CASE STUDY OF SELECTED STUDENTS PARTICIPATING IN EXPERIENTIAL LEARNING TO DETERMINE THE VALUE ADDED TO THE DIDACTIC PROGRAM IN DIETETICS

A Dissertation
Presented to
The Graduate Faculty of The University of Akron

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

Sandra L. Hudak
December, 2006
CASE STUDY OF SELECTED STUDENTS PARTICIPATING IN EXPERIENTIAL LEARNING TO DETERMINE THE VALUE ADDED TO THE DIDACTIC PROGRAM IN DIETETICS

Sandra L. Hudak
Dissertation

Approved: 

Advisor
Dr. Susan J. Olson

Interim Department Chair
Dr. Bridgie Ford

Committee Member
Dr. Sandra Spickard-Prettyman

Dean of the College
Dr. Patricia A. Nelson

Committee Member
Dr. Carole Newman

Dean of the Graduate School
Dr. George R. Newkome

Committee Member
Dr. Deborah Marino

Date

Committee Member
Dr. Susan Witt

ii
ABSTRACT

This study was conducted to determine if experiential learning “added value” to the didactic program in dietetics. Four students enrolled in an upper level medical nutrition therapy course offered at a Midwestern university participated in a medical nutrition therapy experiential learning component. The students were placed at four long term care facilities where they worked with a registered dietitian for twenty to thirty-two hours.

The four research questions explored for this study were

1. Why did students in the didactic program who elected to participate in the experiential learning component of the medical nutrition therapy course, choose to participate?

2. How did students perceive “value added” doing the experiential learning component of the didactic program?

3. In the opinion of the students and their preceptors, how did the experiential learning component “add value” to student learning?

4. What was the “value added” to student learning?

The “value added” by experiential learning to the didactic program and to the medical nutrition therapy course was determined by the activities in which the students participated, the relationship of these activities to course content, and whether or not the students and preceptors believed there was “value added” to the student, the course, or
student learning. Interviews conducted with students and preceptors and student journal entries were used to collect data.

Students participated in resident care conferences, resident council meetings, interviewing residents, completing nutritional assessments, collecting data for assessments and other resident evaluation information. The results of the study showed that overall the students derived benefits to understanding of class material and “value was added” to learning.

Future research should be conducted to observe whether the results from this study were typical of students participating in experiential learning. Effect on participants’ grades, understanding course material, or contribution to classroom discussions should be researched.

A study should be conducted to identify how the experience affected the students’ ability to perform in a dietetic internship. A study should identify if students with experiential learning in their didactic preparation were more confident in performing some of the responsibilities and activities associated with an internship. Research should be done to determine if students who participated in experiential learning during their undergraduate didactic program, performed on a more professional level during their internship.
ACKNOWLEDGEMENTS

I would like to acknowledge my dissertation committee for their assistance and support in preparation of this document. I would like to thank Dr. Susan Olson, chair, for her diligence; Dr. Sandra Spickard-Prettyman for offering suggestions for methods and presentation; Dr. Carole Newman for the original idea; Dr. Deborah Marino for being the content analysis expert and support throughout this process; and Dr. Susan Witt for assisting with the theoretical framework.

Additionally, I would like to thank the faculty in the Dietetics Division in the School of Family and Consumer Sciences. Their strong belief that I could be successful and complete the dissertation in the required time frame gave me the strength to continue when the odds appeared insurmountable. Specifically, I am very appreciative of the support from Sue Rasor-Greenhalgh who was always being available when I needed a sounding board.

Of course, I want to acknowledge my children, Michael and Melissa, who never doubted that I would successfully complete my dissertation.
TABLE OF CONTENTS

LIST OF TABLES........................................................................................................... ix

CHAPTER

I.  INTRODUCTION............................................................................................................. 1
   Statement of the Problem............................................................................................... 4
   Research Questions........................................................................................................ 4
   Purpose of the Study....................................................................................................... 5
   Theoretical Framework................................................................................................. 7
   Assumptions Underlying the Study............................................................................... 7
   Delimitations................................................................................................................ 8
   Definitions.................................................................................................................... 8
   Summary...................................................................................................................... 11

II. REVIEW OF THE LITERATURE..................................................................................... 12
   Introduction.................................................................................................................. 12
   Historical Information................................................................................................. 13
   Experiential Learning Theories.................................................................................... 17
   Studies Utilizing Experiential Learning....................................................................... 19

III. PROCEDURES............................................................................................................... 33
   Introduction.................................................................................................................. 33

vi
Research Questions………………………………………………………………33
Research Design………………………………………………………………….34
Student Participants…………………………………………………………......34
Facilities Used for Experiential Learning………………………………………..38
Preceptors……………………………………………………………………...39
Data Collection…………………………………………………………………..41
Data Analysis…………………………………………………………………….51
Validity Issues……………………………………………………………………54
Subjectivity…………………………………………………………………........56
Summary…………………………………………………………………………57
IV. RESULTS OF THE STUDY ................................................................59
  Student Participation.............................................................................59
  Presentation of Cases...........................................................................61
    Rose.................................................................................................61
    Daisy...............................................................................................63
    Violet...............................................................................................65
    Pansy...............................................................................................66
  Research Questions.............................................................................68
    Rationale for Participation.................................................................68
    Students Perception of “Value Added” to the Didactic Program........71
    How Students Perceived “Value Added” to Medical Nutrition Therapy….76
    Value Added.....................................................................................80
  Summary.............................................................................................86
V. SUMMARY, CONCLUSIONS, AND IMPLICATIONS........................................89

Summary of the Study..............................................................................89

Statement of the Purpose of the Study.....................................................89

Overview of the Procedures..................................................................90

The Research Questions.........................................................................90

Relationship to Theoretical Framework..................................................91

Conclusions............................................................................................91

Decision to Participate...........................................................................92

Student Perception of “value added”.......................................................92

How was “value added” to the didactic component medical nutrition therapy course..................................................94

What was the “value added” to student learning..................................96

Implications...........................................................................................100

Suggestions for Future Research............................................................104

BIBLIOGRAPHY.....................................................................................106

APPENDICES.......................................................................................109

APPENDIX A. LETTER TO PARTICIPANTS..........................................110

APPENDIX B. LETTER OF APPROVAL FROM IRB.................................112

APPENDIX C. INITIAL SURVEY OF NUTRITION IN MEDICAL SCIENCE I STUDENTS..........................................................113

APPENDIX D. INFORMED CONSENT..................................................114

APPENDIX E. OUTLINE OF PRESENTATION TO MEDICAL NUTRITION THERAPY CLASS.........................................................116

APPENDIX F. INSTRUCTIONS FOR JOURNAL ENTRIES.....................117
APPENDIX G.  CONDENSED VERSION FOUNDATION KNOWLEDGE AND SKILLS……………………………………………………………..118

APPENDIX H.  INTERVIEW QUESTIONS FOR STUDENTS………………..119

APPENDIX I.  INTERVIEW QUESTIONS FOR PRECEPTORS…………….120

APPENDIX J.  TIMELINE OF DATA COLLECTION………………………….121
**LIST OF TABLES**

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Participants, Facilities, and Preceptors</td>
<td>37</td>
</tr>
<tr>
<td>4.1</td>
<td>Participants, Facilities, and Preceptors</td>
<td>60</td>
</tr>
<tr>
<td>4.2</td>
<td>Rationale for Student Participation in Experiential Learning</td>
<td>68</td>
</tr>
<tr>
<td>4.3</td>
<td>“Value Added” to the Didactic Program in Dietetics</td>
<td>72</td>
</tr>
<tr>
<td>4.4</td>
<td>“Value Added” to the Medical Nutrition Therapy Course</td>
<td>79</td>
</tr>
<tr>
<td>4.5</td>
<td>“Value Added” to Student Development</td>
<td>80</td>
</tr>
<tr>
<td>4.6</td>
<td>Summary of “Value Added’ Items by Student</td>
<td>87</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

Experiential learning can be defined or described in a variety of ways. According to Kolb (1984), experiential learning describes the learning that is acquired through direct application of skills and knowledge in a relevant setting. Part of the learning process is reflection on those experiences and the learners’ feelings. In describing a dietetic internship, Winterfeldt, Bogle, and Epro (1998) defined experiential learning as the “practice-related knowledge and skill primarily acquired through supervised practice in real-life experience” (p. 32). The basic concept is that the student learned by observing and then actually doing the task or skill.

A form of experiential learning has been a component of dietetic education since 1903 when the need for practical experience as part of training for student dietitians was recognized by Corbett, Departmental Dietitian, Department of Public Charities, in New York City as cited in Lanz (1983). Corbett recommended that students be “graduates of domestic science courses, had taught one year and be over the age of twenty-five” (Lanz, p. 20). Students then completed four months to one year of post graduate clinical courses. In 1917 the American Dietetic Association (ADA) was founded and at the first annual meeting in 1918, the attendees expressed a concern for adequate theoretical education and technical training. As a result of this meeting, the membership
recommended a four year course with three to six months training at the completion of the four year course.

During the fifth Annual meeting in 1922, ADA proposed a “Standard Course for Student Dietitians in Hospitals” (Winterfeldt, Bogle, & Ebro, 1983). The recommendation was for a major in foods and nutrition within a four year college program followed by three to six months of professional experience that emphasized administrative practices, diet therapy, and teaching. In 1923, dietetic educators first outlined the courses they believed were necessary to prepare a student for dietetics practice. At that time, experiential learning was centered in the dietetic internship which students entered after completion of the four year degree. By 1927, ADA recommended that students who entered this hospital experience or internship be required to have a bachelor’s degree with a major in foods and nutrition.

The course of study in dietetics has continued to evolve as ADA attempts to prepare and guide the education of future professionals, modifying educational standards to meet the ever-changing needs of the marketplace. Two major study commissions, one in 1972 and another in 1984 were formed to make recommendations regarding the many questions facing dietetic education. The Task Force on Education in 1982, the Critical Issues Task Force in 1992, and the Dietetic Education Task Force in 1993 have also addressed issues of importance to the educational process (Payne-Palacio & Canter, 1996).

The dietetic internship, which is done at the completion of the academic program, has become the experiential learning component for graduates of the food and nutrition
programs who want to become registered dietitians. The didactic program refers to the lectures or discussion typically conducted in a university setting rather than in actual work settings. Including some experiential learning in the didactic program, while the students are still undergraduate students, may enhance the students’ skill level, increase confidence, and provide additional understanding of the foundation knowledge and skills as established in the Standards of Education by the Commission for Accreditation of Dietetic Education (CADE).

Two studies conducted in the field of dietetics on the subject of experiential learning were examined for the purpose of this study. One study by DeAngelis, Blenkiron, and Vieiria (2001), discussed the need to prepare new dietetic practitioners for the changes occurring in the profession. The authors suggest that mentoring and cooperative experiences guide the students through new situations, enhance their skills and allow them to apply the knowledge from the academic courses to the practical area.

The second study was conducted by Barr, Walters, and Hagan (2002) on the perceived value of professional preparation attained from the four areas of dietetic education by comparing the didactic program, the supervised practice (the dietetic internship), work experience, and continuing education. Barr et al (2002) proposed that the learning curve identified during the first three years of employment would be lessened during the entry level practice years if more experiential learning was included in the didactic program.

Studies by Colangelo et al (2004), Hickcox (2002), Rickard (2002), and Steffes (2004) have described the benefits of experiential learning in other professions, such as
nursing, teaching, law, and other health care professions. The conclusions of these various studies indicated that students participating in experiential learning saw the relevancy of their courses, increased their level of clinical competence, personalized and reinforced academic concepts, acquired broad principles, increased ability to problem solve, and developed confidence (Colangelo et al, 2004; Hickcox, 2002; Rickard, 2002). Additionally, students who participated in experiential learning increased their self-esteem, increased their reasoning ability, and may earn higher grade point averages (Steffes, 2004). All of these values and benefits, if achieved, would be advantageous to students in the didactic program in dietetics.

Statement of the Problem

This study explored the perceived value of experiential learning in the didactic program through interviews with the students, preceptors, and student journal entries. The perceived value was examined from the viewpoint of the student and the preceptor. The course instructor was not included in the interview process in order to preserve the anonymity of the student participants.

Research Questions

The research questions for this study were:

1. Why did students in the didactic program who elected to participate in the experiential learning component of the medical nutrition therapy course choose to participate?

2. How did students doing the experiential learning component of the didactic program perceive “value added”? 
3. In the opinion of the students and their preceptors, how did the experiential learning component “add value” to student learning?

4. What was the “value added” to student learning?

Purpose of the Study

The purpose of this study was to determine the perceived value of including an experiential learning component into the didactic program through an upper level medical nutrition therapy course. One of the major responsibilities of the didactic program is to prepare students for entry into an accredited dietetic internship. It was proposed that students would have a greater understanding of the didactic coursework, be more successful in their dietetic internship, and possess a greater knowledge base about the practice of dietetics if they participated in experiential learning during their academic undergraduate studies. According to Barr, Walters, and Hagan (2002) these skills or attributes would be beneficial to the students who complete an experiential learning component while in the didactic program.

With the ongoing increase in knowledge required, the rapidly changing nutrition environment, and the evolving roles for future dietetics practitioners, it is imperative that the graduates of the didactic program have more highly developed knowledge and skills to become competent practitioners and successful dietetic interns. Didactic programs must explore diverse means to enhance the foundation knowledge and skills of students. One such method would be to include experiential learning into the didactic program.

The American Dietetic Association’s (ADA) vision is that members of ADA will be the most valued source of food and nutrition services (Commission for Accreditation
of Dietetic Education, 2004). The responsibility for seeing that the education of future professionals can meet this vision belongs to The Commission for Accreditation of Dietetic Education (CADE). CADE has as its vision that CADE-accredited programs will be valued and respected for preparing competent professionals for entry-level and evolving practice. CADE’s mission is to serve the public by ensuring the quality and continued improvement of education that reflects the evolving practice of dietetics. In order to achieve their mission, CADE has established foundation knowledge and skills for the didactic program and competencies for the supervised practice component of dietetic education.

The individual didactic programs and coordinated programs must meet all of the foundation knowledge and skills put forward by CADE. In addition, the coordinated programs and dietetic internships must meet the competencies established by CADE. However, the method used to accomplish these tasks is determined by the individual institution or facility. Incorporating experiential learning into the didactic program in dietetics may be one way to assist in fulfilling the foundation knowledge and skills. I hypothesized that the inclusion of an experiential learning component into the didactic program would assist students in achieving the foundation knowledge and skills that are to be provided in the didactic program in dietetics.

It is believed, but not documented, that provision of experiential learning during the didactic program will enhance the foundation knowledge and skills of the student preparing to enter a dietetic internship. This study explored the students’ perception of
the value added to their didactic education by participation in an experiential learning component of the medical nutrition therapy course.

Theoretical Framework

Kolb’s (1984) theory on experiential learning provided the basis for the theoretical framework of this study. Kolb with Fry created the learning model for experiential learning based upon four elements: concrete experience, observation and reflection, forming abstract concepts, and testing in new situations (Smith, 2005). In Kolb’s learning model, education, work experience and personal development are all linked. Experiential learning was described as a means by which the student could relate classroom studies with actual experience. By utilizing this method, learning became a continuous process because classroom theory was tested in experience and experience showed the relevance of the classroom theory (Smith, 2005). Kolb’s (1984) definition of learning explained that learning is “the process whereby knowledge is created through the transformation of experience” (p. 38).

Assumptions Underlying the Study

Several assumptions were made for the purposes of completing this study. The assumptions are based on the researcher’s thirty plus years as a practicing Registered Dietitian and ten years as faculty at a university. The first assumption was that the subjects were typical of students in the third year of the didactic program in dietetics. Second, since all of the subjects were in the upper level medical nutrition therapy course, it was assumed that the students had been exposed to similar course content and theories that were presented in the prerequisite courses and curricular progression.
Delimitations

This study focused on a specific group of students from one type of dietetics program offered in a Midwest, metropolitan university. All subjects were students, either full or part-time, enrolled in an upper level medical nutrition therapy course in their third year. The subjects self-selected a site from a list of facilities made available to them. The students were to participate in experiential learning in conjunction with the academic preparation offered in the medical nutrition therapy course. All students were provided with the same didactic component which focused on treatment of disease states with appropriate nutrition therapy. The experiential learning content was determined between the preceptor and the student. The types of experiences offered varied between facilities and preceptors due to the different levels of care at these facilities and diverse practices of the preceptors.

Definitions

For the purposes of this study, the following definitions were used:

Commission for Accreditation of Dietetic Education – This is the administrative arm of the American Dietetic Association that establishes foundation knowledge and skills for didactic programs and competencies for the supervised practice component.

Competencies - Competency is the ability to carry out tasks within certain expected standards or parameters. There is a three stage approach with students observing preceptors, preceptors observing students, and students practicing independently in order that the students become competent.
Coordinated Program in Dietetics – The Coordinated Program is an academic program in a regionally accredited college or university that combines the dietetic internship with the didactic program in dietetics and culminates in a minimum of a baccalaureate degree. It provides a minimum of 900 hours of supervised practice experiences to meet the foundation knowledge and skills for the dietetic component of entry-level dietitian education programs and the competencies for the supervised practice component of entry-level dietitian programs. In the Coordinated Program the supervised practice experiences are planned to be completed concurrently with the didactic component. At the completion of the Coordinated Program in Dietetics, students are eligible to take the national registration examination for dietitians.

Didactic program in Dietetics – The didactic program is any classroom activity usually presented in the typical college lecture, recitation, discussion or laboratory. This program provides the foundation knowledge and skills as established by the Commission on Accreditation for Dietetic Education.

Didactic student – A student enrolled in the didactic program in dietetics.

Dietetic internship – A supervised practice program sponsored by a health care facility, college, or university, federal or state agency, business or corporation. The internship provides a minimum of 900 hours of supervised practice experiences to meet the competencies for the supervised practice component of entry-level dietitian programs; follows completion of ADA accredited program in dietetics (DPD) and a baccalaureate degree. At the completion of the dietetic internship, students are eligible to take the national registration examination for dietitians.
Experiential learning – A type of student learning where practice-related knowledge and skill is primarily acquired through supervised experience in real-life situations.

Facility – An institution where the preceptor is either employed or providing consulting services and will sponsor the student during the experiential learning process.

Faculty – The person(s) providing didactic instruction to the student in the medical nutrition therapy course and other didactic courses.

Foundation knowledge and skills – The foundation knowledge and skills required in the didactic portion of education programs are grouped under eight areas: communications, physical and biological sciences, social sciences, research, food, nutrition, management and health care system. Foundation learning is further divided into basic knowledge of a topic, working or in-depth knowledge, and ability to demonstrate the skill at a level that can be developed further. To achieve the foundation knowledge and skills, graduates must have demonstrated the ability to communicate and collaborate, solve problems, and apply critical thinking skills.

Medical Nutrition Therapy course – The course that examines the relationship of nutrition intervention to the health factors and disease states of individuals.

Preceptor – A person that guides, mentors, and evaluates a student during the supervised practice experience.

Student – An undergraduate or postbaccalaureate, full or part-time student in the third year of the DPD; enrolled in the first half of the upper level medical nutrition
therapy course in a program accredited by the Commission for Accreditation of Dietetic Education (CADE).

**Supervised Practice** – The learning experiences associated with activities in selected situations that enable the student to apply knowledge, develop and retain skills, and develop professionally.

**Value-added** – A term used to describe the achievement of student goals objectives by using methods that connect classroom material with application in relevant situations.

**Summary**

Additional studies are needed to examine the benefits of incorporating experiential learning into the didactic component of the course of study for dietetics. No studies were found that specifically investigated the perceived value of experiential learning to the dietetic students while in the didactic program in dietetics. Historical information has demonstrated the need for the entry-level dietitian to have completed a supervised practice. However, the changing market of the profession of dietetics commands that a change in the educational process should be assessed. The purpose of this study was, therefore, to research the value of including experiential learning into the didactic component of an upper level medical nutrition therapy course.
CHAPTER II
REVIEW OF THE LITERATURE

Introduction

This chapter provides a review of the literature as it relates to the history of the profession of dietetics, the theoretical framework of experiential learning, and studies utilizing experiential learning. The chapter begins with a review of the history of dietetics to provide the background information about the profession of dietetics and to offer some insight as to the importance of experiential learning to the development of professional dietitians. The history also introduces the various layers of supervised practice that exist in the training of dietitians.

The review of literature includes a discussion of the theoretical framework of experiential learning. Kolb’s model of experiential learning is reviewed as it is the foremost example of the theory of experiential learning. The review provides the model of experiential learning from the perspective of Kolb (1984), Jarvis, Holford, and Griffin (2003), and Brookfield as discussed in Smith (Smith, 2005).

The last section of the chapter discusses the studies that used experiential learning as the foundation of their study. The majority of the literature focuses on experiential learning in healthcare professions other than dietetics as very little literature were found demonstrating the importance of experiential learning to the profession of dietetics.
Therefore, the literature from other professions, including nursing, teaching, law, and medicine, were used as a model to relate experiential learning to dietetics. Although experiential learning, in some form, has always been a part of the development of the practitioners in dietetics, studies have not been widely conducted as to what advantages are obtained using experiential learning within the didactic program in dietetics.

Historical Information

According to Lanz (1983), the word dietetics was first mentioned in medical books published in Florence, Italy in the year 1478. At that time, dietetics was referred to as the treatment of disease by diet and considered to be a branch of medicine and encompassed the doctrine of health, hygiene and diet. The concept of treating disease with diet was practiced as cooking for the sick, dietotherapy, and then diet therapy.

While working as the superintendent of nurses in the British military hospitals in Turkey during the Crimean War, Florence Nightingale established food services for the troops (Payne-Palacio & Canter, 1996). This was significant because by improving the diet of the troops and the sanitary conditions, she was able to reduce the death rate of the injured soldiers. The knowledge gained at this early juncture became the basis for the foundation of the profession of dietetics. At the end of the war, Nightingale continued to demonstrate her belief in the importance of nutrition and foodservice management by emphasizing the selection and service of food and the art and science of feeding the sick (Payne-Palacio & Canter, 1996).

The interest in creating a profession of dietetics was started by the development of the early cooking schools. Sarah Tyson Rorer (1849-1937) who was considered to be the
first American dietitian opened the Philadelphia Cooking School in 1883 where students learned about food values, protein, and carbohydrates, but nothing about calories and vitamins. The training consisted of some medical school lectures and a three month cooking course (Payne-Palacio & Canter, 1996; Wenberg, 1987). Initially graduates got positions planning meals and supervising food production in hospital kitchens.

The beginning of academic preparation for dietetics occurred in the early domestic science schools. Cookery was formally introduced in the curriculum at Kansas Agricultural College, Iowa Agricultural College and University of Illinois in 1873 (Wenberg, 1987). These early courses, which were originally intended for homemakers, became the original dietetics programs offering a study of foods as well as the cooking for invalids. Courses in dietetics included chemistry of cooking, preparation of animal and vegetable foods for the healthy and ailing, and the physiological effects of tea, coffee, chocolate, and alcoholic drinks.

In 1899 Michigan Agricultural College, which became Michigan State University, included courses that presented the sciences of nutrition and food (Wenberg, 1987). These subjects were incorporated into the Women’s Course as cookery for invalids and dietetics. By 1910 the Michigan Agricultural College added a course in institutional management and by 1915 both dietetics and institutional management were senior year requirements for all home economics students (Wenberg, 1987).

At a national home economics meeting in Lake Placid, New York, in 1899, the term dietetics was first recognized and defined. The term applied to a “person who
specializes in the knowledge of food and can meet the demands of the medical profession for diet therapy” (Payne-Palacio & Canter, 1996, p. 7; Lanz, 1983, p. 9).

The American Dietetic Association (ADA) was founded in 1917 at which time the term dietetics was defined as “the science of nutrition and the art of feeding people” (Lanz, 1983, p. 9). Dietetics grew into a profession with the discovery of insulin and other scientific breakthroughs in the 1920s. These discoveries generated an interest in diet therapy and the demand for trained dietitians as diet therapists and food service managers increased (Wenberg, 1987). At the fifth annual meeting in 1922, ADA proposed a “Standard Course for Student Dietitians in Hospitals” which recommended a major in foods and nutrition from a four year college with three to six months of experiential learning emphasizing administrative practices, diet therapy and teaching (Wenberg, 1987; Winterfeldt, Bogle, & Ebro, 1998; Stage & Vincenti, 1997).

Experiential learning in dietetics is traditionally called supervised practice or preprofessional practice. It can be completed following the degree program or concurrently with the didactic coursework, depending on the institution. The preprofessional experience takes place in a work setting as opposed to the classroom. The classroom is regarded as providing the knowledge and reasoning skills, and the supervised practice allows for the application of the knowledge and building of skills to become competent entry-level professionals (Winterfeldt et al., 1998). Competency is the goal of supervised practice.
During supervised practice, preceptors mentor students in order to help the student identify problems, collect data, interpret and synthesize the findings, formulate plans and alternatives, and evaluate the outcomes (Winterfeldt et al., 1998). Supervised practice programs are based on the Standards of Education (SOE) of ADA and the competencies for entry-level practice as a dietitian. In 1994, ADA established the Commission on Accreditation for Dietetic Education (CADE), which is an independent administrative body. CADE sets the foundation knowledge and skills to be achieved by the didactic program and the competencies to be acquired through the completion of the supervised practice component of dietetic education.

The supervised practice component must provide a minimum of 900 hours of experience for the student whether in conjunction with the didactic program or as a stand alone dietetic internship. The review of the literature does not yield studies using experiential learning as an addition to didactic coursework in the Didactic Program in Dietetics. Only the Coordinated Program in Dietetics (CPD) has the supervised practice component integrated with the presentation of the didactic subject material. The CPD provides a minimum of 900 hours of supervised practice experiences to meet the foundation knowledge and skills for the dietetic component of entry-level dietitian education programs and the competencies for the supervised practice component of entry-level dietitian programs. In the CPD the supervised practice experiences are planned to be completed concurrently with the didactic component. Both the Didactic Program in Dietetics (DPD) and the CPD are offered at the Midwestern university where the study was conducted.
Experiential Learning Theories

Experiential learning was first presented in the 1920s/1930s by Dewey who proposed that education was too concerned with the deliverance of knowledge and did not focus on the student’s actual experiences (Reed & Johnson, 2000). According to Reed and Johnson (2000), Dewey is considered to be the philosophical father of experiential education. According to Dewey, education must interact and reconstruct the previous experience of the learner. Education was to interact with and build on the social experiences of the learner in order to secure continuity in the development of the child. Dewey presented his philosophy of education as it related to children. Dewey did not propose that student’s would know how to structure their own learning experiences.

Although, Dewey’s theories were constructed around children, the premise that education must interact and build on the social experiences of the learner applies throughout the education process. Using actual experiences to enhance education applies to all levels of education, including the college student.

Kolb has contributed a well-known model of experiential learning. According to Kolb (1984) the cycle of learning has four essentials which are concrete experience, observation and reflection, the formation of abstract concepts, and testing in new situations. According to Kolb and Fry, the learning cycle can begin at any one of the four points is a continuous spiral (Smith, 2005). It is not unusual for the learning process to begin with a person carrying out an action and then seeing the effect of the action in a particular situation. The second step is to understand the effect in the particular instance so that if the same action was taken in the same circumstances it would be possible to
anticipate what would follow from the action. The third step is understanding the general principle under which the particular instance falls. Generalizing may involve actions over a range of circumstances to gain experience beyond the particular instance and suggest the general principle (Kolb, 1984). When the general principle is understood, the last step is its application through action in a new circumstance within the range of generalization.

Subsequently, in 1987 Jarvis expanded on Kolb’s model to show that there are a number of responses to the potential learning situation. The model developed by Jarvis allowed different routes for learning, with some non-learning, some non-reflective and some reflective learning (Smith, 2005).

Jarvis, Holford, and Griffin (2003) describe learning as a social activity that must involve active engagement. The challenge issued to teachers is that they become ‘facilitators of learning” by helping students acquire educational standards through experience and choice. The student should “demonstrate their understanding in actual settings, provide different ways to demonstrate their learning and focus on the goal of lifelong learning to benefit society” (Jarvis et al., 2003, paragraph 5).

According to Brookfield, as cited by Smith in D. A. Kolb on Experiential Learning (2005), experiential learning can take place in two different types of settings. Experiential learning may be directed by an institution that places students in a relevant setting to provide an opportunity to acquire and apply knowledge, or it may be education that occurs as a result of interaction with life experiences.
As described by Saddington in “What is ‘experiential learning’” (2005) Weil and McGill categorized experiential learning into four emphasis areas to form the basis for a group of interrelated ideas and concerns. The concept of the four villages was presented at the First International Conference on Experiential Learning in London in 1987. These emphasis areas are called villages and are described as follows:

1. Village One – concerned with assessing and accrediting learning from life and work experience as the basis for creating new routes into higher education, employment and training opportunities, and professional bodies.
2. Village Two - focuses on experiential learning as the basis for bringing about change in the structures, purposes and curricula of post-secondary education.
3. Village Three – emphasizes experiential learning as the basis for group consciousness raising, community action, and social change.
4. Village four – concerned with personal growth and development and experiential learning approaches that increase self-awareness and group effectiveness (Saddington, 2005, paragraph 3)

Zemelman, Daniels, and Hyde (1998) define experiential learning as an active, hands-on concrete experience. Zemelman et al. (1998) consider experiential learning the most powerful and natural form of learning. There are benefits and barriers to experiential learning that have to be considered when planning this type of learning. Experiential learning has a variety of titles including work-based learning, cooperative education, competency-based learning and community-based learning.

**Studies Utilizing Experiential Learning**

DeAngelis, Blenkiron, and Vieiria (2001) explored experiential learning for students desiring to become Registered Dietitians. The authors discussed the preparation of the new dietetic practitioners from the prospective of the changes being made in the profession of dietetics. Changes are occurring in the health care setting as well as in the business environment. Therefore, the traditional internships available to students are
becoming more varied and include training for roles in the media, the community, business and management roles. Because of these changes there are implications for the academic and experiential learning experiences for students.

ADA has established goals to meet the rapidly changing market faced by the dietetic professional. The first goal is that a dietitian will be a “leader in selected areas of food and nutrition” (DeAngelis et al. 2001, p. 13). To meet this objective creative and innovative learning environments are required to help expand areas of expertise for dietetic professionals. These learning environments must meet the challenge of providing effective learning experiences to develop the high levels of competence needed for practice now and in the future. Professionals outside of dietetics should be utilized to enhance the learning environment and assist in the development of new and multiple skills.

The second goal was “to position members to compete successfully in a rapidly changing environment” (DeAngelis et al. 2001, p. 13). The focus was on employer recognition of the value of the skills developed through the creative and innovative learning environments established. Here, experiential learning can increase the value of the dietetic professional because they will have concrete learning experiences outside of the traditional settings.

A third goal is “to facilitate support for food, nutrition, and health services research” to offer opportunities for new partnerships (DeAngelis et al. 2001, p. 13). Technological advances and nutritionally based products provide a research area that would benefit from the expertise possessed by a well-trained dietitian.
Approaches suggested by the authors include mentoring, culinary nutrition, and cooperative experiences (DeAngelis et al. 2001). Mentors guide the less experienced person through new experiences, serve as role models, and can enhance the person’s skill level. Culinary nutrition builds on the training in nutrition knowledge and food science and allows the dietetic professional to promote food for good health not just nutrients. The cooperative experience can extend the mentoring concept to a formalized work experience which would allow the students to apply knowledge from their academic area to the practical area.

It is this type of cooperative learning that will allow the student to actually become part of the changing environment and allow them to experience the activities that take place in the various settings. As the diversity of experiences increase within the curriculum the more the value of the student is increased. Dyer (2003) comments on the challenges placed on the academic setting to educate competent practitioners in the rapidly changing health-care market from a nursing perspective. Dyer believes there are many benefits to the collaborative learning process such as experiential learning. These benefits include increased student awareness and respect for other professionals because of the shared learning experiences.

Hickcox (2002) used the term experiential learning to describe learning where the dynamics of the interaction between student and faculty was increased through new courses and tasks. According to the author, experiential learning encompassed practicum experience, credit for prior learning and service learning. Because it was active learning, students were more engaged in the learning process. According to Hickcox, experiential
learning stemmed from the progressive education movement initiated by J. Dewey in the 1920s and 1930s. Hickcox acknowledges that Kolb developed the learning inventory that is the basis for what learners need to grow and develop.

Three mini-cases were described by Hickcox (2002) to illustrate the lessons learned from experiential learning. The mini-cases demonstrated that utilizing experiential learning allowed students to personalize and reinforce academic concepts as well as acquire broad principles and major facts through actual or simulated activities. One of the goals was that learning become self-directed and self-initiating. Positive experiences noted by the students included increased ability to problem solve and use of critical thinking skills. Some of the lessons learned from the mini-cases described by Hickcox should enable the experiential learning to be personalized for the student. Lessons learned include the realization that faculty had to give up a percentage of their course content or look for new ways to teach skills in order to incorporate experiential learning. Faculty also needed to realize that even though learning was more self-directed than the traditional method, students still required structure, guidance, and direction from them.

Reeders (2000) discussed work-based learning (WBL) as a part of higher education. This type of learning has received strong support from the industry and students. Reeders specifically explored student learning for credit designed to occur either in the workplace or in on-campus settings that mirror aspects of the workplace.

In 2002, Rickard evaluated a case-study WBL program for health studies undergraduates in their final year of academic studies. Rickard discussed how the WBL
issues were “managed and accredited, how programmes (sic) position themselves in addressing and assessing different types of knowledge and skills, how vocational and academic goals are balanced and where they draw their authority from” (p. 48). The main challenge was that WBL programs were time and resource intensive. Rickard also indicated the importance of widening student access and increasing participation in WBL programs. Rickard indicated that adoption of WBL has been limited, uneven, and unsystematically evaluated.

The WBL program was used in a university setting in the United Kingdom for a twelve week teaching semester. The program wanted to achieve six core learning outcomes. Time was evenly divided between the academic activities and the work sessions at different placement sites. Planned activities included lectures, seminars, guided tours, and group-work as part of the academic work. An integral part of the group work was preparing students for self-directed learning in which the learner was made aware of and responsible for his or her own learning process and the outcomes. Placements in this case study fell into five different categories: shadow, innovator, volunteer, assistant, research/task. These placements allowed students to develop a range of skills determined by the type of placement. The study found that there were benefits to the learner, the community agencies, and the teacher.

Benefits for the students included an opportunity to examine ethnic health needs, minority employment opportunities, and the ability to relate theory of the classroom to practice. Students surveyed at the end of the WBL opportunity stated that they developed problem-solving skills, developed confidence, and increased learner commitment and
motivation (Rickard, 2002). Students also leaned transferable skills from the community agencies.

The community agencies benefited from the experience because they were able to gain from the academic knowledge and the “fresh approach” brought by the students to the agency (Rickard 2002). Another benefit cited was that the community agencies became more closely involved in the academic curriculum and benefited from the ideas that were exchanged.

Teacher benefits also included the exchange of ideas between the agency and the academic arena. The instructors benefited from a higher level of motivation exhibited by the students. The assessments indicated that this type of experience facilitated learner development.

Students without previous work experience did not gain as much confidence as indicated in the assessment at the conclusion of the work-based learning experience. Some of the community agencies felt that they did not know what to do with the students and hence the student did not achieve his/her learning goals and the agency did not benefit from the placement. As this program has been continued over a period of time, teachers have found that as the numbers of students increased there was an increase in stress in maintaining the quality of the program. Also, teachers must assist students in negotiating the learning agreement with the community agency, which had to be done in a relatively short period of time because the entire experience took place over one semester. Overall, there appeared to be benefits to balancing the academic work with the
practical learning experience, but organizing and running a work-based program is time and resource intensive.

Williams, Reid, Myeni, Pitt, and Solarsh (1999) discussed the value of community-based medical education while examining the areas in need of improvement. One of the most important principles was to involve the community in an active rather than a passive role in the planning and operation of the educational activity. Most community-based education programs tried to expose students to community resources and broaden students’ perspectives by familiarizing them with family and community into which health care must fit. Williams et al. believed these are limited goals and that a third goal of giving the students skills they can use later in their clinical practice should be incorporated into the community-based education programs. The authors described a course developed to be more community responsive with more extensive goals than traditional programs. The four goals established for this program were: to educate students about the family, home and community context in which health and health care are based, to expose the students to community-based health care through their work with individual patients, to create a true partnership with the community in the planning and operation of the rotation, to give the students practical skills for influencing the link between individual patients and the home and community context in which they live. In order to accomplish these more extensive goals a course planning committee was established to form a partnership between the academic setting and the community. The project was conducted in South Africa where a health survey identified tuberculosis (TB) as a major health problem. The students were to work on the problem of how to
implement and make successful outpatient treatment of TB. The program was conducted over a seven month period of time. Pre- and post-evaluations were done to determine the impact of the rotation on student attitudes about community-based learning. Many benefits of this program were realized by the patients, the community and the student. The medical school responded to a community need and therefore fulfilled its social obligation more fully and responded to social needs more appropriately.

Colangelo, Quirici, Adams-Babineau, (2004) organized a summer internship experience for nursing students. They attempted to provide an in-depth clinical experience during the summer between the junior and senior undergraduate years. This internship was designed to build the students’ skill level and experience. The course objectives included to:

1. provide patient care and gain experience in performing nursing skills under the direct supervision of a nurse preceptor or faculty advisor;
2. increase level of clinical competence and clinical judgment by relating nursing theory to practice;
3. refine communication skills through interactions with patients, family members, and health team members;
4. assist patients and their families in learning about their diseases and care requirements; and
5. assume responsibility in seeking new learning experiences. (paragraph #5)

At the conclusion of the summer experience the students rated their experience. The students believed that the program met or exceeded all of their expectations and objectives.

Barr, Walters, and Hagan (2002) reported on a study conducted to determine the perceived value of experiential learning in the education of dietitians. The Barr et al study explored the perceived value of professional preparation attained from the four
areas of dietetic education by comparing the didactic program, the supervised practice (the dietetic internship), work experience, and continuing education. For the purposes of this investigation, the dietetic internship was defined as the supervised practice component which comes at the completion of the Didactic Program in Dietetics (DPD). Supervised practice was the dietetic internship which received the highest rating for confidence, ability, knowledge, skills, and competence as a Registered Dietitian.

In this study, Barr et al (2002) state that “experiential education involves active participation in events or activities that ultimately lead to the accumulation of knowledge and skills and their competent application” (pg. 1458). They describe the DPD as the beginning of the education process where the students gain their academic information. It is the dietetic internship that provides the active participation with the integration of the foundation knowledge and skills as established by CADE. Through the dietetic internship the interns develop the competency to be entry-level practitioners.

In 2000, the authors surveyed the entry level practitioners who had passed the national registration examination between 1996 and 1999. The American Dietetic Association has established a three year time frame as an entry level dietitian. By using this time period, Barr et al (2002) determined that graduates of internships taking the examination during this period would be considered entry-level practitioners. The authors asked the practitioners to rate the perceived contribution of the didactic component, the dietetic internship, work experience, and continuing education to their professional preparedness.
A summation of the responses by students indicated that the supervised practice component received the highest percent of perceived contribution of educational components to professional characteristics. Since Barr et al (2002) also found that confidence was increased through work experience and that the sharpest learning curve occurred during the first years of practice, the authors concluded that more emphasis should be placed on competency development during the educational process by incorporating experiential learning within the DPD. They believed that students may perceive they are more competent, develop more confidence as an entry-level practitioner, and attain a higher skill level at the completion of the dietetic internship if they gained more experience during their academic years. Barr et al (2002) also proposed that the learning curve would be lessened during the entry level practice years if more experiential learning was included in the didactic program.

Johnson (2001) presented a checklist of opportunities, benefits, and barriers to work-based learning in higher education. The checklist was the result of workshops attended by university faculty using work-based learning in their programs. The author believed that it was necessary to overcome or reduce the challenges in order to receive the benefits and opportunities presented by work-based learning. Benefits and barriers were seen to affect learners, universities, and employers.

According to Johnson (2001), one learner benefit was that courses were seen as relevant and practice-focused. Additionally, learning was self-directed and presented the concepts of lifelong learning. Learners benefited from courses that were marketable because they combined education and application. The university obtained new and
innovative courses that put the emphasis on learning not teaching. These courses offered opportunities for computer and information technology and provided the impetus to update staff knowledge and skills. Also, the staff worked with self-motivated learners and developed opportunities for research and consultant prospects. The university benefited by working closely with corporate partners. Employers believed that due to flexible attendance there was less disruption in the workplace. They also received free consultancy from the learners and the faculty. There was a relatively low investment in the WBL program and the work-based projects produced real benefits for the workplace.

Barriers identified for the learners were that different patterns of learning can socially isolate some students and work-based learning is not suitable for students who are not motivated and self-directed. Johnson (2001) also stated that work-based learning does not produce a savings in faculty or resources and time was required for staff development. The participants in Johnson’s workshops believed that academic distain for work-based learning courses exists. Employers also expressed concern about the credibility of WBL courses. Employers were also concerned about confidentiality of workplace issues and the amount of commitment to become a mentor for the student placed in the work environment. Overcoming these challenges can make the work-based learning experience worthwhile and beneficial to all involved.

Using the theories of Kolb, McGunn (2003) reports on the importance of experiential learning to student teachers. Through the use of immediate, real, and concrete experiences, the students were able to formulate and test abstract concepts (McGunn, 2003). The classes taught in the university are the foundation for the
experiences. According to McGunn (2003), the students benefit from sharing their experiences, reinterpreting them and assembling the resources to meet the goals identified through experience.

McGunn (2003) also discussed the role of reflection on the student teaching experience. Student teachers were asked to reflect upon their experiences to develop concepts and plan actions by setting new goals and strategies for teaching. Students were aided by supervisors to ensure that the students engaged in personal reflection and planning. The learning process, itself, was determined by the students participating in the reflection process.

All student teachers in this study were positive about the reflection cycle and its influence on their development as teachers. McGunn (2003) offers the following benefits of reflection most frequently cited by students involved in the study:

- provided an opportunity to look back at my goals for the day and see that they were met;
- opened the door for constructive criticism and growth;
- helped form more concrete impressions of teaching; and
- didn’t make me feel as on the spot as talking about teaching right after I’m done. (p. 146)

Other benefits observed by McGunn (2003) were that there was much less anxiety on the part of the students and clearer ownership in their own development. Overall communication improved when students were more responsible for evaluating themselves. The students developed professional behaviors that set a pattern for continued learning.
From the supervisor’s standpoint, they believed that the reflection had a profound impact on learning during student teaching. All students who used the reflection cycle felt empowered by their role in their own development as teachers.

Walker (2005) also supports the importance of the reflection or debriefing to the student’s ability to process the information from the experiential learning situation. Kolb’s learning cycle is cited as the model for the experiential learning framework and reflection is a stage in this model. By processing the learning experience through reflection the students are able to comprehend the lessons to be learned. The debriefing process moves the students from “passive recipients of information to learners who observe and experience phenomena in the workplace (concrete experience), write about, reflect upon and discuss what has been experienced (reflective observation), think about how their experiences and those of other students relate to concepts and theories considered in their coursework (abstract conceptualization), and use the new knowledge in the workplace (active experimentation)” (Walker, 2005).

Preparing students to think, solve problems, apply knowledge, engage in constructive teamwork, and develop their capacity for lifelong learning will be the greatest demand on education in the future. Debriefing fulfills this demand by helping the student process the experience, relate the experience to course content, and develop alternative solutions that might work in similar situations. Through experiential learning and reflection, the students must think, problem solve, and expand their learning (Walker, 2005).
In 2004, Steffes focused on the “learn by doing” experiences in higher education. Students should be able to observe and reflect on their current actions in order to formulate future practice. Steffes (2004) theorizes that instructors and mentors involved in the experiential learning situation shape and enhance the students’ sense of professionalism in their fields of practice before they leave campus. A goal of these real-life experiences is to advance the students professional and personal development.

Steffes (2004) relates the experiential learning to service-learning and believes the following outcomes are achieved through this real world experience. The author indicates that the outcomes of service learning include:

- increased sense of citizenship (values, skills, efficacy, and commitment to social responsibility);
- development of stronger analytical and problem-solving skills;
- enhanced personal development (self-knowledge, spiritual growth, finding reward in helping others);
- increased leadership skills;
- greater cultural awareness and tolerance;
- enhanced social development skills; and
- improved interpersonal development (working with others, communication skills). (Steffes, 2004, p. 49)

Students involved in service learning may earn higher GPA’s and experience, increased self-esteem, increased moral sensitivity and reasoning abilities, enhanced ethical development, and sharing the intellectual responsibility for their learning (Steffes, 2004).

Additionally, Steffes (2004) suggests that faculty and mentors should challenge students to problem solve by conceptualizing a situation or problem in the workplace and discuss how to respond to the circumstances. Preceptors should also assist students in reflecting on their work and enhancing or modifying their current behavior.
CHAPTER III

PROCEDURES

Introduction

Chapter III addresses the methodology used to study the students’ perception of the benefits of incorporating experiential learning into the didactic program in dietetics through an upper level medical nutrition therapy course at a Midwestern university. An exploratory case study was the form of qualitative research employed for this study. Qualitative research suits this proposal because it allows an in-depth look at a specific intervention and the students’ interaction with the social setting in the facilities used during the course of this study.

Research Questions

The research questions for this study were:

1. Why did students in the didactic program who elected to participate in the experiential learning component of the medical nutrition therapy course, choose to participate?
2. How did students doing the experiential learning component of the didactic program perceive “value added”?
3. In the opinion of the students and their preceptors, how did the experiential learning component “add value” to student learning?
4. What was the “value added” to student learning?

Research Design

Exploratory case study research design was used during this study. This study used four cases to investigate experiential learning as an intervention in the medical nutrition therapy class. The case study research method was used since experiential learning has no clear set of established outcomes. Additionally, case study research applies because the use of experiential learning is a current issue that was examined in actual situations.

Student Participants

There were twenty students enrolled in the beginning medical nutrition therapy course at a Midwestern university. Of the twenty students, eight were in the didactic program (which has no required experiential learning component) and were eligible for participation in the experiential learning component study. The remaining twelve students were in the Coordinated Program in Dietetics (CPD) and, therefore, had the dietetic internship (experiential learning) hours already included in their program. During the first week of classes of the spring semester 2006, all eight of the students were given a letter (Appendix A) explaining the study and requesting that they complete the survey. They were not required to complete the survey. Five students indicated that they would be interested in the study and completed the survey. One student who completed the survey decided to withdraw from the experiential learning component due to time constraints so no visits were scheduled to any facility for this student. Four students (n=4) actually participated in the study. The remaining three didactic students did not
complete the survey nor did they provide any information as to the reason for not participating.

All four of the students were undergraduate students enrolled in an upper level medical nutrition therapy course at a Midwestern university in the spring of 2006. They were completing the Didactic Program in Dietetics and they will be eligible to enter a dietetic internship after they have received their degree. They had completed all of the prerequisites required for the course.

Participation in the experiential learning component was voluntary and was not considered a requirement for the course. I was not an instructor for the medical nutrition therapy course and did not have input into the grading of course material. The course instructor was not included in the interviewing process during the experiential learning component so that the anonymity of the students would be maintained. The instructor was contacted after grades were submitted, but could not offer any comments about the participants in the study.

Since the medical nutrition therapy course has specific prerequisites and is taken at a regulated point in the student’s academic career, it was assumed that the students had similar academic preparedness for the course. Prerequisites for the medical nutrition therapy course are a fundamental nutrition course, a human nutrition course, a biochemistry course or courses, and human anatomy and physiology course or courses. The medical nutrition therapy course used for this study is the second of a series of three courses that are taken consecutively and present information about nutrition as it relates to the human body and health and wellness. The students are not required to have prior
work or volunteer experience in medical nutrition therapy to be enrolled in this course. The CPD students have a one hundred and twenty hour internship (experiential learning) component as a co-requisite with the medical nutrition therapy course. The DPD students do not have this requirement as they will be completing an internship after finishing their degree in dietetics.

The DPD students could withdraw from the experiential learning component at any time, but would remain in the medical nutrition therapy course. Participants were permitted to withdraw without consequences to themselves or to their grade for the medical nutrition therapy course. None of the students who began the experiential learning component withdrew from the study.

The four DPD students who agreed to participate in the study were undergraduate students. Three of the students were enrolled full-time (n=3) and one was a part-time (n=1) student in the DPD. The three full-time students were concurrently enrolled in a food systems management course that includes a thirty-six hour experiential learning component as a regular part of the curriculum. The part-time student had already completed the food systems management course. The students completed sixteen to thirty-two hours at their selected facilities. The number of visits varied from four to eight, with each visit consisting of four hours. A summary of the student participants, the facilities used for the experiential learning component, the preceptors, and the times spent at the facilities is contained in Table 3.1. Pseudonyms were used for the students, preceptors, and facilities in this study.
### Table 3.1: Participants, Facilities, and Preceptors

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>STATUS/EXPERIENCE</th>
<th>PRECEPTOR</th>
<th>FACILITY DESCRIPTION</th>
<th>Hours at Facility</th>
</tr>
</thead>
</table>
| ROSE    | Undergrad Full-Time student  
No previous work related experience | Mercy - Consultant, 30+ years experience, has worked with many students as a preceptor and mentor | The Seasons – Long Term Care facility with 48 bed Assisted Living, 48 bed skilled unit | 32 hours completed in 8 visits |
| PANSY   | Undergrad Full-Time student  
Worked in food service at a Long Term Care Facility | Elmer – Employed full-time at facility, 3 years experience, first time as a preceptor | The Lake – Long Term Care facility 117 Beds, with rehabilitation unit, skilled nursing unit | 16 hours completed in 4 visits |
| DAISY   | Undergrad Part-Time student,  
No previous work related experience. Had completed the food systems management experience. Nursing student experience. | Alice – Employed full-time at present facility, 21 years at this facility, 25+ years experience, many times as a preceptor for various dietetic programs | The Village – Long Term Care facility 153 beds with rehabilitation unit, skilled unit, dementia unit, and assisted living | 20 hours completed in 5 visits |
| VIOLET  | Undergrad Full-Time student  
Worked in food service in two different Long Term Care Facilities – as a cook and as a server | Mercy - Consultant, 30+ years experience, has worked with many students as a preceptor and mentor | The Woods – Long Term Care with 80 bed assisted living, 50 bed skilled unit | 20 hours completed in 5 visits |
Facilities used for Experiential Learning

Students were asked to volunteer to participate in the experiential learning component with the understanding that they would go to the facilities for thirty-two hours, on their own time. All of the students were assigned to long term care facilities for the experiential learning component. Facilities were selected by the students from a list of long term care facilities available from me. I met with the students to explain which facilities were available and their location. The students were given the contact information of the preceptor for their selected facility and were instructed to make arrangements with the preceptors for meeting times and days.

The facilities varied in composition and in total number of residents. Four different facilities were selected by the participants for their experiential learning component. Three of the facilities had residents in an assisted living unit as part of the population. The assisted living section of a long term care facility is for residents who require minimal assistance with their activities of daily living. Two of the facilities had rehabilitation units where residents receive physical therapy, occupational therapy, or speech therapy with the intention that the residents will be discharged from the facility. All of the facilities had a skilled unit where the residents require more intensive nursing care and may have a higher level of acuity. The acuity level of the residents varied in the facilities from highly skilled with multiple disease states to needing some assistance with activities of daily living. The population of the facilities ranged from ninety-six residents to one hundred and fifty-three residents. Three of the facilities were within a twenty
minute drive of the university. One facility was located forty-five minutes from the university, but close to the student’s home.

Preceptors

Preceptors were contacted and their willingness to have students do experiential learning at their facility was sought. They were fellow Registered, Licensed Dietitians who had previously indicated they would mentor students for the purposes of this study. Preceptors selected were not mentoring the Coordinated Program in Dietetics students concurrently with the DPD students volunteering for this study. Three different preceptors were used for this study at four different facilities. One preceptor mentored two of the students at two different facilities for which she is employed as a consultant dietitian. I am aware that the preceptors may exhibit a bias in favor of experiential learning. They are preceptors and mentors to students because they believe that gaining experience in the profession is important to students which will bias them in favor of students participating in experiential learning. During the preceptor interview, the preceptors were asked to specifically indicate those activities and experiences that have contributed to the “added value” of the students’ learning.

There was a variety of experiences and employment among the preceptors. Mercy is a self-employed consultant dietitian in long term care facilities. She agreed to have two students come to two different facilities. She has been a preceptor for students in the Coordinated Program in Dietetics as well as a mentor to other DPD students. Her experience as a Registered Dietitian spans thirty-five years. The two facilities that she
used for the students in this study are new contracts for her. She has been at these facilities for less than two years.

Rose went to The Seasons where Mercy is the consultant dietitian. The Seasons has a total of ninety-six beds. Forty-eight beds are for skilled nursing care and forty-eight are for assisted living residents. During the experiential learning component the facility converted twenty-four of their beds to skilled nursing beds for the total of forty-eight. This provided Rose with the opportunity to assist Mercy with the assessments needed for these new skilled nursing care residents.

Violet went to another facility for which Mercy was the consultant, The Woods. This facility had both an assisted living unit and a skilled nursing unit which provided the student with the opportunity to update nutritional information on current residents and collect nutritional information on new residents or residents who were readmitted to the facility.

Two of the preceptors were employed full-time at their respective facilities. Alice has been employed full-time at her facility for twenty-one years. She has been a Registered Dietitian for twenty-five years. She has been a preceptor for students in the CPD, in a dietetic internship, and for students in the dietetic technology program. In addition, she has permitted students in the DPD to follow her to gain exposure to the profession of dietetics in long term care facilities. Daisy went to The Village, where Alice is employed, for her experiential learning. The Village was the largest of the facilities, housing one hundred and fifty residents, with specialized areas for assisted living, skilled nursing, rehabilitation, and dementia. Daisy was permitted to have
interaction with the residents as well as to collect nutritional information for assessments of residents and completion of a variety of forms.

The third preceptor, Elmer, has been employed full-time in long term care facilities for three years and at his present facility for the past eighteen months. He is a Registered Dietitian but has not had experience in being a preceptor for students. Elmer volunteered to be a preceptor after learning about the study. Pansy went to this one-hundred bed facility and was able to attend resident care meetings, quality assurance meetings, utilization review meetings, and interact with residents to collect nutritional information.

All of the preceptors were familiar with the differences in the requirements of the DPD and the CPD. All of the preceptors indicated that they would be able to discuss the activities in which the students participated and that they understood the medical nutrition therapy course in which the students were enrolled. The preceptors all participated in taped interviews in which they described and discussed the activities and the experiences received by the students. The preceptors acknowledged that they were familiar with the foundation knowledge and skills as developed by CADE.

Data Collection

The study was approved by the Institutional Review Board for Research Involving Human Participants (Appendix B). An introductory letter (Appendix A) and an open-ended survey (Appendix C) was given to all didactic program in dietetics (DPD) students (n=8) in the first semester of an upper level medical nutrition therapy course at a Midwestern university at the beginning of the spring semester of 2006. Students were
asked to complete the survey and indicate their willingness to participate in the planned experiential learning component of the medical nutrition therapy course. Students were requested to describe previous or current experiences and activities as they relate to the profession of dietetics. The survey questions also asked if the students would consent to a taped interview and if they would complete journal entries about their experiences.

Interviews with students and preceptors and journal entries by students were the three sources of evidence for this case study (Yin, 2003). In addition to the interviews and journal entries, other work samples were discussed with the student and the preceptor. Some work samples discussed included progress notes, completion of risk assessments, bulletin boards, and collection of information for the Minimum Data Set (MDS).

In order to obtain data through the interview process, I had to establish rapport with the participants. Rapport refers to the confidence that a subject has in the researcher. Establishing rapport will provide me with more detailed answers to the interview questions because trust will have been built between the interviewee and the researcher (Glesne, 1999). By establishing rapport I hoped to reduce subjectivity because the answers from the students will provide full, detailed data.

Students (n=4) agreeing to participate in the study and the tape recorded interviews signed the informed consent form that explained that their participation in the interviews was voluntary, that the information collected would be kept confidential, and that there were no anticipated risks or benefits (Appendix D). Additionally, the form provided the students with contact information for the advisor for this study, the contact
at Institutional Review Board for Research Involving Human Participants, and for me. The students were verbally asked if they were willing to participate in the experiential learning component. The experiential learning component, the time commitment, and the facilities available for the learning experience were explained to the students at the end of the first medical nutrition therapy lecture (outline of discussion provided in Appendix E).

Students were asked to email journal entries to me at the completion of each day in the facility. All of the students who agreed to participate in the study agreed to send journal entries. Instructions for the journal entries (Appendix F) were emailed to each student. The instructions requested that the student describe the activities and experiences encountered during each visit to the facility. The students were also instructed to indicate their attitudes or feelings towards these activities and to reflect on the value of the activities.

Prior to the students beginning their experiential learning component they were given an edited copy of the foundation knowledge and skills as established by the Commission on Accreditation for Dietetic Education (CADE) (Appendix G). This information was shared with the preceptor as well. The foundation knowledge and skills details the information that students must have to enter a dietetic internship at the completion of their academic career. In the area of medical nutrition therapy, the student must have knowledge of nutrition assessment and treatment of nutritional health risks, knowledge of the influence of age, growth, and normal developments of nutritional requirements. Students must demonstrate the ability to screen individuals for nutritional risks and collect pertinent information for comprehensive nutritional assessment.
The students participating in the experiential learning component were interviewed to determine if there was a perception on the part of the student that the experiential learning added knowledge and skills to the didactic program. A semi-structured interview protocol was used as the basis for the interviews (Appendix H). The first interview was scheduled after the students had completed half of the visits (n=4) to the facility. The second and final interview was scheduled at the completion of the student participation. During the interviews, students were asked to identify activities in which they participated and to describe how these experiences added to their learning and understanding of the medical nutrition therapy course or to the profession of dietetics. Due to time constraints and the number of times the students went to the facilities, two interviews were completed on only two of the four participants. Two of the four students did not know how many times they would be able to go to their selected facility due to starting the experiential learning component late in the semester. One student went four times and one student went five times. They participated in one interview each at the conclusion of their experience. All interviews were transcribed by the researcher within forty-eight hours of the interview.

Interviews were conducted with the preceptor at each facility to obtain an understanding of what they perceived was offered to the student during the experiential learning component. These interviews were conducted after the students had completed their experiential learning at the preceptor’s facility. A semi-structured interview protocol was used for the interviews (Appendix I). Preceptors were asked if they
believed the activities, assignment, or other interactions with student “added value” to the student learning about the coursework or the profession.

One observation of each student was to be made while the students were in the facility during the experiential learning component. The observations were to be scheduled after the student had completed four visits to the facility. Only one observation was made of a student at the facility. During this observation, activity was halted while the preceptor, the student, and other members of the health care team directed comments towards me. I was unable to see the student perform any of the activities, although they were described at this observation. I did not schedule observations at the other facilities because I did not want to be the center of the discussion and I was unable to see the student perform any activities.

Data were collected through an initial survey, tape recorded interviews with students, tape recorded interviews with preceptors, and journal entries submitted by the students. The tape recorded interviews were transcribed within forty-eight hours of the interview. The initial surveys were used to determine the students’ work related experiences as they pertained to either food systems management or medical nutrition therapy. This information was used to make a determination as to whether or not the students’ employment prior to the experiential learning had provided them with added understanding of the medical nutrition therapy course or whether the “added value” came from the experiential learning component.

Students were asked if they were working or had worked in a job that was related to the profession of dietetics. If the students responded affirmatively, they were asked to
describe the work they did to confirm its relationship to dietetics and to determine if the work was related to food systems management or medical nutrition therapy. For instance, two of the students had experience either serving food to residents in long term care facilities or as cooks and one had a forty hour experience through the food systems management course. One student had no dietetics related experience. Working in the kitchen as a cook or as a server is related to food systems management not to the medical nutrition therapy course.

On the survey the students were also asked if they were familiar with the foundation knowledge and skills as established by CADE. An abbreviated copy of these foundation knowledge and skills was given to the students for them to use as a basis for describing their experiences. The abbreviated list only included the knowledge and skills that related to medical nutrition therapy.

In order to establish why the students participated in this study they were asked if they had any goals for participating in this study and what their expectations were of the experiential learning component. This data was collected from the interviews conducted with the students.

To determine how the students’ perceived value added to the didactic component the comments from the interviews and journal entries were examined for an indication of what the students stated was important to their understanding of course material and what activities and experiences added to their overall knowledge base. The information they received from their participation in this study was determined to be perceived value if the students stated that it would add to their understanding of the profession, to the course, to
nutrition in general, or to their basic skill level. The activities that could contribute to their body of knowledge were reading the residents’ medical records; interviewing residents; writing progress notes in the medical records; completing the various forms used to assess, monitor and care plan for the resident; participating in the resident care plan meeting; participating in discussions with the interdisciplinary health care team; and seeing the responsibilities of the dietitian in the long term care facility. Information was collected through the interviews with the students, the preceptors and student journal entries. Comments about these experiences were analyzed for positive and negative statements or reactions from the students.

Activities, such as writing in the residents’ medical records and completing forms for nutrition assessment of residents were determined to “add value” because they related to the medical nutrition therapy coursework. Students were learning about disease states and their effect on nutritional status, nutritional intake, and nutrients in their medical nutrition therapy course. As dietitians they will be expected to use this information to write care plans, do nutrition assessments, and make recommendations for the care of the resident. By participating in activities such as gathering information for the assessment forms, the Braden skin assessment form, or the nutritional risk assessment form, the student would be able to perceive the value of the information presented in their didactic course. Therefore, the journal entries and student interviews were used to determine the number of times the students participated in any of these activities and the amount of documenting they were permitted to do in the residents’ medical records. The
preceptors’ interviews provided confirmation that the activities occurred and the amount of documentation that was permitted.

Disease states and medications also affect food consumption by residents. By speaking directly to the residents, monitoring food intake, reviewing charts, and calculating weight changes, the students would see the application of food-drug interactions and the affect of the diseases that were discussed in class.

Attendance at the resident care plan meetings also provided the student with the ability to learn how these factors affect the resident as a whole person and the interaction of an interdisciplinary team to plan effective measures to help the resident. These meetings also demonstrate the ability of the dietitian to learn what other team members are doing and if or how it will affect the resident’s nutritional status. For instance, working with an occupational therapist to improve the residents intake through adaptive devices such as utensils with enlarge foam grips assist in holding the food and bringing the food to the resident’s mouth.

The resident care plan meeting also offered the student the opportunity to see the value of case studies that are completed during the medical nutrition therapy course. The case study is a compilation of information from all disciplines that allow nutritional recommendations to be made for the resident.

The preceptors participated in a tape recorded interview to verify the information that was provided by the students in their journals and interviews. Interviews with the preceptors also clarified information that the students presented in order to further identify the tasks and their relationship to the didactic learning component. Preceptors
were asked to offer an opinion as to the value of the experiential learning component to the medical nutrition therapy course.

Data indicating how the activities and experiences related to or improved the understanding of medical nutrition therapy answered the third research question of how the experiential learning component added value to student learning. During the interviews students were asked if the activities they experienced or the information they acquired aided in their understanding of the course material present in the medical nutrition therapy course. The students were asked generally if there was any value added to their didactic course. They were also questioned about specific activities and whether those activities had added to their understanding of the course material.

To determine what was the value added by the experiential learning component for the students the comments regarding confidence, comfort level, better understanding of medical nutrition therapy coursework, increased understanding of the dietitian’s role, and seeing another aspect of dietetics were used to establish value added. Additionally, I counted receiving, using, and completing various forms used by the preceptors an “added value” for the students. The students were asked specific questions about confidence in and development of their skills and abilities during their interviews. The preceptors were also asked to offer an opinion about the students’ level of confidence in performing activities such as writing progress notes and completing assessment forms.

Confidence level, increased understanding of course material, increased respect for other members of the health care team, understanding the role of other health care professionals were benefits cited in the review of literature and were considered to be
value added by the experiential learning component. In a study by Rickard (2002) students surveyed at the end of the experiential learning component had developed problem-solving skills, developed confidence, and increased learner commitment and motivation. Barr et al. (2002) noted that experiential learning contributed to increased confidence for entry-level professionals. For this study, data collected for evidence of confidence and comfort level was the ability of the student to write progress notes, complete the various forms, and participate in resident council meetings. Rickard (2002) and Hickcox (2002) indicated that students who participated in experiential learning gained an increase in understanding of course material. Students involved in the internship as reported by Dyer (2003) gained respect for other professionals and an increased understanding of the role of other health care professionals.

Journal entries were received from all four participants although not all the journal entries were sent immediately following the visit to the assigned long term care facility. The journal entries provided initial data on the activities so that more in-depth questions could be asked during the interviews. According to the journal entries, one of the activities in which the students participated was attending the resident care plan meetings. During the interview, the students were asked about the discussions at the resident care plan meetings; if they learned anything from the meetings; if attending the meeting was of value to their learning; or if the meetings added to their understanding of the coursework in the medical nutrition therapy class.

To aid in the clarification of data collection process a timeline of the data collection is included in the appendix, see Appendix J. Data collection took place over a
fifteen week semester and the start of the experiential learning component varied for each participant. The timeline also indicates the times that the journal entries were sent and the interviews were conducted with both the students and the preceptors.

Increased learner commitment and motivation was indicated in the student interviews when students discussed their increased desire to become dietitians. Students also offered the comments that they were pleased with the experience that had been provided to them through the experiential learning component.

Data Analysis

Analysis of the data focused on the description and interpretation of what the subjects said and did. The information from the interviews and journal entries was coded to establish the presence of themes. The themes were activities that “added to the value” of the didactic program, activities that “added to the value” of the medical nutrition therapy course, attitude in regards to confidence or comfort level with the material presented, or general information discussed that would be considered as “adding value” to the student and their education.

Initially, the data were organized according to the process used to collect it, i.e. interviews or journal entries. During the transcription process of the taped interviews, emerging themes or patterns that appear to be related to the research questions were identified. The analysis began with examining the activities in which the students indicated they had participated. Their perception of the value of the activity or experience was examined to determine if the student perceived the experience or activity as positive, negative, no impact, or its contribution to the understanding of medical
nutrition therapy. The comments made by students during the interviews were analyzed to determine what the “added value” of the experiential learning component was.

According to Rickard (2002) and Hickcox (2002), students participating in experiential learning indicated that they increased their problem solving and critical thinking skills. Students in this case study were asked if they believed they had enhanced their problem solving skills or saw the importance of problem solving as it related to the medical nutrition therapy. They were asked what they saw or did that led them to believe that this skill was increased or demonstrated. Students were asked to consider if the experiences that they observed or performed related to their understanding of the course content or of the profession of dietetics.

Students were asked to indicate in their journal entries activities or experiences that occurred while at their respective facilities. The journal entries were used as a basis for questions to be asked during the taped interviews and as an initial listing of activities and experiences done or witnessed by the student.

Transcriptions of the interviews were coded for themes, patterns, and activities. Themes, patterns and activities, such as expressed confidence, interactions with interdisciplinary health care team members, meetings with residents, and student’s attitude were used to determine a relationship with the research questions. The themes or patterns were identified because of the frequency of occurrence, or because they were crucial to other themes, or because they were rare or non-existent (LeCompte and Schensul, 1999).
Themes were identified by listening to the tape recorded interviews and analyzing the transcribed interview notes from the students and preceptors for items that were similar and items that were different (LeCompte and Schensul, 1999). Themes emerged from the activities or experiences performed by the students as they related to the medical nutrition therapy course material or to the enhancement of their skill level.

Themes that related to concepts from the review of the literature were considered *a priori*. According to the literature, experiential learning helps students develop self-confidence and self-directed learning. Johnson (2001) reported that students realized the relevance of course material by participating in experiential learning. Benefits to students also included increased ability to problem solve and critical thinking skills. These concepts were used to establish the themes for this study. Interviews and journal entries were examined for an indication by the students and preceptors that the student had gained self-confidence, developed problem solving ability or critical thinking skills. Other related attitudes such as desire to become a dietitian or that the student was pleased with their participation in the experiential learning were also themes that came from the data collected.

Activities that were identified from the interviews and journal entries included attending resident care plan meetings, charting in progress notes, completing assessment forms, interviewing residents, attending resident council meetings, preparing a bulletin board, attending quality assurance meetings, and participating in resident discharge planning. Some activities related directly to the medical nutrition therapy course. The comments about these activities were coded to coincide with the research questions.
Direct questions were asked about the activities to determine if the student believed they related to the medical nutrition therapy course or to their overall knowledge base.

Student attitudes towards the experiences were a key to the data analysis for how the students perceived the value of the experiential learning component. Comments were analyzed for positive, negative or neutral reaction to the experiential learning component in order to determine the perceived value of the experiential learning. Students were asked if they believed they had received value from the experiential learning component. They were asked to describe what the value of this experiential learning component was and if the value was to the medical nutrition therapy course or to their understanding of the profession of dietetics. Comments from students were analyzed to determine if they believed that there had been “value added” to their learning by participation in the experiential learning component as “value added” pertains to the research questions.

Validity Issues

Validity in qualitative research refers to “the correctness or credibility of a description, conclusion, explanation, interpretation, or other sort of account” (Maxwell, 2005, p. 106). It is a goal rather than a product and has to be assessed in relation to the purposes and circumstances of the research, rather than being a context, independent property of methods or conclusions. The main emphasis in qualitative research for validity should be how to rule out specific plausible alternatives and threats to the interpretations and explanations (Maxwell, 2005). Two threats to validity, according to Maxwell (2005), are bias and reactivity.
Bias refers to the selection of data that fit the researcher’s existing theory or preconceptions and the selection of data that stand out to the researcher (Maxwell, 2005). Marshall and Rossman (1999) indicate that the researcher must have an awareness of his or her own self when collecting and interpreting the data. By linking the data collected to a general research question, researcher bias can be reduced. Confirmability of the data also limits bias in interpretation. Strategies for confirmability include checking and rechecking data and examining for alternative explanations and having two sets of notes, one with objective observations and one with tentative categories (Marshall & Rossman, 1999).

A method to reduce bias and chance association of data is to use triangulation. Using multiple methods to collect data will substantiate the findings of this research. This was achieved by conducting interviews with the students, conducting interviews with the preceptors, and using journal entries submitted by the students. By relying on multiple methods of data collection the researcher is better able to support the claims made in the conclusion and to prevent researcher bias (Glesne, 1999; Yin, 2003). Having multiple sources builds redundancy into the data collection and allows for confirmation or cross-checking of data to ensure accuracy, reduce bias and control the threats to validity (Maxwell, 2005).

For this study, I was interested in discovering if adding an experiential learning component to a medical nutrition therapy course was perceived by the students as “adding value” to their education. Sharing transcripts of interviews with the participants aided in preventing the researcher from influencing the results of the study by ensuring
that the interpretation of the interviews accurately reflected the students’ and preceptors’ opinions and beliefs. The transcripts were sent to participants for member checking and students indicated that no changes were required to the transcribed notes.

The second validity threat was reactivity. This is the influence of the researcher on the setting or individual studied (Maxwell, 2005). One observation was attempted but due to the influence of my presence on the situation, no further observations were conducted. There was an attempt on the part of the preceptor and other members of the facility to impress me with the amount of information that was being presented to the student and the value of this information.

However, since interviews were conducted with the students, I must be aware of reflexivity. Maxwell (2005) indicates that because the researcher was conducting the interviews this made her a part of the study. Glesne (1999) argues that the degree to which the researchers incorporate themselves into the study varies. Although I have experience in the profession of dietetics, the data to be collected needed to reflect the students’ beliefs about experiential learning. Glesne does stress the importance of subjectivity and the subjective lens with which information is collected and the way the research is viewed by the researcher.

**Subjectivity**

Subjectivity is used to describe the emotions that may be connected to the research. These emotions should be monitored by having an awareness of how they may distort the analysis of the data (Glesne, 1999; Maxwell, 2005). A threat to validity may be caused by subjectivity or researcher bias that can occur in the selection of data that fits
a preconceived understanding or idea held by the researcher. Closely monitoring subjectivity and being aware of my personal bias made the data more trustworthy.

In order to accurately report on the data of this case study, I cannot ignore my background as a Registered Dietitian. I have over thirty-five years of experience in the profession of dietetics. As an undergraduate student, I was required to complete 240 hours of experiential learning. This experience provided initial preparedness for the profession. Through the experiential learning, I developed confidence, new skills, an understanding of some course concepts, success in my dietetic internship, and a greater interest in dietetics management. I believe that this experience accounted for some of the successes I have accomplished during my professional career. Therefore there is a self-admitted bias in favor of the inclusion of experiential learning in the curriculum. I believe that obtaining experience provides the student with greater knowledge about the profession and a greater understanding of material presented in courses, as well as personal confidence. Because of these preconceived ideas, I needed to be cautious in the interview process to not elicit information that was not the students’ belief or to influence how they answered questions. I needed to include all comments, whether favorable or not, concerning the students’ evaluation of the experiential learning component. I had to be alert to the questions I asked and the statements I made to the students, to the preceptors, and in reporting the results of the study.

Summary

By having an awareness of the threats to validity and how to limit them, I hope to demonstrate the trustworthiness of the data. The researcher anticipates that in order to
determine if experiential learning provided the students with greater knowledge and skills, a follow-up study would have to be done after the students have completed their dietetic internship. At that time, students would have a greater awareness of the impact of experiential learning that was included in the didactic program.

The results of this study may influence the decisions that are being made in the curriculum for the didactic program in dietetics. If the students believe they have gained additional knowledge and skills and believe they have enhanced their preparation for a dietetic internship, the curriculum may be evaluated to determine if experiential learning should be included in the didactic program in dietetics.

The exploratory case study is not replicable since subsequent studies would take place at a different time, different place, and with different subjects (Yin, 2003). However, this does not mean that future students would not benefit from the inclusion of experiential learning in their didactic courses. This case study was not based on a large number of cases and is not presented as reliable. However, it is believed that the data gathered will provide useful information to aid in making decisions about experiential learning experiences.
CHAPTER IV
RESULTS OF THE STUDY

This chapter presents the results of the analysis of the information from the four case studies conducted for this research. A summary of the student participants, the facilities used for the experiential learning component, the preceptors, and the times spent at the facilities is contained in Table 4.1. Chapter IV first provides a detailed description of the students and their activities while they were participating in the experiential learning component. The results were then used to answer the research questions established for this study. The data were collected to establish why the students elected to participate in the experiential learning component; how the students perceived “value added” to the didactic component; how the experiential learning component “added value” to student learning; and what was the “value added” to student learning.

Student Participants

All four of the students are undergraduate students enrolled in an upper level medical nutrition therapy course at a Midwestern university in the spring of 2006. They are completing the Didactic Program in Dietetics and they will be eligible to enter a dietetic internship after they received their degree. They had completed all of the prerequisites required for the course.

Two of the students, Pansy and Violet, had worked in food service in long term care facilities prior to their involvement in this study. They had been employed in the
<table>
<thead>
<tr>
<th>STUDENT</th>
<th>STATUS/ EXPERIENCE</th>
<th>PRECEPTOR</th>
<th>FACILITY DESCRIPTION</th>
<th>Hours at Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROSE</td>
<td>Undergrad Full-Time student No previous work related experience</td>
<td>Mercy - Consultant, 30+ years experience, has worked with many students as a preceptor and mentor</td>
<td>The Seasons – Long Term Care facility with 48 bed Assisted Living, 48 bed skilled unit</td>
<td>32 hours completed in 8 visits</td>
</tr>
<tr>
<td>PANSY</td>
<td>Undergrad Full-Time student Worked in food service at a Long Term Care Facility</td>
<td>Elmer – Employed full-time at facility, 3 years experience, first time as a preceptor</td>
<td>The Lake – Long Term Care facility 117 Beds, with rehabilitation unit, skilled nursing unit</td>
<td>16 hours completed in 4 visits</td>
</tr>
<tr>
<td>DAISY</td>
<td>Undergrad Part-Time student, No previous work related experience. Had completed the food systems management experience. Nursing student experience.</td>
<td>Alice – Employed full-time at present facility, 21 years at this facility, 25+ years experience, many times as a preceptor for various dietetic programs</td>
<td>The Village – Long Term Care facility 153 beds with rehabilitation unit, skilled unit, dementia unit, and assisted living</td>
<td>20 hours completed in 5 visits</td>
</tr>
<tr>
<td>VIOLET</td>
<td>Undergrad Full-Time student Worked in food service in two different Long Term Care Facilities – as a cook and as a server</td>
<td>Mercy - Consultant, 30+ years experience, has worked with many students as a preceptor and mentor</td>
<td>The Woods – Long Term Care with 80 bed assisted living, 50 bed skilled unit</td>
<td>20 hours completed in 5 visits</td>
</tr>
</tbody>
</table>
food service management area as servers of food to the residents or as a cook. Neither
had worked in the medical nutrition therapy area of a long term care facility. One
student, Rose, had no food service or other clinical experience as it related to the course
material or the profession of dietetics. Daisy had clinical experience through nursing
courses that had been taken during her academic career and had completed the thirty-six
hour experiential learning component for the food systems management course, but had
no medical nutrition therapy related experiences. The students completed sixteen to
thirty-two hours at their selected facilities. The number of visits varied from four to
eight, with each visit consisting of four hours.

Presentation of cases

Rose

Rose, a full-time undergraduate student, completed thirty-two hours over the
course of eight visits to the facility. She had selected The Seasons, a ninety-six bed long
term care facility with forty-eight skilled nursing beds and forty-eight assisted living
beds, for her experiential learning component. She participated in two interviews during
the experiential learning component. The first interview was conducted after she had
completed four visits to the facility and the final interview was after the eighth visit. In
addition, she sent eight weekly journal entries explaining the activities and experiences at
the facility. She had no prior experience as it related to food service or medical nutrition
therapy. One observation was made while Rose was at the facility but because my
presence was too disruptive in that all comments were directed towards me rather than
the student, the information presented during the observation was not used.
While at The Seasons, Rose attended the monthly resident council meetings. During these meetings she assisted in menu development with the Dietitian and the chef, conducted taste testing of fish samples, and helped select special occasion meals for Mother’s Day and Easter. She also attended the Resident Care Plan meetings which are interdisciplinary meetings where the resident’s care, goals, problems, and treatments are discussed. The first three visits to The Seasons by Rose were spent observing the activities of the dietitian, collecting forms, and reading residents’ medical records as well as attending the meetings. Mercy, the preceptor, indicated “(I) gave them all of my forms so that once they get out there in the big world and you need a form, these are not patented, these are not anything that you can’t use” (Mercy interview page 1, paragraph 6).

By the fourth week, Rose was permitted to write progress notes in the residents’ medical records. In her journal entries she wrote, “I wrote how the patient is doing and what the follow up will be for the week” and “I did some more charting on patients who had some wounds” (Rose, journal entry 4, page 1, paragraphs 1 and 3). In subsequent visits, she continued to do more recording in the medical records and assisted with gathering information for the nutrition assessment form. She indicated in her seventh journal entry that she “looked up medications to see if they would affect the patient’s diet. I then had to go through and see what problems they currently have and fill out a risk assessment” (Rose, journal entry 7, page 1, paragraph 1). She continued to record information on the nutrition assessment forms and write progress notes on residents during her eighth and final visit to The Seasons.
The journal entries describe an increase in understanding of the preceptor’s work and a general increase in confidence by the student. She was able to observe the treatment of specific problems, such as a pressure ulcer. She stated that she learned about nutrition intervention techniques and laboratory values that assist the preceptor in completing the assessment of the resident’s condition. By the fourth visit to the facility, she was permitted to collect information from the resident and write the progress note in the chart.

During the seventh week, the facility changed a twenty-four bed assisted living unit into a skilled unit where a higher acuity level of resident would be living. The student was permitted, with the supervision of the preceptor, to do an entire assessment of one resident. She wrote, “each week I did at least one person so by the end I knew where to look for all of their stuff and it was really a lot easier to figure out what to do and I didn’t have to ask her so many questions” (Rose, second interview, page 1, paragraph 6). She indicated that this took the majority of the time she was at the facility for that day but by the end of the day, her comfort level had increased significantly. When she returned for her eighth day, she again completed medical nutrition therapy assessments.

Daisy

Daisy completed twenty hours in five visits at her selected facility, The Village is a one hundred and fifty-three bed long term care facility with a skilled nursing unit, a dementia unit, a rehabilitation unit and an assisted living unit. The first interview was conducted after two visits to the facility due to scheduling difficulties and an uncertainty on her part as to how many times she would be able to go to the facility. She sent regular
journal entries after each of the five visits to the facility with a discussion of the
experiences that she had encountered. The final interview was conducted at the end of
the five visits and twenty hours at the long term care facility. She is a part-time student
and had some clinical student nursing experience but no experience with medical
nutrition therapy. She had already completed the food systems management course and,
as part of the course, had spent thirty-six hours in the kitchen of a large metropolitan
hospital as a patient tray line worker and as a server in the employee cafeteria.

She spent the first visit to The Village observing the dietitian interview several
residents, complete the paperwork required for residents according to the Medicare
regulations, and document on a risk assessment form. She stated in the interview, “she
was explaining all of it, like the Medicare system and why they have to do what they
have to do as far as the evaluations…she kind of explained the pieces/parts of what she
did for each difference and the time frame” (Daisy, second interview, page 1, paragraph 6).
By the second visit, Daisy was able to participate in some of the documentation. She
wrote in her journal entry that she “spent some time looking at labs and recording
abnormal evaluations” and she “was able to participate in documenting some of this
information” as it related to percent of weight change, percent of meal intake, and
consumption of supplements (Daisy, journal entry 2, page 1, paragraph 1). By the fifth
and final day, Daisy wrote in her journal, “I spent some time figuring out average intakes
for some of the residents. I also got to fill in some of the care plans. I filled in
information on the MDS (Minimum Data Set) and calculated percent weight changes for
some of the residents. I verified medications and added some of these on the food drug
interaction program she had on the computer” (Daisy, journal 5, page 1, paragraph 1). This information was supported through the interview process as well as she stated in the second interview that she was allowed to “collect and write in some of the stuff on the MDS (Minimum Data Set)” and she was able to fill in some of the information on the care plans (Daisy, interview 2, page 2, paragraph 16).

Daisy attended resident care meetings and was able to observe the process of caring for the residents through discussions with the interdisciplinary team. She continued to gather information to complete some of the forms such as the malnutrition risk assessment form, the nutrition assessment form, and the Braden skin assessment form. The dietitian at The Village maintains an educational bulletin board with nutritional and health information for the employees and residents. Daisy was at the facility during Cancer Prevention Month and prepared a bulletin board with “information on diet and exercise to prevent cancer” (Daisy, journal entry 3, page 1, paragraph 1). Additionally, she was able to assist the dietitian in preparing discharge diet information for a resident. She observed the dietitian while the information was presented to the resident.

Violet

Violet, a full-time undergraduate student, completed twenty hours in five visits to her selected facility, The Woods. The Woods is a one hundred and thirty bed long term care facility with eighty beds used for assisted living residents and fifty beds for skilled nursing residents. She sent two journal entries over the course of the five visits and only one interview was done at the end of the five weeks. Violet had previous work
experience in food service in two different long term care facilities, but she had no medical nutrition therapy experience. She indicated on the initial survey that she had been a waitress in one long term care facility and a cook in another.

While at The Woods, she attended resident care conferences and quality assurance meetings. At the quality assurance meetings the overall care given at the facility was discussed rather than individual residents. The physician, pharmacist, nurses, and dietitian participate to discuss pertinent issues. As Violet’s journal entry indicated, “the nurse discussed overall skin integrity, number of urinary tract infections in the home, etc.” The dietitian reviewed nutrition issues, “how many residents lost weight, if it was expected, how many gained, dehydration, prevalence and number of tube feedings” (Violet, journal entry 1, page 2, paragraph 5).

Violet was given the opportunity to record information in the residents’ medical records. She filled out a quarterly dietary progress note using the resident’s chart after being at the facility three times. During her fifth visit to The Woods, she reviewed a resident’s chart and used the information to complete a risk assessment form. Mercy, the dietitian, provided Violet with copies of all of the forms used at The Woods.

Pansy

Pansy, a full-time undergraduate student, completed sixteen hours in four visits at a long term care facility. She selected The Lake, a one hundred and seventeen bed long term care facility with a skilled nursing unit and a rehabilitation unit, for her experiential learning component. One interview was conducted at the completion of the sixteen hours in the facility. She cited time constraints as the reason for being unable to complete more
hours in the experiential learning component. She sent two journal entries over the course of the four visits to the facility. Pansy has experience as a dietary aide in a long term care facility where she serves food to the residents at the facility. She had no previous medical nutrition therapy experience.

While at The Lake, she attended a variety of meetings including the resident care conferences, quality assurance meetings, and utilization review meetings. She observed the dietitian, Elmer, complete assessments on the residents and interview the residents during the care plan process. During the resident care conferences, she was able to observe the interaction of the interdisciplinary team as they discussed the individual residents. She indicated in the interview that “the family members came in and they talked about their improvements, how they are doing because they had, like, the social worker, the activities director, they had the dietitian, the head nurse, they had the administrator there” (Pansy, interview, page 1, paragraph 12). Elmer stated that they had “a lot of meetings” but Pansy did “participate in the family care conferences with social workers, activities department, myself, and dietary to go through the interview process, the question process with family members about the patient. She observed and participated in a little bit with that” (Elmer interview, page 1, paragraph 6).

Pansy did not participate in writing in the residents’ medical records nor in completing any of the forms. Elmer would have had Pansy document in the residents’ medical records but he did not believe that she had developed the confidence or comfort level in her ability. He stated, “I would have left that up to her, if she felt comfortable, if she felt comfortable to start pulling the information together, her perspective and sharing
it with me. She didn’t take the initiative to go that route but it may be all based on a comfort level” (Elmer interview, page 5, paragraph 36).

Research Questions

Rationale for Participation

In order to establish why the students participated in the experiential learning component, they were asked if they had any goals for participating and what their expectations were of the experiential learning component. A summary of the goals as they relate to the students’ rationale for participation in the experiential learning component appears in Table 4.2. The table includes the number of hours each student spent completing their experiential learning component as well as the number of times they went to their respective facilities. The number of activities each student indicated they had done is included for reference to the variety of experiences that each student was able to participate in during the experiential learning.

Table 4.2: Rationale for Student Participation in Experiential Learning

Rose – to feel more comfortable, see what a dietitian does, gain clinical experience
  • Thirty-two hours in facility
  • Eight visits to facility
  • Four activities
  • Accomplished goal

Daisy – see dietitian’s role, broaden perspective of dietetics
  • Twenty hours in facility
  • Five visits to facility
  • Four activities
  • Accomplished goal

Violet – no preset goals
  • Twenty hours in facility
  • Five visits to facility
Five activities
Enjoyed participation in experiential learning

Pansy – prepare for dietetic internship, goal established after beginning experiential learning
- Sixteen hours in facility
- Four visits to facility
- One activity
- Accomplished goal

Two of the students, Rose and Daisy, had established goals for their participation. Rose stated in her second interview that she “just wanted to feel more comfortable, just learn what the process would be from start to finish, the routine, just kind of see what I might want to do one day, just to have a good idea of what to expect” (Rose, second interview, page 6, paragraph 76). She believed that she accomplished this goal and stated, “Yes, I definitely feel more comfortable and it confirmed that I liked it enough that I like doing it” (Rose, second interview, page 6, paragraph 78).

Daisy also had goals established as illustrated by her statement, “I really wanted to see more and I did, they were really kind of met. I just really wanted to see what the dietitian’s role was because I kind of like because I already knew some (Daisy, second interview, page 4, paragraph 44). Through the experiential learning component she was able to expand her thoughts about the various roles of a dietitian as evidenced in her statement “I think that I really learned a lot because it changed what I really thought…I got a bigger picture of what really is, especially in long term care, because I was grouping it all together and every area is really so separated as far as what goes on” (Daisy, second interview, page 5, paragraphs 52, 54).
Pansy’s expectation for the experiential learning component reflected her thoughts about her preparedness for the dietetic internship in addition to its relationship to the medical nutrition therapy course. She commented that “I like the experience a lot because it helps me for when I’m going to intern and stuff” (Pansy, interview, page 2, paragraph 30.” Later in the interview she added “it would be good or helpful in terms of when you’re in school and I would feel a little bit more prepared for when I go out into my internship. That way I’ve had some kind of clinical experience” (Pansy, interview, page 9, paragraph 122).

When Violet was asked about her goals, she commented that she didn’t really have any preset goals, “I didn’t know what it was going to be like. I just kind of thought it was fun. I didn’t mind going there” (Violet, interview, page 4, paragraph 62). In her last journal entry she stated that “overall, I had a wonderful experience” (Violet, journal entry 2, page 1, paragraph 2).

Based on their statements made during the interviews, three students, who had established goals, appeared to meet their goals in completing the experiential learning component. All four of the participants indicated their satisfaction with the experience even if they did not have preset expectations. Their statements indicated that they chose to participate in the experiential learning component to gain some clinical experience, to feel more prepared for their dietetic internships, to increase their comfort levels in clinical placements, and to broaden their perspective of the profession of dietetics.
Students Perception of “Value Added” to the Didactic Program

To determine how the students’ perceived value added to the didactic component the comments from the interviews and journal entries were examined for an indication of what the students stated was important to their understanding of course material and what activities and experiences added to their overall knowledge base. The information they received from their participation in this study was determined to be perceived value if the students stated that it would add to their understanding of the profession, to the course, to nutrition in general, or to their basic skill level. The activities that contributed to their body of knowledge were reading the medical records, completing the various forms, interviewing the residents, seeing the interdisciplinary team interactions, attending the resident care conferences, and seeing the work of the dietitian in long term care. A summary of these activities as they pertain to the individual students appears in Table 4.3. The summary included in the table indicates the number of activities in which the students participated, but not the quality of the participation. The total number of activities is included to indicate that the number of hours spent at the facility may impact of the number of opportunities to participate in activities. The student with the least number of hours participated in the fewest activities.

Whether or not the students perceived these activities as adding value was evidenced by their statements made during their interviews and comments made in their journal entries. Rose was pleased with the opportunity to see and complete the various forms used, “it’s neat to see all the different forms” and “it’s real neat to see that the dietary information really affects everything about their lives in the hospital” (Rose, first
Table 4.3: “Value Added” to the Didactic Program in Dietetics

<table>
<thead>
<tr>
<th>Activities - skills:</th>
<th>ROSE 32 Hours</th>
<th>DAISY 20 Hours</th>
<th>VIOLET 20 Hours</th>
<th>PANSY 16 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident Care Plan Meeting</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Resident council meetings</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charting progress notes</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Filling out forms</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Review of charts</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Interviewing residents</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulletin board</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Quality assurance meeting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharge planning</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Total Activities per student</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

interview, page 4, paragraphs 48 and 50). Mercy indicated that she had given both Rose and Violet the forms when interviewed. She stated, “They both have those sheets and I told them to share them with everybody. It is a good thing to have and many dietitians don’t know all of this in there” (Mercy interview, page 6, paragraph 40). She was also able to attend the monthly resident council meetings where she saw residents involved the menu planning process. In her journal, she wrote, “It was nice to see the patients getting involved in the food choices. It made them happy and it would make me feel good as a dietitian knowing my clients want to eat the food we are providing and planning” (Rose, journal entry 5, page 2, paragraph 4). Rose expressed her disappointment that she was unable to interview residents when she stated “that was one thing that I would have liked to have done…she had to have them all done by a certain day, a window you know. I was never there during that window” (Rose, second interview, page 3, paragraphs 34 and 36). Overall, Rose believed that this experience had
added to her understanding of the profession and “it makes me want to be a dietitian even more” (Rose, first interview, page 9, paragraph 112).

Violet thought that the resident care plan meetings provided beneficial insight into the work of the interdisciplinary team when she stated, “I think the care conferences are very informative. I basically learn a little bit about all areas of long term care. I have learned about medications, depression, certain diseases, resident abuse, and much more” (Violet, journal entry 1, page 2, paragraph 4). In her interview, she confirmed that the care conferences were “interesting, I learned a lot of stuff especially at the care meetings” (Violet, interview, page 2, paragraph 20). In addition to the dietitian, the meeting is attended by a nurse, the social worker, the physical therapist, the activities director, and the resident and family members, where possible. While completing the assessment forms, she indicated “I learned quite a bit about general dietary concerns, such as: a lot of medications cannot be taken with grapefruit juice, because the juice messes up the availability of the drug, 93% of the elderly are homebound while only 7% are in long term care facility, low blood cholesterol in the elderly compromises the immune system…” (Violet, journal entry 1, page 1, paragraph 3). In addition, Violet attended a quality assurance meeting where general discussions about medication, overall skin integrity, percent of residents on therapies, and resident indices are discussed. She did not offer an opinion about this meeting but it did provide an overview of the activity that occurs in a long term care facility. Mercy confirmed that Violet attended the various meetings, “we scheduled her (Violet) on Thursdays. Thursday is like my pickup day, clean up what I didn’t do on Tuesday and we go to plan of care or once a month we go to
a QA (Quality Assurance) meeting” (Mercy interview, page 1, paragraph 2). Mercy indicated Violet’s interest when she stated, “She was able to go to the QA meeting which is monthly. There is a form that we follow and she was very interested in it and the staff there was very receptive of her being there” (Mercy interview, page 1, paragraph 4).

Mercy believed that the information given to the students, especially the forms, were very beneficial to them. She said, “it’s opening their eyes and I said they have to read the MDS book because they may now change it” (Mercy interview, page 6, paragraph 40).

Daisy also attended the resident care plan conferences and was able to observe the interdisciplinary team members. She stated, “They had the patients come and their family members and they explained to them what was going on and what they need to do at home and all that kind of information. It was interesting to get to see what physical therapy and occupational therapy did and how they come in and talk…a lot of them are rehab patients that are coming in, so it was interesting to see how they all work together. The social worker was there to explain what they need to do in their home and what kind of stuff they needed” (Daisy, second interview, page 11, paragraphs 128 and 130). She was able to accompany the preceptor, Alice, as she spoke with residents about food preferences and complaints. During these times she had the opportunity to see a discussion about a renal diet with a resident and see her calm an upset resident. Daisy indicated that “it was kind of interesting to see all of the little things that go on to make these people happy while they are there” (Daisy, second interview, page 3, paragraph 28 and 30). This student was also able to observe several home-going diet instructions and
to put together a bulletin board for cancer prevention. Alice indicated that “we did have some discharges so we had some discharge planning that we had to do and discussing ongoing things, like, where they’re going to eat, how are they going to have food, are they going to be doing meals-on-wheels” and “when (Daisy) was with me we had two residents that were going home that required both therapeutic and mechanical altered diet instructions we had to give. We had to go in and meet with the resident and the families and review those and such” (Alice interview, page 3, paragraph 12.) As the preceptor, Alice, indicated, “in the long term care setting there is so much and so many different things that go on, she had a little taste or flavor of each of it…you can make of it whatever you want. The sky is the limit as to how much you can do and how much you can get involved in” (Alice, interview, page 4, paragraph 21)

Pansy attended the resident care plan conferences as well, but did not indicate that she had derived much value from the meetings. She was aware of the various interdisciplinary team members that were present at the meeting. She stated in her journal that “so far I have mostly been sitting in at conferences” where “it ranges from diet to how active the person is and if they are making any progress” (Pansy, journal entry 1, page 1, paragraph 1). In her interview, she stated that “I sat in the family health care conference, I think it was and they just went through, I don’t know what it was about the residents, but there were only a few” (Pansy, interview, page 1, paragraph 12). According to the preceptor, Elmer, in addition to the resident care conferences she attended “Quality of Life meetings and the Utilization Review committee” where he believed that “she got an appreciation of the work.” (Elmer, interview, page 2, paragraph
10). He also mentioned that he had Pansy complete some assessment forms and follow him during his interviews with two residents. Pansy did not indicate that she had done any forms although she did mention the interviewing of the residents when she stated, “when we go into the patient’s room, he introduces me and lets them know that I’m a student and that I’m shadowing just so they’re comfortable and everything” (Pansy, interview, page 3, paragraph 38).

*How Students Perceived “Value Added” to Medical Nutrition Therapy*

Showing how the activities and experiences related to or improved the understanding of medical nutrition therapy answered the third research question of how the experiential learning component added value to student learning. The opinions of both the preceptors and students were analyzed for the determination of this question. By the conclusion of the study, all four of the students had seen some aspect of the experiential learning component that applied to or enhanced their knowledge of the medical nutrition therapy course. The “value added” to the course varied by student, by the different activities in which they participated, and by the amount of time spent in their respective facilities.

Rose was able to relate the care plans completed on the residents in The Seasons to the medical nutrition therapy course when she stated that she got to “see all of his history and then go through his care plan…see how the information about the medication and food orders and everything they had with medications, what you can’t eat, what he should eat and times and everything and how it goes into the care plan, which we did a little bit in the beginning of (the medical nutrition therapy) course” (Rose, first interview,
page 1-2, paragraph 14). When she was asked if she saw course information on the forms she completed at The Seasons, she replied, “Yeah, definitely” (Rose, first interview, page 4, paragraph 46). She was asked if she saw some of the material from the medical nutrition therapy class at The Seasons. She offered the opinion that “case studies, definitely helped out a lot” (Rose, first interview, page 1, paragraph 14).

Rose had also attended a medical nutrition therapy seminar and believed that the experiences provided by the experiential learning component assisted in her understanding of material presented at that conference. She stated that “at the conference there were things that they talked about that I had picked up from shadowing, not necessarily from class. One thing, about sores and healing and all that and I got from my field experience” (Rose, first interview, page 5, paragraph 56). Overall, Rose believed that the experiential learning “really did go well with the (medical nutrition therapy) course. We would be talking about something in class and I would be able to associate it with something that I was doing” (Rose, second interview, page 3, paragraph 38).

Violet recounted some of the “value added” to the medical nutrition therapy course when she said that the experience related to “food and medication interactions. We got that book in (the medical nutrition therapy) course and then just some of the diseases. She had, like, diabetic diets” (Violet, interview, page 2, paragraph 32). She first stated that “there were times that we would talk about something (Mercy) and I would think ‘oh, we learned that (in class)’, but I can’t think of anything specifically right now” (Violet, second interview, page 2, paragraph 30). In her last journal entry, Violet
indicated that “I think the (medical nutrition therapy) students would benefit from having a related lab or clinical experience…” (Violet, journal entry 2, page 1, paragraph 2).

When asked if the experiential learning related or assisted with the medical nutrition therapy course, Daisy responded “Oh yeah, I do actually with nutrition. She went back and like the weight changes and we did some of that” (Daisy, second interview, page 3, paragraph 32). She also believed that there was a relationship between the care plans and the medical nutrition therapy course as evidenced by “Yeah, because there is the incorporating of all the diagnoses and writing them all out…they have it all set up so that it follows the same format with the diagnosis and the intervention but they are already listed, you just have to go and circle them rather than creating your own like we have done (in class)” (Daisy, second interview, page 4, paragraph 40).

Pansy’s initial comments indicated that she did not see a relationship to the experiential learning component and the material presented in the medical nutrition therapy course. When asked if any of the material covered in the experiential learning component had been covered in class, she replied, “not really” (Pansy, interview, page 3, paragraph 34). She also said “A lot of the stuff, I’ve never heard of because I don’t think we’ve gone over any of this stuff in class, because if he has said something, I would have said ‘yeah, I know what you’re talking about’” (Pansy, interview, page 4, paragraph 55). However, when asked about charting on the residents she explained that in class they had done an assessment and she “understands how to do it and I enjoy doing it” and that “he just has it different” (Pansy interview, page 6, paragraphs 82 and 88). Elmer, the preceptor, offered the opinion that the experiential learning component can add “in the
sense that the (medical nutrition therapy) course covered a lot of ground and this type of patient population varies from floor to floor and we cover a lot of ground, too, between the disease states you’re seeing” (Elmer, interview, page 2, paragraph 14). He also suggested, “I think that she was at that point that she was still a little bit hazy about what all she was seeing” (Elmer, interview, page 4, paragraph 29).

The statements made by the students and preceptors indicated that the experiential learning component can “add value” to the understanding of the medical nutrition therapy class. There were varying degrees of value that were added to the course work dependent upon the student, the amount of time spent in the facility, and the preceptor. A summary of the activities that “added value” to the medical nutrition therapy course appears in Table 4.4. The total number of concepts per student is shown for reference only. The list of concepts was determined from the interviews with students and confirmed in the interviews with the preceptors.

Table 4.4: “Value Added” to the Medical Nutrition Therapy Course

<table>
<thead>
<tr>
<th>Course Concepts - knowledge:</th>
<th>ROSE 32 Hours</th>
<th>DAISY 20 Hours</th>
<th>VIOLET 20 Hours</th>
<th>PANSY 16 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident Care Plan Meetings</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Charting Progress Notes</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Filling out forms</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Case studies</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Review of charts</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Tube feedings</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receiving forms</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Understanding course material</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Pressure ulcer care</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lab values</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Concepts per student</td>
<td>10</td>
<td>5</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>
Value Added

To determine what was the value added by the experiential learning component for the students the comments regarding confidence, comfort level, better understanding of medical nutrition therapy coursework, increased understanding of the dietitian’s role, seeing another aspect of dietetics, and developing problem solving or critical thinking skills were analyzed. Additionally receiving, using, and completing various forms from the preceptors is an added value for the students. Interviews with the students and the preceptors as well as the student journal entries provided evidence of the “value added” by the experiential learning component. Items discussed by the students and preceptors considered to be “added value” to the students have been summarized in Table 4.5.

Table 4.5: “Value Added” to Student Development

<table>
<thead>
<tr>
<th>Other value added</th>
<th>ROSE 32 Hours</th>
<th>DAISY 20 Hours</th>
<th>VIOLET 20 Hours</th>
<th>PANSY 16 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comfort level/confidence</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Pleased with experience</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Be a dietitian more</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem solving</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charting progress notes</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Receiving forms</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Quality Assurance meeting</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Seeing health issues</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Saw bigger picture</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comfort level</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Relate to management</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Be dietitian even more</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the statements by the students and preceptors it is evident that the students gained various levels of confidence about their abilities to complete the various
forms used at their respective facilities and to write a progress note in the residents’
medical records. Three of the four students completed parts of the various forms that
were used in the facilities. By the fourth week at The Seasons, Rose was permitted to
write progress notes in the residents’ medical records. In her journal entries she wrote, “I
wrote how the patient is doing and what the follow up will be for the week” and “I did
some more charting on patients who had some wounds. It is important to know if the
patient is injured in any way, because they must increase their calories each day to help
the body repair the wounds” (Rose, journal entry 4, page 1, paragraphs 1 and 3). Rose
also wrote in her journal that she participated in writing a care plan for another resident,
“we had to mark what he was allergic to and that he needed a mechanical soft diet”
(Rose, journal entry 5, page 1, paragraph 1).

Daisy spent the first visit to The Village observing the dietitian interview several
residents, complete the paperwork required for residents according to the Medicare
regulations and document on a risk assessment form. She acknowledged that she saw the
different styles of care plans used and “she (Alice) let me fill those in, some of them.
They were already predone on some of them and then there are just certain areas that you
circle off, so I got to participate in all of those” (Daisy, second interview, page 4,
paragraph 38). Alice, Daisy’s preceptor, stated “we had her filling in on some of the
assessments, and I’m trying to remember if it was a new admission or re-admission,
because we had so much traffic coming through that I actually had her going through
hospital discharge information and finding out what actually transpired with the
individual while they were in the hospital…” (Alice interview, page 1, paragraph 2).
Alice also indicated that Daisy “had an opportunity to fill in some care plans because we have standardized care plans, one for nutrition, one for hydration, one for tube feeding and one for chewing and swallowing and it’s just a matter of individualizing it for that particular resident” (Alice interview, page 1, paragraph 2).

Violet indicated that she observed the preceptor doing a risk assessment form, then “I did that for one patient and I did one, I think it was a quarterly and put their labs on it” (Violet, interview, page 2, paragraph 26). Mercy said that “she did very well because she did three or four of those (assessment forms for assisted living residents)” (Mercy interview, page 1, paragraph 8).

Two students, Rose and Violet were confident enough to write progress notes in the residents’ medical records. Rose indicated that for the last two weeks of her time at The Seasons she was “writing notes into their files and everything. That’s pretty much what we did for the rest of the time because they made that one unit skilled so we had to transfer all of the information and do assessment evaluations for all of those people” and “each week I did at least one person so by the end I knew where to look for all of their stuff” (Rose, second interview, page 1, paragraphs 4 and 6). Violet confirmed that “she (Mercy) let me look through the charts and do some of the assessments” (Violet, first interview, page 1, paragraph 18) and in her journal she recorded that “learning how to look through charts and assess them is something that I found very valuable…the more exposure I get, the more I know I will feel comfortable with charting in the future” (Violet, journal entry 2, page 1, paragraph 1).
Mercy was the preceptor for both Rose and Violet. She confirmed in her interview that the students were permitted to write notes in the residents’ medical records. Because they were not doing a complete assessment with recommendations she did not co-sign the notations. She said “we are going to get these charts and we are just going to write a little note so we are just letting them know that we are just keeping track” (Mercy, interview, page 6, paragraph 40).

Neither Pansy nor Daisy had developed enough confidence or a high enough comfort level to write progress notes in the residents’ medical records. When Pansy was asked if she had an opportunity to assess any of the residents, she replied, “No, I really don’t feel comfortable with that yet” (Pansy, interview, page 2, paragraph 18). Her preceptor, Elmer, stated that “I had her do a little bit of assessing weight changes and some of the BMIs (Body Mass Index). She had a limited amount of interaction with assessing” (Elmer interview, page 2, paragraph 10).

Daisy indicated that on her fifth visit to The Village her preceptor asked if she “wanted to take a stab at progress notes” but Daisy replied “I don’t think so…I just told her that she really is so in-depth about what she writes and I just said I don’t think so because we would be there for an hour or so” (Daisy, second interview, page 2, paragraphs 16 and 18). When Daisy was asked if it was a confidence issue she replied “I kind of knew what to write but I was just afraid of leaving anything out and her having to go back and so it was a little bit of confidence” (Daisy, second interview, page 2, paragraph 22). Alice confirms that Daisy was not comfortable by stating “I did not get a comfort level, that she was comfortable with the process and I think it was just because
she probably never really had to do it before. That was where I try to emphasize to her that you try to put in as much information as you can because you’re basically drawing a picture of what’s been going on with this individual” (Alice interview, page 2, paragraph 4).

Mercy was the preceptor for Rose at The Seasons where they converted twenty-four of the assisted living unit beds to beds for residents needing skilled nursing services. This conversion allowed Rose many opportunities for collecting information to complete nutrition screenings and write clinical notes in the residents’ medical records. Mercy stated in the interview that, “I had her document because I told her that we are going to get these charts and we are just going to write a little note so we are letting them know that we are keeping track. I let her gather her data because we got the data for the people for the twenty-four beds” (Mercy interview page 6, paragraph 40).

Mercy provided both students with the menus and spreadsheets for their respective facilities. She also gave them all of the forms that she has developed as a consultant dietitian stating that, “(I) gave them all of my forms so that once they get out there in the big world and you need a form, these are not patented, these are not anything that you can’t use” (Mercy interview page 1, paragraph 6). She also provided Rose and Violet with all of the forms that she uses in her consulting business along with “a set of menus, the spread sheets, and the nutrition risk assessment form from the ADA (American Dietetic Association)” (Mercy interview, page 1, paragraph 8). Mercy also gave the students with an explanation of, as well as, a “copy of the MDS (Minimum Data Set) and highlighted areas that are nutritionally related on the sheets that go with the
MDS. I tell them about the PPS (Prospective Payment System), I highlight the stuff for them” (Mercy, interview, page 6, paragraph 40). Rose indicated in her journal entries that she had received the forms from Mercy and provided me with a complete set of forms. Violet also wrote in her journal that she had received all of the forms and believed they would be “nice reference tools in the future” (Violet, journal entry 1, page 2, paragraph 6).

Daisy also saw and used a variety of forms at The Village. She discusses the care plan sheets, malnutrition risk form, the Braden skin assessment form, the MDS, “the RAPS (Resident Assessment Protocol Sheets) and there is another form that indicates what you are going to do about the problem” (Daisy, second interview, page 1, paragraphs 6 and 8). Alice confirmed that Daisy filled out some of the assessment forms, care plan forms, and the MDS forms.

Elmer, the preceptor for Pansy and The Lake, stated that “I provided her with some tube feed charts in terms of formulas that are out there that are used. I also provided her with some material like the ADA manual on nutrition and the elderly, some policies and procedures that are done at (The Lake) as a whole for nutrition and hydration…I gave her blank documentation forms” (Elmer, interview, page 2, paragraph 14). Pansy had noted in her interview that she had seen the ADA form and its use by the preceptor.

Several of the students reflected on their attitudes or feelings towards the activities they performed at the facilities. One student, Pansy, stated that she had spent most of the time in meetings and didn’t get to see the actual work done by the dietitian
(Pansy journal entry 1 & 2, page 1, paragraph 1). However, she later stated that she still found it beneficial to participate in the experiential learning because she learned that “the more I take clinical and the more I take food systems, I can tell where my strong point is and it’s food systems, I’m sure” (Pansy, interview, page 2, paragraph 26). Another student indicated that she was pleased with the activities she had performed during the experiential learning and “overall, I had a wonderful experience. I think that (medical nutrition therapy) students would benefit from having a related lab or clinical experience” (Violet journal entry 2, page 1, paragraph 2).

Summary

Table 4.6 summarizes all of the activities and other “value added” information mentioned by the students. The number of activities in which the students participated are tallied according to those that “added value” to the overall didactic program and those that “added value” to the medical nutrition therapy course. The table also indicates the other items, such as confidence, problem solving, and realizing that they wanted to become a dietitian even more. All of the items have been marked according to which students mentioned the individual item as it related to them. The summary indicates that the student spending the greatest amount of time in the facility gained more knowledge as it related to the medical nutrition therapy course. According to the summary, it appears that the students need at least twenty hours in an experiential learning component to benefit from the activities that increase skills and value to the didactic program. The student with the least number of hours spent in the experiential learning component did not derive as much “value added” to student development as the other students.
Table 4. 6 Summary of “Added Value” Items by Student

<table>
<thead>
<tr>
<th>Activities - skills:</th>
<th>ROSE 32 Hours</th>
<th>DAISY 20 Hours</th>
<th>VIOLET 20 Hours</th>
<th>PANSY 16 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident Care Plan Meeting</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Resident council meetings</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charting progress notes</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filling out forms</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Review of charts</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interviewing residents</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Bulletin board</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Quality assurance meeting</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Discharge planning</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>Total Activities per student</strong></td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Concepts - knowledge:</th>
<th>ROSE 32 Hours</th>
<th>DAISY 20 Hours</th>
<th>VIOLET 20 Hours</th>
<th>PANSY 16 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident Care Plan Meetings</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Charting Progress Notes</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filling out forms</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Case studies</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review of charts</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Tube feedings</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Receiving forms</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Understanding course material</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Pressure ulcer care</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lab values</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Concepts per student</strong></td>
<td>10</td>
<td>5</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other value added</th>
<th>ROSE 32 Hours</th>
<th>DAISY 20 Hours</th>
<th>VIOLET 20 Hours</th>
<th>PANSY 16 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comfort level/confidence</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pleased with experience</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Be a dietitian more</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem solving</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Charting progress notes</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Receiving forms</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Quality Assurance meeting</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Seeing health issues</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Saw bigger picture</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Comfort level</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Relate to management</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Be dietitian even more</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
The results of this study indicated that all four of the students appeared to believe they received “added value” to their dietetic education and believed that the experiential learning component “added value” to the medical nutrition therapy course. The experiences were not consistent among the four participants so each indicated that the value added was dependent upon the individual and the activities in which they participated. According to the students, they were pleased with the experience and appeared from their statements to believe that they had learned new information, enhanced material from the medical nutrition therapy class and had added to their own understanding of the profession of dietetics.
CHAPTER V
SUMMARY, CONCLUSIONS, AND IMPLICATIONS

The discussion in Chapter V has been organized around the four research questions initially proposed for this study. This chapter contains the summary, conclusions, and implications for the programs, and suggestions for future research. The summary presents a brief statement of the purpose of the study, an overview of the procedures, the questions being investigated, and the relationship of this study to the theoretical framework about experiential learning. Major findings from each research question are highlighted and reported in the conclusions. A discussion of the significance of these findings and their implication provide the suggestions for future research.

Summary of the Study

Statement of the Purpose of the Study

Prior research has demonstrated that the inclusion of experiential learning into the didactic component of the instruction of health care professionals provides benefits to the student. As noted in DeAngelis et al. (2001), creative and innovative learning experiences will assist in expanding the areas of expertise for dietetic professionals. Colangelo et al. (2004) used a summer internship for nursing students to provide clinical experience for students in order to enhance the students’ skill level and experience. Barr et al. (2002) suggested that incorporating experiential learning into the didactic program
in dietetics may increase the students’ perception of their confidence and skill level. Therefore, this case study was proposed to see if students enrolled in the Didactic Program in Dietetics would benefit from the addition of experiential learning to a medical nutrition therapy course. This was an exploratory case study to determine the “value added”, if any, to student learning.

Overview of the Procedures

The research design selected for this study was an exploratory case study. Students in the Didactic Program in Dietetics enrolled in an upper level medical nutrition therapy course in a Midwestern university during the spring semester were the participants in the case studies. Registered, licensed dietitians acted as mentors to precept the students in long term care facilities for a mutually agreed upon number of hours. The students and mentors participated in taped interviews to determine the answers to the research questions. The students also sent journal entries to record the activities in which they participated and their attitudes towards these activities.

The Research Questions

The following research questions were used as the basis of the case study and were investigated.

1. Why did students in the didactic program who elected to participate in the experiential learning component of the medical nutrition therapy course, choose to participate?

2. How did students doing the experiential learning component of the didactic program perceive “value added”?
3. In the opinion of the students and their preceptors, how did the experiential learning component “add value” to student learning?

4. What was the “value added” to student learning?

Relationship to Theoretical Framework

By incorporating an experiential learning component into the medical nutrition therapy class, the Didactic Program in Dietetics students were provided the opportunity to extend the theories taught in the classroom into actual situations. According to the theoretical framework established by Kolb (1984) student learning becomes a continuous process and the experience can allow the students to see the relevance of the classroom theory. The concept that learning should interact with the environment began with Dewey in the 1938 (Reed and Johnson, 2000; Kolb, 1984) and was expanded by Kolb (1984) with the development of the model of experiential learning. Jarvis (1987) utilized Kolb’s model and proposed that there are different routes to the learning situation. Zemmelman et al. (1998) suggested that experiential learning is the most powerful form of learning. These strengths of experiential learning were the basis for the decision to utilize experiential learning in conjunction with the medical nutrition therapy course.

Conclusions

This section of Chapter V has been organized around the four research questions. Conclusions related to each of the research questions are presented followed by a discussion of the meaning of the conclusions.
Decision to Participate

Four students agreed to participate in the experiential learning component that was offered in conjunction with the medical nutrition therapy class. Three of the students had preset goals as their incentive for agreeing to participate. Rose stated her goal as “just wanted to feel more comfortable, just learn what the process would be from start to finish” (Rose, second interview, page 6, paragraph 78). Daisy “wanted to see what the dietitian’s role was” (Daisy, second interview, page 4, paragraph 44). Pansy did eventually state that she liked “the experience a lot because it helps me for when I’m going to intern and stuff” (Pansy, interview, page 2, paragraph 30). The fourth student, Violet, did not have preset goals but “overall, I had a wonderful experience” (Violet, journal entry 2, paragraph 2). Even without a preset goal, Violet still enjoyed the experience and liked going to the facility and working with the preceptor. Overall, it appears that the students with preset goals accomplished their objectives and enjoyed their experiences. The ability to meet student objectives was noted in Colangelo et al. (2004) when student nurses who participated in a summer internship concluded that all or most of their expectations had been met. The student nurses’ internship was designed to build the students’ skill level and experience, increase the students’ level of confidence, refine communications skills, and assist patients and families through their interactions.

Student Perception of “value added”

The students perceived “value added” when they were able to participate in a variety of activities such as resident care conferences, resident council meetings, writing progress notes in the residents’ medical records, filling out assessment forms, and seeing
the responsibilities of a dietitian in long term care facilities. Student participation in these various activities was dependent upon the number of hours they were at the facility and the level of confidence they had developed while there. All four of the students were able to participate in resident care conferences and observe the interaction of the interdisciplinary team members. These conferences permitted the students to gain an understanding of the contribution of the dietitian to the overall health and care of the resident.

Rose valued the opportunity to complete the various forms used when she stated “it’s really neat to see that the dietary information really affects everything about their lives in the hospital” (Rose, first interview, page 4, paragraph 50). She also attended the resident council meeting and commented that “it made them happy and it would make me feel good as a dietitian knowing that my clients want to eat the food we are providing and planning” (Rose, journal entry 5, page 2, paragraph 4). Rose enhanced her understanding of the profession of dietetics by participating in the experiential learning component.

Violet and Daisy both attended the resident care plan meetings and believed that they had “value added” to the didactic program. Violet stated that “the care conferences are very informative. I basically learned a little bit about all areas of long term care” (Violet, journal entry 1, page 2, paragraph 20). Daisy also found “it was interesting to get to see what physical therapy and occupational therapy did and how they come in and talk” (Daisy, second interview, page 11, paragraph 128). Appreciation for other health care professionals’ responsibilities is consistent with Dyer’s (2003) conclusion that a
benefit of experiential learning was an increased student awareness and respect for other professionals that occurred because of the shared learning experiences.

Pansy attended the resident care meetings but did not appear to have benefited from the meetings. The preceptor, Elmer, stated that Pansy completed some assessment forms used at the facility. This was not mentioned by Pansy.

Three of the four students who participated in the experiential learning perceived that “value was added” to the didactic program in dietetics. The students had different experiences and performed a variety of activities that enhanced their understanding of the profession of dietetics. Steffes (2004) believed that a goal of experiential learning is that students will advance their professional and personal development which three of the students participating in this study appeared to accomplish.

Concrete experience is one of the four sections of Kolb’s (1984) cycle of learning. Kolb believed that learning is a process that is grounded in experience. The participants in this study experienced a variety of activities that provided concrete experience. They were able to learn about the responsibilities of other health care team members through the resident care conferences. Three of the four students saw the value of their academic work when they observed the use of or used the forms in assessing the residents.

How was “value added” to the didactic component of the medical nutrition therapy course

To determine if value had been added to the didactic component, statements made by students regarding the contribution of the experiential learning to the medical nutrition therapy course were examined. Three of the students were able to understand the
relationship between the assessments completed on residents and the case studies that are part of the coursework. The assessments completed on residents reviewed past medical history, discussed diagnoses, reviewed weight changes, and formulated plans for the residents’ care. These are all components of a case study completed in the classroom. For instance, Rose reported that “the case studies, definitely helped out a lot” when asked if she saw material from the medical nutrition therapy course included in the assessment forms she completed at The Seasons (Rose, first interview, page 1, paragraph 14). In addition students were exposed to residents with various disease states, such as diabetes and kidney disease, which are explored as part of the medical nutrition therapy course.

The students also examined the interaction between medications and food by doing the assessments and attending the resident care conferences. Medications and their food interactions are listed on the resident assessments and discussed by team members in the resident care conferences. As part of the medical nutrition therapy course, the students learn about medications and their affect on food intake and nutritional status. Rose said that she got to “see how the information about the medication and food orders and everything they had with medications, what you can’t eat, what he should eat and everything and how it goes into the care plans” (Rose, first interview, page 4, paragraph 46). Violet also said that the experience related to “food and medication interactions. We go to that book (in the medical nutrition therapy) course and then just some of the diseases” (Violet, interview, page 2, paragraph 32).

In the medical nutrition therapy course, the students also learn about weight, weight control, and weight loss. Residents in long term care facilities are regularly
assessed for weight status and weight changes. Weight is also a topic covered in the resident care conferences. The students were able to assist with weight assessments when they completed progress notes or filled out assessment forms for the residents’ medical records.

This relationship between academic concepts and experiential learning was discussed by Hickcox (2002), Rickard (2002), and Johnson (2001). Hickcox (2002) stated that participants in experiential learning were able to personalize and reinforce academic concepts as well as acquire broad principles and major facts. Rickard (2002) concluded that students were able to relate the theories presented in the academic setting with activities that they saw in practice. Johnson (2001) believed that the students saw course material as relevant and practice focused and that the students were able to combine education with application. Three of the four students participating in this study were able to recognize the relationship of the medical nutrition therapy coursework to the practice of dietetics in the long term care facilities.

*What was the “value added” to student learning*

The “value added” to student learning was that the students were able to use and complete the variety of forms that are used by the long term care dietitian to assess and monitor the nutritional health and well-being of the residents. In addition, the students were given copies of the forms for them to discuss with their peers and their instructors or to keep for future reference in classes, internships, or work. Receiving these forms, in a work setting rather than in the classroom, provided the students with an opportunity to understand the rationale for the format of the forms.
Two of the students stated that they did gain an increase in confidence and comfort level as it related to medical nutrition therapy while in the experiential learning component. Rose wrote in her journal entries that “I wrote how the patient is doing and what the follow up will be for the week” (Rose, journal entry 4, paragraph 1). Violet also participated in charting and stated that “I did that for one patient and I did one, I think it was a quarterly and put their labs on it” (Violet, interview, page 2, paragraph 26). Both students who stated they had felt comfortable recording notes in the residents’ medical records were with the same preceptor. This preceptor has many years of experience mentoring students and encourages them to participate as much as possible in the activities that she performs at the facilities.

The students who gained enough confidence to participate in recording notes in the residents’ charts demonstrate several of Kolb’s (1984) theories of learning. They were able to apply the experiences of collecting nutrition information on residents to the application of recording pertinent nutrition information on the appropriate assessment forms in the residents’ medical records. Application of general information to new circumstances is one of the four sections of Kolb’s model of experiential learning. Additionally, Kolb indicates that the learning process requires an understanding of the experience and the ability to transform that understanding is crucial to learning.

The other two students did not believe that they had gained as much confidence but this could be due to a number of factors. One student, who did not write in the residents’ medical records, was also with an experienced preceptor but did not believe that she would be able to write complete progress notes. She was asked if she would like
to attempt to write a progress note, but declined because she was “afraid of leaving anything out” (Daisy, second interview, page 2, paragraph 18).

The fourth student was with a preceptor who had not had students before. She did not gain the confidence that would allow her to write a progress note. She was asked if she had an opportunity to write progress notes and she replied that “I really don’t feel comfortable with that yet” (Pansy, interview, page 2, paragraph 18). She also had the least amount of time spent in a facility.

The confidence to write notes in the residents’ charts may have been related to the amount of time spent in the facility. As the experiential learning time increased, the students would have become more familiar with the progress note recording process and the expectations of the preceptor. Another factor may have been the preceptors’ ability to explain their expectations to the student. The preceptor, Mercy, who indicated to the students that she expected them to be able to do charting had the greatest success in achieving this expectation.

All of the students were able to enhance their knowledge about the activities of the dietitian in long term care by observing the dietitian and seeing the responsibilities that were inherent in the position. Their attendance at the resident care conferences and other meetings increased their knowledge about the role that the dietitian plays as a member of the interdisciplinary team.

Reflection on the experiences by the students is part of Kolb’s (1984) model of experiential learning. Reflection, according to Kolb, can and should be done on the experiences they have had and observed or reflected upon from many different
perspectives. For one student, Rose, looking back at the experiences she had enhanced her enthusiasm about her selection of dietetics as a profession. However, another student realized that she did not want to pursue a career in medical nutrition therapy and believed that food systems management was the stronger option for her. For both of these students reflecting on their experiences, some of which were the same, led to two different conclusions.

Overall, all of the students believed that they had added to their knowledge of the medical nutrition therapy course. This additional knowledge is value that is added to the didactic program in dietetics. Other benefits included an increase in confidence for two of the students as it related to collecting pertinent patient information and synthesizing it into a notation into the residents’ medical records. As pointed out in Colangelo, et al. (2004) the experiential learning helped to build the students’ skill level and experience. The authors believed that the students increased their clinical competence and refined their communication skills through interactions with patients, family members, and health care team members as based on skill assessment ratings completed by the students prior to the beginning of the study and at the conclusion of the study. Two of the students participating in this study achieved these benefits by completing some of the medical nutrition therapy assessment forms. All four of the students participated in the interdisciplinary team meetings and resident council meetings to increase their experience with other health care team members and improved their communication skills.

Contrary to Rickard (2002), the student with the least amount of experience, in this case Rose, appeared to have gained the most confidence and received the greatest
amount of “value added” to student learning. Rickard proposed that students without previous work experience did not gain as much confidence as indicated by the other participants. A student with previous related work experience in food service, Pansy, seemed to gain the least from the experiential learning component.

Implications

The results of this exploratory case study indicate that an experiential learning component should be considered for addition to the upper level medical nutrition therapy course for the Didactic Program in Dietetics students. Based on the comments from some of the students, there was “value added” to their learning in the medical nutrition therapy course and to their development as a professional in dietetics. This implication of the experiential learning conducted for this study coincides with Village Two as discussed by Saddington (2005). Village Two expresses the concept that experiential learning can be used as a basis for justifying a change in the structure, purpose, curricula of post-secondary education.

In the future it would be important to have the students create goals that are consistent with the foundation knowledge and skills as established by the Commission on Accreditation for Dietetic Education (CADE) for their participation in an experiential learning component. By having established goals the students and preceptors would be able to organize activities and experiences to assist the students in meeting their goals. The goals would provide direction and enhance learning opportunities for the students. Predetermined goals also add focus to the learning component because both the student and the preceptor would know what was expected from the experiential learning
component. The students were provided with an abbreviated list of foundation knowledge and skills that pertained to medical nutrition therapy which included suggested activities that would enable them to achieve these skills. In the interviews, the students did not indicate that they had used the list provided and their goals did not mirror the foundation knowledge and skills. Following the guidelines established by CADE would strengthen the focus of the experiential learning and provide a stronger structure for the learning experience.

The student goals and objectives should be shared with the preceptors so that they can identify activities that will assist in meeting the established student goals. This list of activities would provide for more consistency among the students and may provide a greater range of experiences for the students. For an experiential learning component, there should be an established agenda or list of activities that would offer the students knowledge that would enhance the didactic curriculum.

In addition, the instructor setting up the experiential learning component should provide guidelines for the preceptors. By having guidelines the participants would accomplish goals that relate to the program objectives and to the foundation knowledge and skills as established by the Commission on Accreditation for Dietetic Education.

Based on the students’ comments about how and if they benefited, there needs to be a minimum of thirty-two hours of participation on the part of the student. The student who spent the most amount of time at her respective facility appeared to gain the most benefit from her participation. She was able to do more activities, to be exposed to more situations, and to participate in the actual assessment of the residents.
of completing assessments and care plans for residents in long term care facilities, a
minimum of thirty-two hours would permit, the student to be oriented to the facility,
attend a resident care conference, observe the activities of a dietitian, interview residents,
and participate in writing notes in the residents’ charts. Completion of these activities
would increase the students’ confidence so that they would be able to write progress
notes and collect information for the assessments. The student with the least number of
hours didn’t appear to have developed as much confidence or participate in as many
activities as the other students.

The results indicated that the students that were with preceptors that had previous
experience mentoring students, also participated in a wider range of activities and were
exposed to a greater number of experiences. For future experiential learning components,
the preceptors should either have prior experience or be trained through the preceptor
training session developed by the American Dietetic Association or one developed by the
faculty at the university. Preceptors should be selected according to their experience
working with students and understanding of the foundation knowledge and skills. The
medical nutrition therapy instructor should coordinate the activities with the preceptor in
order to assist in student learning and gaining the knowledge and skills established by
CADE. Activities that would assist in the student’s learning and achieving the
knowledge and skills could be decided upon by both the preceptor and the instructor.

One of the students mentioned that she would have liked to have been able to
participate in activities at more than one facility. This would be somewhat difficult to
arrange in the confines of a thirty-two hour experience. In order to go to more than one
facility the student would need to have enough hours available that they could go to several facilities and still learn from the dietitian at each facility and observe a variety of experiences. The existing food systems management course does have an experiential learning component in place where the students can spend a day a week at a variety of facilities. However, seeing the medical nutrition therapy aspect of dietetics is more difficult to see in a day due to the variety of residents or patients that may be at that facility. In addition, the duties of the dietitian at a facility may be very different from day to day when attempting to record notes on residents’ records, interview residents, attend meetings, or complete assessments on residents or patients. However, this does not mean that once the thirty-two hour experiential learning was in place, that other alternatives, such as going to more than one facility, could not be explored.

Recommendations for the inclusion of experiential learning into the didactic curriculum consist of:

1. thirty-two hours of an experiential learning component
2. goals and objectives established by the students
3. preceptors with training specific to mentoring students or preceptors with mentoring experience
4. activities and tasks designed to meet the foundation knowledge and skills as established by CADE
5. activities and tasks agreed upon by the preceptor and the course instructor so that the students would be at the facility when these activities took place
6. course syllabus with the outline of points to be discussed in the classroom, such as the various disease states, case study information, or the relationship of nutrition to the aging process

Students may not derive benefits from experiential learning due to a number of factors. Students do not develop confidence at the same rate and may not feel comfortable writing progress notes in the residents’ charts. These students may need more time in the facility, more training in writing progress notes, or change to a different preceptor. Students have a varying degree of success in mastering the concepts of medical nutrition therapy. Additional explanation of the classroom material and demonstration in the facility may assist students with mastering the course concepts. A goal of experiential learning should be to provide the students with a successful learning situation.

Suggestions for Further Research

Future research should be conducted to observe whether or not the results from this study were typical of students participating in an experiential learning component. It would be beneficial if a larger number of students participated in the experiential learning component. Additionally, if the instructor for the medical nutrition therapy course was making the arrangements for the experiential learning component, he/she would be able to track the whether or not the component had an impact on the participants grades, understanding of the course material, or contribution to the classroom discussions. Additionally, research to determine if the students involved in experiential learning increased their ability to complete case studies or other assignments in class would help
decide if experiential learning was beneficial to the students understanding of course material and theories.

In order to determine if there were long term effects of participating in an experiential learning component as it related to medical nutrition therapy, a study should be conducted to identify how the experience affected the students’ ability to perform in a dietetic internship. Specifically, a study should identify whether or not the students with experiential learning included in their didactic preparation, believed they were more confident in performing some of the responsibilities and activities associated with an internship. The study should also request that the internship director determine if the students with experiential learning included in their didactic program are more proficient in their performance of selected activities than the students without an experiential learning component.

A study, similar to the survey done by Barr et al. (2002) to determine the perception of the value of experiential learning to the entry-level dietetic practitioner, could be conducted with students who completed some experiential learning during their didactic program. The focus would be to see if the learning curve that was identified by Barr et al. in entry-level practitioners was different among those with experiential learning in the didactic program versus those who did the experiential learning in the form of a dietetic internship.
BIBLIOGRAPHY


APPENDICES
APPENDIX A

LETTER TO PARTICIPANTS

Dear Didactic Program in Dietetics Student,

I am a doctoral level student from the College of Fine and Applied Arts, School of Family and Consumer Sciences, Division of Nutrition/Dietetics at The University of Akron. I am also a full-time faculty member in the Division of Nutrition/Dietetics with teaching responsibilities for Food Systems Management and Food Science.

My dissertation topic is exploring the “added value” of experiential learning to the Didactic Program in Dietetics (DPD) in the medical nutrition therapy course. Experiential learning is a type of student learning where practice-related knowledge and skill is primarily acquired through supervised experience in real-life situations. In order to discover whether or not experiential learning will benefit the DPD students, I have planned to offer an experiential learning component that relates to medical nutrition therapy.

I am asking all DPD students to complete a short survey at the end of the next class that will request information about your prior or current work experience. The survey will also ask if you would be willing to participate in the experiential learning component.

You are invited to participate in this study during the spring semester of 2006. Your participation in this study is voluntary and will not influence the grade you receive in the medical nutrition therapy course. You may withdraw from the study at any time without penalty to you or your grade in the medical nutrition therapy course. Any information obtained from you will be kept confidential and will not be shared with any instructor in the nutrition/dietetics division. Your confidentiality will be protected throughout the course of this study.
If you agree to participate, you will be asked to perform work related experiences at a facility of your choice with a registered dietitian preceptor. The experience will ask you for a commitment of four hours per week for eight weeks.

You will be asked to take part in two tape recorded interviews during the experiential learning component. At the end of each day in the facility, I am asking that the student email me a journal entry that will describe their activities for the day with a reflection on those activities. Specific instructions for the email journal will be given to those who agree to participate in the experiential learning component.

There are no anticipated benefits or risks to participants, aside from helping me to gain a better understanding of experiential learning and the value it may add to the Didactic Program in Dietetics.

If you have any questions regarding this research, please contact me at 330-972-6043 or my email address slhudak@uakron.edu. I look forward to meeting with you after the next class to further discuss this project.

Yours truly,

Sandra L. Hudak, MS, RD, LD
Assistant Professor, Nutrition/Dietetics
APPENDIX B

LETTER OF APPROVAL FROM IRB

Office of Research Services and Sponsored Programs
Akron, OH 44325-2102
(330) 972-7086 Office
(330) 972-6281 Fax

January 9, 2006

Sandra L. Hudak
6947 Kingwood Drive
SOLON, OHIO 44139

Ms. Hudak:

The University of Akron’s Institutional Review Board for the Protection of Human Subjects (IRB) completed a review of the protocol entitled “Experiential Learning in the Didactic Program in Diabetes”. The IRB application number assigned to this project is 20051235.

The protocol qualified for Expedited Review and was approved on January 9, 2006. The protocol represents minimal risk to subjects and matches the following federal categories for expedited review:

6. Collection of voice, video, digital or image recordings made for research purposes
7. Research on individual or group characteristics or behavior or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation or quality assurance methodologies

This approval is valid until January 9, 2007 or until modifications are proposed to the project protocol, whichever may occur first. In either instance, an Application for Continuing Review must be completed and submitted to the IRB.

Enclosed is the informed consent document, which the IRB has approved for your use in this research. A copy of this form is to be submitted with any application for continuation of this project.

Please note that within one month of the expiration date of this approval, the IRB will forward an annual review reminder notice to you by email, as a courtesy. Nevertheless, it is your responsibility as principal investigator to remember the renewal date of your protocol’s review. Please submit your continuation application at least two weeks prior to the renewal date, to assure the IRB has sufficient time to complete the review.

Please retain this letter for your files. If the research is being conducted for a master’s thesis or doctoral dissertation, you must file a copy of this letter with the thesis or dissertation.

Sincerely,

Sharon McWhorter
Associate Director

Cc: Susan Olson, Advisor
    Department Chair
    Phil Allen, IRB Chair

The University of Akron is an Equal Education and Employment Institution
APPENDIX C

INITIAL SURVEY OF NUTRITION IN MEDICAL SCIENCE I STUDENTS

1. Why did you choose dietetics as your major?

2. Do you have any work experience related to the profession of dietetics?

3. If you are currently working or have worked in a job that can be related to dietetics, please describe the following:

   What type of job did you have?

   What type of experiences did the job provide?

   Were you working with a registered dietitian?

   Who did you work with?

   What type of activities did you perform?

4. Would you like to participate in an experiential learning component in conjunction with this course? Yes No (circle one)

5. If yes, would you be willing to keep a journal (log) of activities, experiences, reflections? Yes No (circle one)

6. If you are willing to keep a journal would you submit it to the researcher on a weekly basis? Yes No (circle one)

7. Are you willing to be interviewed? Prior to the study? During the study? Yes No (circle one)

8. Are you willing to be interviewed at the facility? Yes No (circle one)

Are you familiar with the foundation knowledge and skills as established by the Commission on Accreditation for Dietetics Education? Yes No (circle one)
APPENDIX D

INFORMED CONSENT

You are invited to participate in a study being conducted by Sandra L. Hudak MS, RD, LD, a doctoral level student and faculty member from the College of Fine and Applied Arts, School of Family and Consumer Sciences, Division of Nutrition/Dietetics, University of Akron, OH.

The project focuses on experiential learning. Specifically, the project will look at value added by experiential learning to the didactic program in dietetics. The researcher is particularly interested to discover how the students view the value of experiential learning to their education in the didactic program in dietetics.

If you decide to participate, you will be asked to take part in interviews prior to beginning the study and twice during the actual experiential learning component. The interviews will take place at a convenient time and location. The interviews should take approximately 30 minutes of your time.

Your participation in the interview is voluntary and does not affect your grade in the course in any way. You can also refuse to answer any questions and may withdraw from the study at any time without penalty.

Your confidentiality will be protected throughout the interview. Any data obtained from you through audiotapes of interviews will be kept confidential and will not be viewed by anyone but the researcher. All identifying information will be retained in a locked storage area. The data will be kept for five years and will be destroyed upon completion of the project.

There will be no anticipated benefits or risks to participants, aside from helping me to have a better understanding of experiential learning and the didactic program in dietetics.

If you have any questions about the research project, you can call me at 330-972-6043 or my advisor, Dr. Susan Olson at 330-972-8223.

This doctoral research has been reviewed and approved by the University of Akron Institutional Review board for the Protection of Human Subjects. Questions about your
rights as a research participant can be directed to Ms. Sharon McWhorter, Associate Director, Research Services, at 1-330-972-7666 or 1-888-232-8790.

I wish to participate in the study and to audiotaped interviews. □

I do not wish to participate in the study but agree to audiotaped interviews. □
APPENDIX E

OUTLINE OF PRESENTATION TO MEDICAL NUTRITION THERAPY CLASS

1. Students to be given letter explaining the study
2. Review letter with the students
3. Explain time commitment of 32 hours
4. Explain that they will go to a long term care facility either close to the university or close to their homes
5. Plan to meet after second class to give them the initial survey and discuss facilities and preceptors
6. Facilities include:
   The Lake with Elmer – location given
   The Woods with Mercy – location given
   The Village with Alice – location given
   The Seasons with Mercy – location given
   The Rocks with Flo – location given
APPENDIX F
INSTRUCTIONS FOR JOURNAL ENTRIES

To: Students participating in dissertation for SL Hudak
From: SL Hudak
Re: Instructions for writing journal entry
Date: February 1, 2006

After you have completed a day in the long term care facility where you are doing the experiential learning, please think about any activities, discussions, observations done while in the facility.

In an email to me at slhudak@uakron.edu please send your thoughts, beliefs, description, questions.

Some questions to consider in your journal writing may be:
What were the activities that you saw or took part in while in the facility today? Describe them?
Did you attend any meetings while there today? What type of meeting? How long did it last? Did the dietitian or dietary manager actively participate in the meeting?

How did you feel about these activities, observations, discussion? Did they help you understand medical nutrition therapy? Did they give you a greater understanding of the work of a dietitian? If yes, how did they contribute to your understanding of the course or profession? If not, why did it not contribute to your understanding of the course or profession?

If you have questions they can be included in your journal entry or sent to me separately at the above email address.
## APPENDIX G

### CONDENSED VERSION FOUNDATION KNOWLEDGE AND SKILLS

<table>
<thead>
<tr>
<th>KNOWLEDGE REQUIREMENTS</th>
<th>TASKS OR ACTIVITIES EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student will have knowledge of evolving methods of assessing health status</td>
<td>Read charts, journals discuss with RDs and other practitioners</td>
</tr>
<tr>
<td>Student will have knowledge of influence of age, growth, and normal development on nutritional requirements</td>
<td>Talk to RD, attend care conferences, charts, labs, write sample menus, assess menu choices made by residents</td>
</tr>
<tr>
<td>Student will have knowledge of nutrition and metabolism</td>
<td>Talk to RD, attend care conferences, charts, labs</td>
</tr>
<tr>
<td>Student will have knowledge of medical nutrition therapy</td>
<td>Talk to RD, attend care conferences, charts, labs</td>
</tr>
<tr>
<td>Student will have knowledge of health promotion and disease prevention theories and guidelines</td>
<td>Presentation materials for patients, staff, or family members</td>
</tr>
<tr>
<td>Student will be able to screen individuals for nutritional risk</td>
<td>Visit patients, read charts, complete forms</td>
</tr>
<tr>
<td>Student will be able to collect pertinent information for comprehensive nutrition assessment</td>
<td>Do food drug interactions</td>
</tr>
</tbody>
</table>

APPENDIX H

INTERVIEW QUESTIONS FOR STUDENTS

First interview – after four weeks of experiential learning:

1. Describe the experiences you have had while in this facility?
2. What was your reaction to these experiences?
3. How do you believe these experiences or activities contributed to your understanding of the course material?
4. What opportunities have you had to speak to the residents? To the personnel? To other health care staff?
5. What activities have you observed the RD doing?
6. What is your reaction to these activities?
7. What opportunities have you had to evaluate the nutritional status of residents?

Final interview – at the conclusion of the experiential learning:

1. What goals did you set at the beginning of this experience?
2. What goals did you accomplish now that the experience is finished?
3. What experiences have you had in the last four weeks?
4. What is your reaction to these experiences?
5. As you reflect back over the experiential learning, discuss whether or not you developed some critical thinking skills?
6. Looking back over your experiences, describe any problem solving situations that you encountered.
APPENDIX I

INTERVIEW QUESTIONS FOR PRECEPTORS

1. What activities were assigned to the students?
2. What experiences or activities did the student participate in?
3. How many times did the student communicate with the residents? With the personnel?
4. How do you think the activities or experiences “added value” to the student’s dietetics education?
5. What knowledge and skills were demonstrated by the student?
6. How much time was the student able to spend with you, watching you chart, consult, complete assessments?
APPENDIX J

TIMELINE OF DATA COLLECTION

First week of the semester
- Distributed information about study

Second week of the semester
- Request students fill out survey
- Met with students to determine placement preferences
- Review of completed surveys – five returned; only four continue
- Rose selects facility for experiential learning
- Students given copy of condensed foundation knowledge and skills
- Directions for journal entries sent to students

Third week of the semester
- Rose starts experiential learning
- Rose sends journal entries – continues after each time at the facility

Fourth through sixth week of the semester
- Rose continues experiential learning
- Daisy selects facility for experiential learning
- Pansy selects facility for experiential learning
- Violet selects facility but cannot work out time with dietitian

Seventh week of the semester
- Observation of Rose at facility

Eighth week of the semester
- First interview with Rose
- Daisy begins experiential learning
- Daisy sends journal entries after each time at the facility
- Pansy begins experiential learning

Ninth week of the semester
- Rose, Daisy, and Pansy continue with experiential learning
- Pansy sends first of two journal entries
Tenth week of the semester
  • First interview with Daisy – she has been at the facility twice but thinks she is only going to do four visits, so interview is scheduled
  • Violet selects facility for experiential learning

Eleventh week of the semester
  • Violet begins experiential learning

Twelfth week of the semester
  • Daisy completes five visits to facility for twenty hours
  • Second interview with Daisy after
  • Interview with Pansy – four weeks in facility for sixteen hours
  • Pansy decides she cannot spend any more time in facility

Thirteenth week of the semester
  • Rose and Violet continue experiential learning
  • Violet sends first journal entry

Fourteenth week of the semester
  • Rose completes experiential learning eighth time for thirty-two hours
  • Interview with Alice, preceptor for Daisy
  • Second interview with Rose

Fifteenth week of the semester
  • Violet completes five weeks at facility for twenty hours
  • Mercy, preceptor for Rose and Violet interviewed
  • Elmer, preceptor for Pansy interviewed