groups than students expecting a grade of "C." The difference is approximately 5%. There is little difference between the journaling and non-journaling student ratings of overall course score.

There is statistical significance measured on Independent-Measures t Test between the grade expected by students and their overall rating of the course, $t_{(89)} = 2.569$, $p = .012$. The hypothesis "The student rating of the overall course score is influenced by the grade they expect to receive" is supported by the data. This correlates the data gathered by Algozzine et al. (2004) in their meta-analysis of *Student Evaluation of College Teaching*. Algozzine et al. lists student grades as a factor which positively correlates with evaluation of teaching and finds that several researchers report that "more favorable course evaluations tended to be positively correlated with students' higher grade expectations" (p. 137). The results of this study add further support to this data.

Graph 4.1
Student Overall Scale Rating and Grade Expected

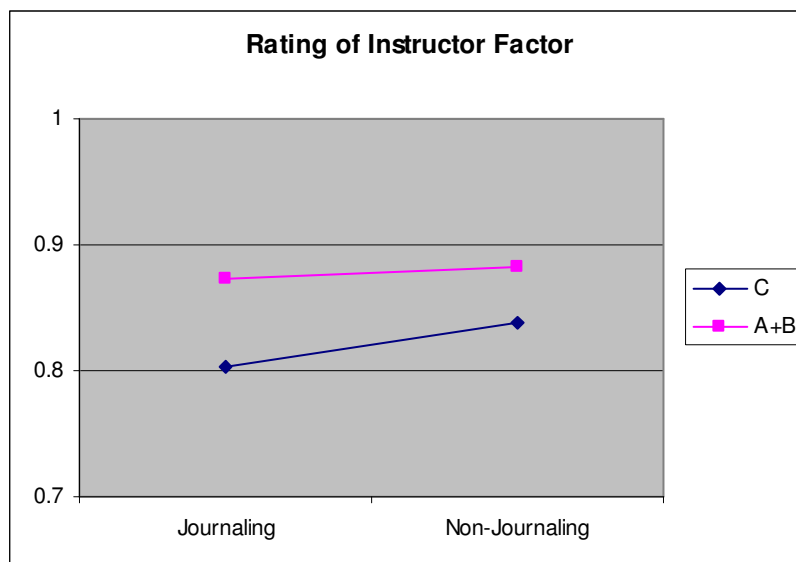


Grade Expected	Journaling	Non-Journaling
C	0.801	0.816
A+B	0.857	0.872

Question 6: Is the students' rating of instructor score influenced by the grade they expect to receive?

The student rating of instructor (mean scale scores) indicates some differences based on the grade student expect to receive. Graph 4.2 shows the linear relationship between the grades expected and the instructor rating. Students that expect grades "A" or "B" rated the instructor higher in both the experiment and control groups than students expecting a grade of "C". There is little difference within these groups between journaling and non-journaling students. Univariate F tests indicate statistical significance, $F_{(1,89)} = 1.40$, $p = .033$. The hypothesis statement, "The student rating of the instructor score is influenced by the grade they expect to receive" is supported by this data.

Graph 4.2
Student Rating of Instructor Factor and Grade Expected

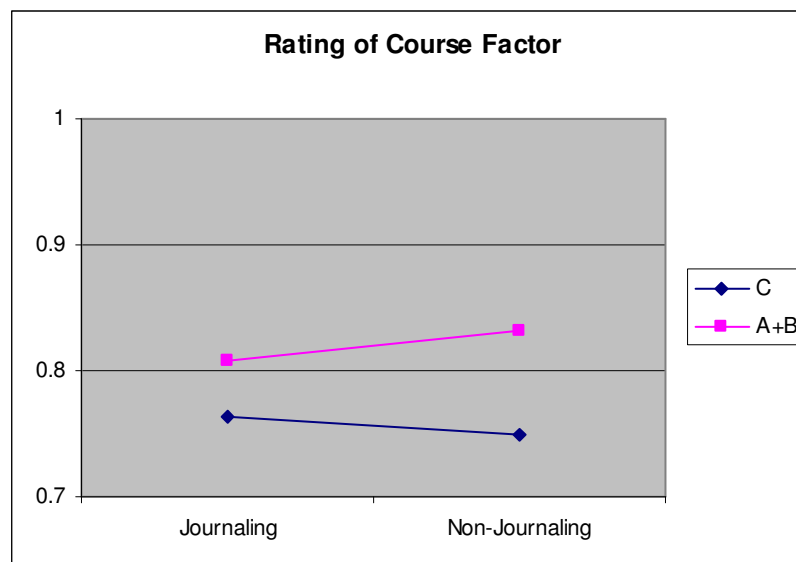


Grade Expected	Journaling	Non-Journaling
C	0.803	0.838
A+B	0.873	0.883

Question 7: Is the students' rating of course score influenced by the grade they expect to receive?

The student rating of the course is affected by the grade the student expects to receive. Graph 4.3 demonstrates the linear differences between the variables. Means show approximately 4% difference in scaled scores between students that expect an "A" or "B" and students who expect a "C". As in question 6 there is little difference within these groups between journaling and non-journaling scores. Univariate F-tests show statistical significance, $F_{(1,89)} = .863$, $p = .004$. The hypothesis, "The student rating of the course score is influenced by the grade they expect to receive", is supported by this data.

Graph 4.3
Student Rating of Course Factor and Grade Expected

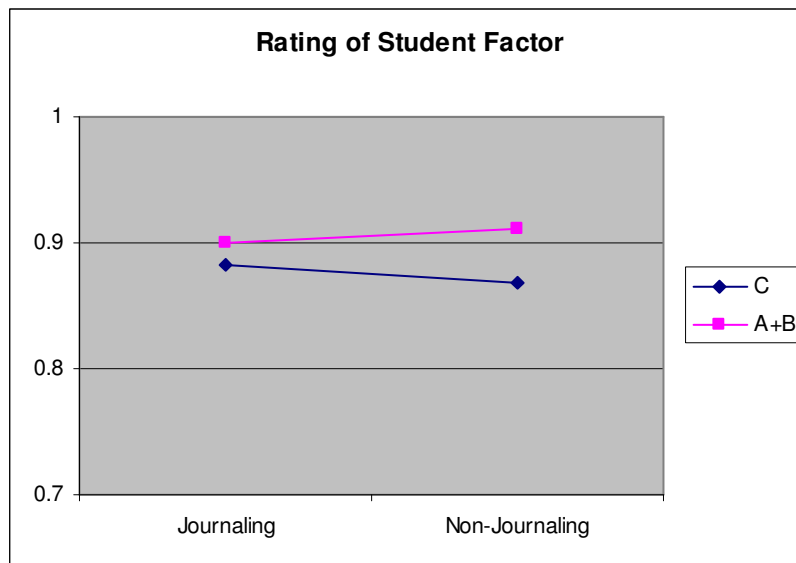


	Journaling	Non-Journaling
C	0.764	0.749
A+B	0.808	0.832

Question 8: Is the students' rating of student score influenced by the grade they expect to receive?

There is no difference in the mean scaled scores between rating of student scores and grade expected with means for all variables of 90%. Graph 4.4 reports the means and shows the linear relationship between these variables. There is no difference between the groups of journaling and non-journaling students. Univariate F-tests indicate no statistical significance, $F_{(1,89)} = 1.185$, $p = .249$. The hypothesis "The student rating of the student score is influenced by the grade they expect to receive" is not supported by the data.

Graph 4.4
Student Rating of Student Factor and Grade Expected



	Journaling	Non-Journaling
C	0.883	0.868
A+B	0.9	0.911

Reliability

Although validity and reliability of the instrument are established in an earlier study (Manning et al., 2003), this study adds to the reliability of this instrument as measurement of student satisfaction. Cronbach Alpha Split Halves statistical measurement indicates internal consistency of the instrument with an overall Reliability Coefficient of Alpha = .9536. Table 4.6 reports alpha coefficients for overall score, instructor score, course score and student score sub-categories.

Table 4.5
Cronbach Alpha Reliability Coefficients

	Alpha	
Overall Score	.9536	Items 1-36
Instructor Score	.9636	Items 1-21
Course Score	.787	Items 22-31 and 36
Student Score	.831	Items 32-35

Summary

In chapter four the statistical data have been reported and used to answer research questions and hypothesis. Questions 1 – 4 concern the differences between the experimental, or journaling groups, and the control, or non-journaling groups. Means and standard deviations show little differences among the groups and this is supported statistically with no significant differences between student evaluation score of the overall course score, the instructor score, the course score and the student score. Questions 5 – 8 concern the influence of the variable “grade expected” on the overall course score, instructor score, course score, and student score. Significant statistical differences are present in response to questions 5, 6, and 7, concerning the overall score, the instructor score, and the course score. This is reflective of the studies cited in the meta-analysis of Algozzine et al. (2004) who notes correlation between instructor, course, student characteristics, and grade expected and student response on evaluation forms. Question 8 concerns the student score which reflects factors of self-evaluation, or intrinsic factors, whereas the other items concerned extrinsic factors. The findings for question 8 are not statistically significant. These findings are examined in more depth in Chapter 5. In addition, Chapter 5 will include conclusions, implications and recommendations for this research study.

CHAPTER 5: DISCUSSION AND CONCLUSION

Though highly recommended by many educators, the benefits of journaling are very difficult to substantiate. The purpose of this study is to advance the knowledge of the use of journaling as an instructional strategy that facilitates student learning.

Although many studies have examined student opinion of the benefits of journaling in a course (Arrendondo & Rucinsky, 2004; Dye, 2005; Ibarreta, 2004; O'Connell & Dymont, 2003; Hettich, 1990; Ritchie, 2003), no research exists evaluating whether the use of journal writing impacts the student perception of the course experience. This research study evaluated the effectiveness of journaling as an instructional strategy that influences the nursing students' perception of course experience as reported on end-of-course evaluation, or Student Opinion Survey (SOS). This chapter will include a brief summary of the study including the purpose, research questions, data sources, and method. In addition, there is also a discussion of the findings, conclusions of the study, implications for further research and summary statement.

Purpose of the Study

The purpose of this study is to determine the impact of journaling on nursing students' perception of satisfaction with the overall course experience as expressed on end-of-course evaluations. The ultimate goal of this research is to support the use of instructional strategies as a means of improving the teaching-learning process for educators and students. Instructional strategies such as journaling are most often

evaluated in terms meeting educational goals that involve changes in student behaviors, skills, attitudes or beliefs. It is important to understand whether certain instructional strategies not only meet the teachers' goals but also help to make the course more meaningful to the student. How nursing students perceive their experience in a course is critical to their overall satisfaction with the nursing program. Student satisfaction is connected to improved retention, academic, personal and professional success (Corts et al., 2000).

Methodology

This experimental study consisted of two groups of nursing students from an associate degree nursing program in an large urban community college. One group is first semester nursing students and the other is second semester nursing students. Each group was further divided randomly into an experimental and a control group. The experimental groups were asked to participate in a journaling assignment. The control groups were given an equivalent writing assignment. Participation was voluntary and the survey results were anonymous.

Following completion of the writing exercises all students were asked to complete a 36 item end-of-course evaluation, also known as the Student Opinion Survey (SOS). Chapter 3 details the assessment tool used for this study, the Student Opinion Survey tool, developed at Central Piedmont Community College. This instrument is the end of course evaluation tool used routinely by this college. Reliability and validity of this instrument have been determined by the Research and Planning department at Central Piedmont Community College. Based on factor analysis of the 36 items each item is placed in one of three sub-categories; Instructor, Course, and Student. This is the basis

for scores in each category (Manning et al., 2003). Survey results are used to compare differences between the experimental and control groups on each of the sub-categories. In order to control for confounding variables an additional category was evaluated; “grade expected”. Algozzine et al. (2004) demonstrated in their meta-analysis that the grade the student expects to receive has an influence on the student evaluation of the course.

The results of the following research questions will be discussed in this chapter along with implications and recommendations for further study.

1. Do participants in the experimental group rate the overall course score higher than those in the control group?
2. Do participants in the experimental group rate the instructor score higher than those in the control group?
3. Do participants in the experimental group rate the course score higher than those in the control group?
4. Do participants in the experimental group rate the student score higher than those in the control group?
5. Is the students’ rating of overall course score influenced by the grade they expect to receive?
6. Is the students’ rating of instructor score influenced by the grade they expect to receive?
7. Is the students’ rating of course score influenced by the grade they expect to receive?
8. Is the students’ rating of student score influenced by the grade they expect to receive?

Discussion

Many strategies are used by teachers to improve the effectiveness of the teaching-learning process; research on these strategies is most often focused on learning outcomes, not on the learning process. Understanding how the learning process influences learning outcomes is critical. Are some instructional strategies more effective than others? This research examined a particular strategy. Specifically, does the use of journaling influence student perception of course experience. This study was designed to add to the body of knowledge about the use of journal writing and to determine if the use of this strategy affects nursing students' perception of overall course experience. Journaling is an important educational strategy used to promote personal and professional growth of nursing students. Student satisfaction is important because it influences student motivation (Chute, Thomson, & Hancock, 1999; Donohue & Wong, 1997) and is a factor in student success. Bean and Bradley (1996) found that student satisfaction has a significant effect on performance and is a good predictor of academic success (Donohue & Wong, 1997). In a broader sense, this study adds to the knowledge base of the effectiveness of instructional strategies from a student perspective.

As discussed in the review of literature (Chapter 2), although student satisfaction is assessed using many factors, however it is understood that teaching and learning factors hold the most importance in student satisfaction (Algozzine, 2004). Ansari and Oskronh (2004) identify 4 main groupings that must be considered in understanding student satisfaction, including "climate" factors, a range of educational variables, an assortment of student demographic variables, and finally the interaction of these factors. Climate factors include: course content, structure, teaching-learning strategies, and

feedback, support and assessment procedures. Educational variables include course characteristics, level of the course, class size, academic term in which the course runs, assessment strategy, and whether students are full or part-time. Demographic variables include gender, ethnicity, age, disability status, entry qualifications, educational goals and expected grade. The authors conclude that all variables collectively interact to generate satisfaction and it is very challenging to really understand which variables are at play in any given situation with educational variables being the most significant. The Student Opinion Survey used in this study reflects the historical and traditional categories in student evaluation of teaching (Algozzine, 2004).

Conclusions

Journaling and Student Evaluation of Course

Research questions 1-4 examined relationships between journaling and non-journaling and student evaluation of variables relating to the overall course factors, instructor factors, course factors and student factors. The two groups involved in this study were very similar demographically. Means for gender, educational level, and birth year are consistent across the experimental and control groups as reported in Chapter 4. Means for overall course score, the instructor score, the course score and student scores are almost identical across both groups. ANOVA statistical testing found no measurable differences in these areas between groups or within groups (Chapter 4). The obvious answer to these research questions is that the use of journal writing as an instructional strategy produced no change in the students' overall perception of the course experience.

While it may be true that the use of journal writing does not influence student perception of the course, a closer look at the literature may indicate that a universal

problem with students' evaluation of teaching exists and the instrument may not be an accurate measure of the influence of journaling in this study. As noted in Algozzine's et al. (2004) literature review of student evaluation of teaching there is a long-standing historical struggle to determine if student evaluation of teaching is fundamentally effective. As with most student evaluations this instrument contains a series of open- and closed- ended questions about course content and teaching effectiveness. As recommended in multiple-studies (Algozzine et al. 2004; Marsh & Roche, 1997) this instrument includes a breakdown into sub-categories that reflect the multi-dimensional aspects of teaching and learning but, literature reflects that there is still no strong consensus on whether these instruments are effective in measuring what they are intended to measure or even if they are measuring what should be measured (Cowman, 1996; Johnston, 1996; McKeachie, (1997).

Although many studies exist concerning the effect of multiple variables on students' course evaluations, the results have been mixed and inconsistent with no clear direct relationship defined. According to d'Apollonia and Abrami (1997) unless the variables can moderate the validity coefficient, the correlation between student ratings and student learning, they cannot be described as biasing variables. This has leads to many different opinions about the usefulness of students' evaluations of teaching and should serve as a reminder that many factors work together to influence student perception of teaching effectiveness.

Literature reveals that it has been very difficult to measure the effectiveness of journal writing in education. Many educators describe the use of journaling as instrumental in improving critical thinking skills, self-reflection and self-direction, and

the application of theory to practice but details of how these attributes are measured are very subjective (Brown, 1992; Brown & Sorrell, 1993; Callister, 1993; Landeen, Bryne, & Brown, 1992; Patton et al., 1997). Since journal writing is often measured in terms of reflection it proves difficult to develop concrete scales or rubrics to measure these characteristics (Hettich, 1990; Pellic, 2004; Pee et al., 2002; Plack et al., 2005; Ritchie, 2003; Van Horn, 2000; Williams et al., 2002; Wong et al., 1995). Although many authors describe various tools used to measure reflection, there is little consistency among the instruments and most recommend further study of ways to effectively measure the outcomes of journal writing. Measuring the effects of journaling in education continues to prove a very difficult undertaking and this may be reflected in the results of this study.

Student Evaluation of Course and Grade Expected

There is widespread agreement among educators that teaching is a multi-dimensional activity, and the use of global scoring for evaluation of teaching is ineffective (Algozzine, 2004). The problems with global scoring lead to the development of subsets of items in attempts to better determine factors which correlate with evaluation of teaching (Rice & Stewart, 2000). Marsh and Roche (1997) advocate that students' ratings of teachers should be influenced by factors associated with effective teaching and not factors which have no relevance to teaching and learning. Multiple studies based mostly on the work of Marsh (1987) identified factors relating to course characteristics, student characteristics, instructor characteristics and student grades as factors that correlate with evaluation of teaching, although results of the influence of these characteristics is often mixed (Algozzine et al., 2004).

Statistically significant relationships between the grade students expect to receive and their evaluation of teaching are identified by several researchers (Centra & Creech, 1976; Eiszler, 2002; Feldman, 1997). Other researchers have find positive correlations between the grade the student expects to receive and a favorable course evaluation (Grazin & Painter, 1973; Hoffman, 1978; Marsh, 1980, 1982). Results of this of this study support these findings with most factors indicating significant statistical differences between students who expected to receive an A or B, or students expecting to receive a C for the course grade.

Research questions 5-8 concern the relationship between grades expected and scores on the end-of-course evaluation. Questions 5, 6, 7 address sub-categories of overall course score, instructor score, and course score. Students expecting an “A” or “B” give these factors a higher rating than students expecting a “C.” This result is consistent in both experimental and control groups. This provides support for literature indicating the grade students expect to receive does influence student perception of the instructor and the course. Question 8 addresses the sub-category of student score. Although the literature identifies “student” factors as exerting some influence on student evaluations, most studies identify these factors as pertaining to the students’ previous experience with the teacher, interest in the material, gender and attitude (Algozzine, 2004). The student evaluation tool used in this study identified student characteristics relating to the amount of effort and preparation the student puts into the course (Manning et al., 2003). The results of this study show no significant differences between the grade expected and the ratings on these factors. This is consistent with current literature in which different studies yield different results about the influence of student factors, and identify weak or

inconsistent relationships (Algozzine, 2004). Interestingly, when students evaluate external factors related to the instructor and the course, ratings differ according to “grade expected”. The more intrinsic factors of student effort and preparation show no influence between “grade expected” and ratings on student factors.

Although mean and standard deviations for all sub-categories (see Chapter 4) were very similar in this study, Manning et al. (2003) found that ratings on student factors tend to be lower than on instructor and course factors. In addition, Manning’s study includes a factor analysis that identifies two strong factors and one weak factor corresponding with the three sub-categories. The item loading for “Instructor” and “Course” are strong factors, while the “Student” factor is weak. Recommendations of a follow-up study by Manning et al. (2003) suggest adding more “student” items to make the instrument stronger in this area, but noted that with its 36 items the instrument is already longer than the optimal length. Validity of the instrument is discussed in detail in Chapter 3.

Reliability

Validity and reliability of the instrument are established through a comprehensive study by Manning et al., (2003). This study adds to the internal consistency of this instrument with high overall Reliability Coefficient of Alpha = .9536. This closely matches the Cronbach alpha coefficient of .974 and the Spearman-Brown coefficient of .907 found in Manning’s study.

Although internal consistency of the instrument is determined in the study conducted by Manning et al.(2003), further recommendations include conducting a test-retest of the

instrument at some time in the future to help establish reliability over time and further establish validity.

Summary and Recommendations

Educators we are involved in an ongoing struggle to find ways to evaluate current instructional strategies and to improve the teaching- learning process. In addition, they are judged on the quality of teaching and student response to this teaching in the form student evaluations. According to Cheng & Tam (1997) higher education is increasingly recognized as a service industry with greater emphasis placed on meeting the expectations and needs of its customers, who are students. Student satisfaction has been found necessary to improved retention, academic, personal and professional success (Corts et al., 2000). Questionnaires eliciting student views are a frequently used measure of quality (McKeachie, 1997). Within higher education there is increased commitment to effectively use this data to assure learning and teaching standards (Murphy & Harris, 1995). Additionally, even though students rate a course as satisfactory educators continue to work to improve the courses and teaching methods.

This study attempted to find a relationship between the use of journal writing as an instructional strategy and nursing students' perception of the overall course experience. Although a relationship may exist, none was identified in this study. The generic evaluation tool used in this study may not be specific enough to measure the influence of journaling on student perception of the course experience or the specific learning outcomes of journaling. Results of the student evaluations of this study indicate a group of students that indicate overall satisfaction with their course experience. Since the group is has expressed a high satisfaction level it becomes more difficult to discern

any real effects of the treatment. In addition nursing is a specialized discipline and journaling was not instituted to increase effectiveness but to increase critical thinking skills and reflection.

Various studies have identified that student response to journaling is positive (Dye, 2005; Hettich, 1990; Ibaretta, 2004; O'Connell & Dymont, 2003), but using general evaluation tools which focus on instructor, course and student variables may not address the real influence of the use of journaling on the practice nursing. Journaling is a useful instructional method in nursing education, acting as a bridge between classroom learning and clinical practice. It requires nursing students to take the time necessary to reflect on practice in a meaningful way to become a more competent caring professional. The real outcome of the use of this instructional method may not be measurable until after nurses have completed training and begun practice as professional nurses.

Based on the increased importance of student evaluations of teaching in today's educational culture and the need to continue to improve and revise teaching methods, further study of this issue is warranted and it is recommended that future studies are conducted longitudinally with larger groups. Algozzine et al. (2004) discuss concerns with student evaluations and notes that evaluation of teaching should include a variety of procedures and "multiple data types from multiple sources" (p.138). Further study is needed to determine if instructional strategies have an influence on students' perception of the course experience. Ideas for future study of journaling include adding a series of open ended questions that specifically address the effects of journaling such as, "Did the use of journaling help you to better reflect on your clinical practice?," or "Did journaling make an impact on how you felt about your clinical experiences?". Strategies other than

journaling might be evaluated in the same way to see if relationships exist between teaching methods and student perception of the course.

Other recommendations for future study include further reliability and validity studies of the instrument, including factor analysis and test- retest. Continued work to identify factors which influence student response on course evaluation is necessary. Multiple issues still surround the use and effectiveness of student evaluation of teaching, and further study and refinement of instruments are necessary to progress in evaluating teaching effectiveness.

In summary, understanding how the learning process affects learning outcomes is critical. Equally important is how student experiences in a course are influenced by various instructional strategies. This study was an attempt to examine whether the use of journaling influences the overall course experience of nursing students at a community college. Although no measurable effect was found, continued research into how specific instructional strategies influence learning and course experience are important to continued improvement in education.

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APPENDIX A

Student Opinion Survey Questions

The purpose of this form is to gather information concerning your reactions and opinions concerning the instructor and the course. Please respond to each item using the scale below. **IF YOU CANNOT ANSWER AN ITEM OR IF IT IS NOT APPLICABLE, PLEASE LEAVE THE ITEM BLANK.**

- A = excellent / exceptional**
B = above average
C = average / adequate / typical
D = below average
E = very poor / inferior

Based on the above scale, how would you rate the Instructor for this course in the following areas:

- | | | |
|-----|---|-----------|
| 1. | The instructor communicates course objectives, expectations, attendance policies and assignments. | A B C D E |
| 2. | The instructor organizes and plans class time. | A B C D E |
| 3. | The instructor applies class requirements, policies, attendance and grades consistently. | A B C D E |
| 4. | The instructor provides regular feedback on student progress. | A B C D E |
| 5. | The instructor gives adequate notice of major announced tests and assignments. | A B C D E |
| 6. | The instructor meets the class for the whole time. | A B C D E |
| 7. | The instructor is available outside of class (e.g. office hours, email, phone.) | A B C D E |
| 8. | The instructor makes difficult material understandable. | A B C D E |
| 9. | The instructor clarifies material with appropriate examples, illustrations or demonstrations. | A B C D E |
| 10. | The instructor encourages student comments, participation and questions. | A B C D E |
| 11. | The instructor communicates clearly and understandably. | A B C D E |
| 12. | The instructor shows positive attitude toward students. | A B C D E |
| 13. | The instructor encourages thinking and learning. | A B C D E |
| 14. | The instructor enjoys and shows enthusiasm for <u>the subject</u> . | A B C D E |
| 15. | The instructor enjoys and shows enthusiasm for <u>teaching</u> . | A B C D E |
| 16. | The instructor makes assignments that relate to the course content. | A B C D E |
| 17. | The instructor motivates me to do my best. | A B C D E |
| 18. | The instructor uses the textbook and/or course materials to help me learn. | A B C D E |
| 19. | The instructor teaches me new things. | A B C D E |

APPENDIX B

Guidelines for Journaling

As part of the learning process in the clinical setting, you are required to keep a journal (progress diary) about the clinical experience.

Each student is required to write a journal entry weekly beginning the second week of clinical.

Please purchase a small spiral notebook for this purpose. Make an entry each week; be sure to date the entry. It is acceptable to do computer entry. If a computer is used you must print each entry and place it in a 3 hole punch folder. It is important to do an entry after each clinical week. Do not wait to do all entries at once.

The journal should be turned in the week after your last clinical day.

Each week's journal entry will address a different aspect of the clinical experience. Below are the topics (also called "prompts") that you will respond to and will guide your journal writing entry.

You will have a different topic (prompt) every day.

After the first 4 journal entries, you can choose a topic (prompt) that you feel is the most important or interesting.

Journal entry 1: (To be used after the first week of clinical)

Describe a significant event that occurred during your clinical experience. Describe your reaction to the event; address what you did well and where you need to improve.

Journal entry 2 (To be used after the second week of clinical)

Describe how you used a problem solving process during your clinical experience. Identify a problem that arose. Identify at least one piece of nursing knowledge you needed to understand in order to solve the problem. Identify external resources used in problem solving.

Journal entry 3 (To be used after the third week of clinical)

What new information or knowledge did you learn today? How were you able to apply this knowledge to patient care? How do you think you will be able to use this knowledge as you progress as a healthcare professional?

Journal entry 4 (To be used after the fourth week of clinical)

Describe a particular fear, concern or worry that you have that is connected to your clinical experience. Describe aspects of your clinical experience that influence your particular fear, concern or worry.

APPENDIX C

Informed Consent

Journaling to Enhance Student Perception of Course Experience

Project Title and Purpose:

You are invited to participate in a research study entitled Journaling to Enhance Student Perception of Course Experience. The overall goal of this research is to examine to what extent the use of journaling influences student satisfaction with the course. In this approach the end of course evaluations of students who have participated in journaling will be compared with the end of course evaluations of students who did not participate in journaling.

Investigator:

This study is being conducted by Mary Kotsokalis. Responsible faculty is Dr. Grace Mitchell.

Description of Participation:

In order to participate in this study you must be enrolled in NUR 115 or NUR 135. The approximate number participants will be 120. The study will last one semester. Participants will be asked to complete writing assignments that involve academic definitions or directed journaling entries depending on random group assignment. Writing assignments are part of the standard course of study for nursing courses. Estimated time needed to participate in the study will be approximately 3 hours over the course of the semester.

Risk and Benefits of Participation:

Although some risks may be unforeseeable, there are no known risks to participating in this study. The benefit of this study is to help enhance the body of knowledge surrounding the use of journaling in education, specifically as it relates to the use of reflective journaling to improve the attitude and satisfaction of students undergoing the rigorous demands of a nursing program.

Alternatives:

Students may decline to participate in the study but will still be required to complete writing assignments as outlined in the syllabus. A choice of writing assignments will be given to those students choosing not to participate in the study. Students completing a writing assignment, whether participating in the study or not, will receive 10 extra point on their quiz grade.

Volunteer Statement:

You are a volunteer. The decision to participate in this study is completely up to you. If you decide to be in the study, you may stop at any time. You will not be treated any differently if you decide not to participate in the study or if you stop once you have started.

Privacy and Confidentiality:

All data collected in the study will be anonymous and reported in an aggregate format with no individual identifiers. The data will not contain any information that will link back to you or your participation in the study. Confidentiality will be maintained by removing any identifying information from data. All journal entries will be kept confidential.

Statement of Fair Treatment and Respect:

UNCC wants to make sure that you are treated in a fair and respectful manner. Contact the university's Research Compliance Office (704-687-3309 if you have questions about how you are treated as a study participant. If you have any questions about the project please contact Mary Kotsokalis at 704-330-6451 or Dr. Grace Mitchell at 704-687-3493.

Participant's Consent:

I have read the information in this consent form. I have had the chance to ask questions about this study, and those questions have been answered to my satisfaction. I am at least 18 years of age, and I agree to participate in this research project. I understand that I will receive a copy of this form after it has been signed by me and the Principal Investigator.

Participant's name (Print)

Participant's signature and date

Investigator's signature and date