A Qualitative Study of Dietetic Students Completing Internship in a Dietetic Technician Program

Sharon Spicer Stewart

Follow this and additional works at: https://commons.und.edu/theses

Part of the Psychology Commons

Recommended Citation
https://commons.und.edu/theses/799

This Dissertation is brought to you for free and open access by the Theses, Dissertations, and Senior Projects at UND Scholarly Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of UND Scholarly Commons. For more information, please contact zeineb.yousif@library.und.edu.
A QUALITATIVE STUDY OF DIETETIC STUDENTS COMPLETING
INTERNSHIP IN A DIETETIC TECHNICIAN PROGRAM

by

Sharon Spicer Stewart
Bachelor of Science, University of North Dakota, 1971
Master of Science, North Dakota State University, 1978

A Dissertation
Submitted to the Graduate Faculty
of the
University of North Dakota
in partial fulfillment of the requirements
for the degree of
Doctor of Philosophy

Grand Forks, North Dakota
December
1998
This dissertation, submitted by Sharon Spicer Stewart in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

Chairperson

This dissertation meets the standard for appearance, conforms to the style and format requirements of the Graduate School at the University of North Dakota, and is hereby approved.

Dean of the Graduate School

Date

The micrographic images on this film are accurate reproductions of records delivered to Modern Information Systems for microfilming and were filmed in the regular course of business. The photographic process meets standards of the American National Standards Institute (ANSI) for archival microfilm. NOTICE: If the filmed image above is less legible than this Notice, it is due to the quality of the document being filmed.

Operator's Signature
**PERMISSION**

<table>
<thead>
<tr>
<th>Title</th>
<th>A Qualitative Study of Dietetic Students Completing Internship in a Dietetic Technician Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department</td>
<td>Teaching and Learning</td>
</tr>
<tr>
<td>Degree</td>
<td>Doctor of Philosophy</td>
</tr>
</tbody>
</table>

In presenting this dissertation in partial fulfillment of the requirements for a graduate degree from the University of North Dakota, I agree that the library of this University shall make it freely available for inspection. I further agree that permission for extensive copying for scholarly purposes may be granted by the professor who supervised my dissertation work or, in her absence, by the Chairperson of the department or the Dean of the Graduate School. It is understood that any copying or publication or other use of this dissertation or part thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the University of North Dakota in any scholarly use which may be made of any material in my dissertation.

Signature

Date Dec. 8, 1998
TABLE OF CONTENTS

ACKNOWLEDGMENTS ........................................................................................vi
ABSTRACT .............................................................................................................. vii
CHAPTER

I. INTRODUCTION AND REVIEW OF LITERATURE ................................ 1
   Introduction .......................................................................................... 1
   Introduction to Dietetic Education .................................................... 3
   Purpose and Overview of the Study ................................................. 8
   Organization of the Dissertation ................................................... 11

II. METHODOLOGY .................................................................................. 13
   Research in Dietetics ....................................................................... 13
   Nature of Qualitative Research ....................................................... 16
   The Study Design ............................................................................. 17
   Site Selection .................................................................................... 18
   Introduction to the Study Design .................................................... 20
   Entry Into the Site of Facility ........................................................... 21
   Student Selection ............................................................................. 23
   Preceptor Selection .......................................................................... 24
   The Interview ..................................................................................... 25
   Focus Group ...................................................................................... 26
   Data Collection and Analysis .......................................................... 27
   Reliability ............................................................................................ 30
   Validity ................................................................................................ 31
   Limitations ......................................................................................... 32
   Summary ............................................................................................ 33

III. PORTRAITS OF EACH PARTICIPANT ................................................. 34
    Terry .......................................................................................... 34
    Abby ........................................................................................... 36
    Nancy .......................................................................................... 38
    Alice ............................................................................................ 40
    Lynn .............................................................................................. 41
ACKNOWLEDGMENTS

I wish to thank my family, advisor and friends for their support, encouragement and patience in the completion of my dissertation and my doctorate degree. I especially appreciate my editor, my husband, who willingly read and edited all the drafts of my dissertation. I want to acknowledge my parents who have provided encouragement for all my education and a desire to learn.
ABSTRACT

The purpose of this study was to explore the view of dietetic students and their preceptors concerning the supervised practice experience. Guiding questions for this study were: (1) dynamics of learning in the work place setting, (2) dietetic students' technical ability to complete the activities expected of them in the work place, (3) dietetic students' socialization into the field site experience, including how well the students were accepted by other staff, (4) expectations of the preceptor prior to working with student dietetic technicians, (5) students' and preceptors' expectations of the DT program coordinator, (6) students' and preceptors' satisfaction with the supervised practice experience, (7) and the stress level experienced by the students during the supervised practice.

The study followed seven dietetic students as they completed the supervised field experience component of the dietetic technician program. The study included direct observation of the students in the field sites as well as in-depth interviews with each student individually and in small groups. Supervised practice preceptors were interviewed two times during the experience. All interviews were recorded and transcribed. Observations of students in the supervised practice were recorded in a narrative format. The data generated
from the field notes and the interviews were coded and common themes were sought. Quotations from the data were used to support the themes generated from the research. In order to identify differences in the expectations of the students and each preceptor, views of each group were compared and contrasted.

The conclusions of this study are grounded in the collected observations of the dietetic interns and their preceptors. Internship allowed students to develop the skills of a practicing dietetic technician. The internship was beneficial to the preceptors who updated skills and completed projects because of the contributions of the health care facility.
CHAPTER I

INTRODUCTION AND REVIEW OF RELATED LITERATURE

Introduction

Practicum or internship is a major component of allied health education. The use of internship or supervised practice is required in medical disciplines and in the allied health fields, including dietetics. The practicum or internship provides a setting for the students to practice theory learned in the classroom setting. The students develop not only the skills needed by their profession but also the conventions, constraints, languages, and appreciative systems of their profession (Schon, 1987). Evaluation of the students in the practicum or internship setting is effective for learning because the student can make changes in response to preceptors' analysis. After the changes are made, the preceptor can then provide further evaluation for the students. The student also has the opportunity to question the methods of the preceptors related to patient care or management style and to offer alternative solutions to problems. This ability to interact with preceptors is excellent in the development of critical thinking and problem solving skills in students (Wolf, 1996).

Practicum or internship can be viewed as a form of technical training. Students learn by reading, listening, and watching in the classroom under the direction of the classroom instructor. Then students go to the practicum and/or
2

internship to practice skills in a work place setting, under the supervision of the site supervisor or preceptor. The preceptor observes the student's performance, detects errors, and points out correct procedures. The students then have the opportunity to make changes recommended by the preceptor. Students in a practicum and/or internship learn by doing and by interaction with other students and with the preceptor (Schon, 1987).

Educators view all forms of supervised practice as an effective method of education for the student. Unfortunately, supervised practice and internship are also expensive methods of education in terms of dollars and staff time. The post-baccalaureate degree internship programs, which are sponsored by health care institutions, have recently begun charging tuition for internship. In the past, dietetic interns often received stipends from the internship program for work done. Coordinated programs in dietetics may now have to pay hospitals for their use as a field sites for students within their programs. The health care institutions of today view internship as expensive because of the need for increased staff and the perceived lack of value received from the internship. This is true in other non-medical fields requiring internship, also (ADA, 1997).

Within social work there is a concern about the quality of internships. Because of decline in federal funds available for social welfare programs, the number of social welfare staff is decreasing, but their agencies have the added pressure of supervising interns with inadequate staff. "There are higher expectations for interns producing, seeing patients and bringing in revenue."
There is also less tolerance of students who are problematic or even less than outstanding" (Bocage, Homonoff, & Riley, 1995, p. 703). If educators believe that supervised practice is needed to produce graduates who meet the expectations of the work place, this must be demonstrated to industry. The cost-effectiveness of internship programs, as well as other advantages to the health care community for sponsoring internship programs, needs to be demonstrated.

Introduction to Dietetic Education

Dietetic education is organized using a professional education model. Terms used in this section, which are unique to dietetic education, are defined in the appendix. In a four-year college model, the intention is that the first two years of college consist of general education courses and an introduction to the professional field. The junior and senior years emphasize technical coursework of the profession. The practicum or internship follows college education (Schon, 1987). Internship has been included in dietetic education since 1903, when a 3-month program was established in New York City hospitals. Traditionally, the internship for the dietitian is a post-baccalaureate educational program sponsored and conducted by an organization accredited by the American Dietetic Association (ADA). ADA began an extensive study of the internship in 1949. A curriculum guide for interns and staff was published by ADA in 1954 (Cassell, 1990).

Hospitals, businesses, colleges and agencies sponsor dietetic internships. The majority of internships are in teaching hospitals and medical centers.
(Gilbride, 1996). The student makes application to the internship, and the internship staff makes the decision concerning which students to accept. Internship programs will accept between 1 and 30 interns annually depending on the size and number of staff in the health care institution. The internship is designed to train interns through supervised instruction in clinical dietetics, community dietetics, and food service management. Education provided by a health care institution is expensive for the institution, so the number of training sites is limited. With the need for additional internship sites created by an increasing number of students and a decline in the number of health care internships, a new model of training was developed, including the coordinated program in dietetics (Gilbride, 1996).

Coordinated programs in dietetics (CUP) began in 1969. The CUP program incorporates the internship as a component of the baccalaureate degree, with the college providing faculty supervision at the health care institution. CUP became a significant route to dietetic education. By 1984, the number of graduates from CUP programs were equal to the number of graduates from internship programs (ADA, 1984).

Access to pre-professional practice continues to be a major problem in dietetic education. A 1993 study conducted by ADA showed that 48% of graduates from didactic programs in dietetics did not continue to supervised practice either because they were not accepted (21%) or did not apply (27%). In the study by English (1995), college grade point average (GPA) seemed to be
the main factor in acceptance into a supervised practice. Other factors considered were work experience and recommendations (English, 1995).

A study was completed using student teachers, but may have application to dietetic interns as well. Dietitians do a great deal of formal and informal teaching of patients, staff and the public. In this study undergraduate GPA was of some predicative value in determining internship placement, but other factors, especially personal qualities, were also considered important. Factors of limited value in predicting success in securing an internship were professors' recommendations and Graduate Record Examination scores. The most successful interns combined knowledge, planning, hard work and commitment (Andrew et al., 1996).

Puckett (1997) concluded from her study that dietetic education has not kept pace with the needs of the health care industry. Evidence of inadequate education is the increasing number of practitioners who have lost their jobs, taken early retirement, or made complete career changes. The reasons cited by study participants for the failure of practitioners to be successful in the work place were many. Some were lack of flexibility in course work at all levels of formal education, lack of current materials including technology, lack of actual work experience on the part of professors and the lack of respect for the profession of dietetics from other health-related disciplines. The participants stated the need for more management and business skills and greater communication abilities. Puckett also expressed a concern about a lack of current technology skills and
the absence of continuing education by dietetic professionals. "Education is a lifelong process, an individual responsibility to be shared and used for personal growth, to benefit our customers and our community" (Puckett, 1997, p. 253).

The American Dietetic Association has been the accrediting institution of the profession of dietetics since it began and continues to set the standards for all dietetic education including the post-baccalaureate degree internship sites. In 1997, the Foundation Knowledge and Skills and Competencies were published in the Standards of Education. These standards expect that students will reach the "supervise" or "manage" performance level in practice settings. If this is to occur, the didactic program must set the stage by beginning the process with basic knowledge and application levels of learning.

Because of the emphasis placed on cost effectiveness in higher education and the cost containment measures within health care, dietetics began to look at the effectiveness of dietetic education and the benefits to both the student and the health care facility of the dietetic internship and CUP. The Board of Directors of the American Dietetic Association fears a potential shortage of internships, which would result in a shortage of dietetic personnel. Colleges within the coordinated undergraduate programs (CUP) are concerned about the cost of providing clinical preceptors to supervise the clinical practice. It is the belief of the dietetic organization that clinical programs in dietetics are beneficial for faculty, practitioners, students, and the public. Benefits of internships and supervised practice to the health care facility include potential for hiring
graduates, enhanced quality of care for patients, improvement in job related teaching skills, intellectual stimulus to professional staff, and prestige and recognition for the hospital (Gilbride, 1996).

In 1972 the American Dietetic Association began the approval of an education program for a paraprofessional in dietetics, the dietetic technician. At the time these programs began, the American Dietetic Association was concerned with cost effectiveness in dietetics and quality of dietetic professionals. The dietetic technician would work as a member of the dietetic team and the technician would serve as a resource to the dietitian. Dietetic technicians would be required to earn an associate degree in dietetics and to meet specific competencies as identified by the American Dietetic Association. The 1972 Study Commission of ADA stated, "dietitians must learn to delegate some of their historic tasks and roles to other less highly trained workers" (ADA, 1985). Although this was the career goal for the dietetic technician, dietitians were reluctant to delegate tasks other than clerical duties to dietetic technicians. In 1997, the Standards of Education clearly defined the roles of both the dietetic technician and the dietitian. A key component of the dietetic technician program is supervised practice (Cassell, 1990).

The program was designed to be similar to the coordinated program in dietetics, with internship and practicum as integrated components within it. The dietetic technician program requires a minimum of 450 hours of supervised practice to complete the associate degree as compared to 900 hours in the
baccalaureate degree program. Because of the coordination of the field experience into the curriculum, enrollment in the program would be limited to 10-20 students per class.

A review of the literature reveals quantitative studies on CUP programs and post-baccalaureate degree internship programs. One quantitative study, a follow-up study of graduates of a dietetic technician program, was found. The study focused on the success of graduates on the job and looked at average salary, job title, job responsibilities and job satisfaction. It did not address the quality of the educational program (Lucas, 1993).

Purpose and Overview of the Study

The purpose of this study is to examine the internship component of the technician program in dietetics from the perspective of the student and the field site coordinator or preceptor. The goal of internship is to provide a learning environment in which students can develop the technical skills needed by the registered dietetic technician. My goal in this study is to determine what factors are key in the development of an effective learning environment, the educational benefits to the student while in the internship site, and the benefits to the institution sponsoring the internship experience. This study tries to view the internship experience from the perspective of the participants and the preceptors, and thus the methodology most appropriate is inductive and qualitative (Glesne & Peshkin, 1992).
The following questions serve to guide the inquiry:

1. What were the dynamics of student learning in the work place setting?
   a. How do the students view their roles as a learners in the work place?
   b. What do the supervisors view as their role in the education of the student?

2. Do the dietetic students feel that they have the technical abilities needed to complete activities expected of them in the work place?
   a. Do the students believe that they apply their knowledge in the work place?
   b. Are the expectations of the students and the supervisors similar in regard to technical skills?
   c. Do the students view their education as preparing them for the workplace?

3. How do the dietetic students see themselves as being socialized into the work place?
   a. Do the students feel like they are a part of the staff?
   b. How do the dietitians and dietary staff regard the students?
   c. Do the students feel that level of acceptance affected their ability to learn?
4. What are the expectations of the supervising dietitian prior to working with the dietetic student?
   a. What are the motivating factors for the dietitian agreeing to participate in the internship experience?
   b. Does the student meet the expectations of the supervising dietitian?

5. What were the expectations of the students and the supervising dietitian for the instructor from the college that was responsible for the internship?
   a. Do they believe that the college provided enough supervision?
   b. Do they feel that the college assisted in setting up a quality learning environment for the student?

6. Are the students and the preceptors satisfied with the field experience?
   a. Do the students think that they had learned new skills?
   b. Do the students think that the amount of time at the internship sites was appropriate for the amount of learning taking place?
   c. Do the preceptor see the experience as a learning experience for both the student and the institution?

7. What is the level of stress experienced by the students during the internship?
   a. Do the student experience stress? What is the cause of the stress?
   b. Do stress affect the level of learning taking place?
Organization of the Dissertation

The dissertation is organized in the following manner. Chapter I begins with an overview of the internship within medical disciplines and its role in other professional fields. This is followed by an explanation of dietetic education. The history of dietetic education including the role of the internship is explained and current literature is examined. The goal of the first chapter is to provide background information for those unfamiliar with dietetic education and internships. The purpose of the dissertation and guiding research questions are included in this chapter.

Chapter II introduces the methodology used in the study. The first portion of the chapter explains typical research methods in dietetics and why a qualitative methodology was chosen for this project. Qualitative research methods are explained as are the criteria used to validate the study. The chapter includes a description of the data gathering techniques, the data analysis methods, and a review of literature related to the topic of research methodology.

Each of the participants in the study is highlighted in Chapter III. The background information on seven student-interns and five preceptors is presented to allow the reader to better understand the participants and their contributions to the study.

Chapter IV contains the findings of the study. Each finding or theme is highlighted and supported by evidence from the study to strengthen the finding. The evidence includes statements from the intern's journal writings and
statements from interviews as support for them. My discussion and analysis follow each theme, as does literature related to each theme presented. The review of literature highlights information from dietetic education and related fields. It presents data both that support or refute the theme presented. The discussion is my analysis of both my research and the review of literature.

The final chapter presents a brief summary of the project. The themes of the study are listed along with a brief discussion of each. Limitations of the study and my recommendations are presented. The chapter ends with recommendations for further research.

Appendices follow the main text of the dissertation. Appendix A includes a glossary of the terms used within the study which are unique to dietetic education and references. Other materials referenced in the study are included in the appendices.
CHAPTER II

METHODOLOGY

Chapter II includes description of a dietetic research methods, an overview of the study, and a discussion of qualitative research. The chapter describes in detail the study design including site selection, design procedures, entry into the site, selection of participants, data analysis, and limitations.

Research in Dietetics

Dietetics is a discipline that is difficult to define. Often thought of as the science of applying food and nutrition to health, it is much broader than just nutrition. Dietetic professionals work in health care, education, research, sales, marketing, and public relations. Because of the broadness of the discipline, the need for research and the methodology of research varies greatly according to the area of dietetics studied.

Nutrition is a science that is concerned with food and how food is digested, absorbed, transported, metabolized and the waste excreted from the body. Because nutrition is a science founded in biochemistry, dietetic professionals are educated in the scientific method while students at the university. When these same professionals engaged in nutrition research, they use a quantitative methodology, which is the accepted methodology in science. Nutrition research studies are done to determine nutrient requirements, to learn
about the role of nutrition in disease and disease prevention, and to learn how to
the body metabolizes nutrients. Experimental methods are appropriate for
research to answer these questions.

The common types of study in dietetics—laboratory studies, human subject
studies, surveys, and epidemiological studies—are examined in the paragraph
that follows. Laboratory studies are used to test hypotheses generated by
observation. Nutrition research first focused on the identification of vitamins and
minerals and their uses in the body. The need for research was observed in
people who were stricken with disease which appeared to be linked to the foods
they ate. Animal studies, using the experimental method were appropriate for
research to learn the role of vitamins and minerals in the body. Animal studies
were used to attempt an answer to questions related to vitamins and minerals.

Research using human subjects is also used to learn about the need for
nutrients. Human subjects participate in either depletion-repletion studies or
balance studies. In a depletion study, a subject is fed a diet devoid of a nutrient
and the subject is studied. Later, the subject is fed the nutrient and studied to
determine if the symptoms observed are reversed with the addition of the
nutrient.

Survey research is also popular and has been used extensively in
dietetics. Surveys of food consumption data are generated studying average
American families and are used to describe how the average American eats on a
daily basis. A survey of graduates from dietetic programs is completed to assess
the competency of the graduate in the workplace. These surveys generate data that are then analyzed using statistical methods. Most survey research uses a numerical scale to evaluate data. It may allow the respondent to write in a response, also. The numerical data are analyzed using statistical methods. The written responses are often not used because the researcher does not know how to analyze the responses.

Epidemiology is the study of patterns that occur within populations. A cross-sectional study is a sample of a cross section of a population at one point in time. A longitudinal study is of the same group over time. Epidemiological studies have been used in nutrition to attempt to explain why a number of nutrition related diseases increase once a population has emigrated to a new country. Epidemiological studies do not determine cause and effect, but identify patterns (Smolin & Gosvenor, 1997).

In dietetics most research studies are completed using quantitative methods rather than qualitative methods. It seems more credible to nutrition researchers to generate mathematical data to support their hypotheses. Yet, qualitative research would also be of value to the dietitian and professionals in other allied health fields. Berg and Berg state that although most graduate-trained nurses today believe that "respectable research" and "publishable research" is quantitative research, (Berg & Berg, 1993, p. 166), with appropriate qualitative methods much of the bias against qualitative research can be
minimized. Qualitative research has much to add to the knowledge base in nursing.

Qualitative research can answer the "why" which mathematical analysis is unable to determine. "Quality is essential to the nature of things and quantity is an amount. Qualitative research refers to the, how, when and where, and describes the essence ambience, the meanings, concepts, definitions, characteristics, metaphors, symbols and descriptions of things. Quantitative research is counts and measures of things" (Berg, 1995, p. 3). The dietitian would like to know, what, how, when and where as well as emotions, motivations, symbols and their meanings, empathy, trust, and values placed on food by the client. We are studying something very basic to life: food and food habits. This is hard to quantify.

Nature of Qualitative Research

Qualitative research had its beginnings in the early 1900's and has come into major prominence since the 1960's. Bogdan and Taylor (1975) state that qualitative methods refer to procedures which produce descriptive data and utilize people's own words. Patton (1990) states qualitative data is "detailed description of situations, events, people, interactions, and observed behaviors: direct quotations from people about their experiences, attitudes, beliefs and thoughts" (p. 22). Qualitative methods allow us to know the participants as people. Qualitative methods use participant observers who immerse themselves in the setting with the goal of seeking understanding by use of observations and
interviews with the participants (Bogdan & Taylor, 1975). Qualitative research is based on the premise that knowledge about people is not possible without describing human experiences as they are lived, and that the source of information must be the people themselves (Polite & Hungler, 1993).

Qualitative methods seem most appropriate in situations where description is needed and where the generation of theory or grounding of a theory may be the goal of the research. Grounded theory emerges from the bottom up (Glaser & Strauss, 1967) The inductive method is used. Specific statements are used to make a generalization. It is limited to what is actually observed and it allows one to explore and discover an emerging design. Bogdan and Biklen (1992) describe this as an empiric-inductive approach, which builds abstractions from the particulars that have been gathered and are grouped together.

I chose qualitative research as the method for this study. Although this method is not widely used in dietetics, the qualitative method allowed me to learn about the experience of students in a dietetic internship in the most complete manner.

The Study Design

The study is qualitative in design and seeks to understand the behaviors of the students and their supervisors in a health care setting in detail. Data gathering in qualitative research is organized around observation of participants, open-ended interviews with participants, coding, and analysis of data. In
qualitative research the researcher should not have a detailed plan prior to the beginning of the study. I suggested some possible guiding questions for the study, but some of these guiding questions were discarded and other questions added as the study evolved. Because this study is inductive rather than deductive, the design of the study evolved during the data gathering process (Vierra & Pollock, 1988).

Site Selection

Research within one's own institution or agency is generally not recommended in qualitative research. Reasons for using the home institution are ease of access, prior rapport with participants, the relevance of findings to the researcher's professional life, and the reduction in the amount of time required collecting data. Some of the problems with "backyard" research are personal and professional dilemmas. A researcher within a home institution may uncover information that is not good to know about colleagues or come to be seen as spying on others within the institution (Glesne & Peshkin, 1992).

I chose to conduct a study on students completing an internship program as a part of the requirements of an associate degree. I was aware of the dangers of conducting backyard research and took measure to reduce them. First, I did not gather data about the institution itself or any colleagues within the institution. The focus of the study was students and preceptors. Preceptors are staff members at the field site who are supervising the intern on a daily basis. The preceptor is an employee of the internship site and not a university
employee. The internships are not affiliated with the college and a study of personnel in the field site is not backyard research. Students are part of the institution and I designed the study carefully to minimize any effect on students.

The students did not have to participate in the research, but all students registered for internship were contacted. Two of the students originally contacted did not participate in the study. The students were assured that participation would have no effect on the final grade for the internship. Students were not identified by name in the study and pseudonyms were used. The university administration reviewed the study protocol and approved the study.

The benefits to the dietetic program and to the health care institution for participation in the study are many. These include in-depth information on the internship experience. This information can be used to improve the teaching and learning experience of other students in other programs on our campus. The study could be conducted using a similar design within other departments on the campus. The college requires internship for graduation from all of its programs, and little research has been completed on the quality of the learning experience for students. An additional advantage to the college is visibility within the community. Students often are assets to the health care institution and a study of internship within health care facilities increases the credibility of the college. These benefits to both the health care institution and the college were reasons that each institution agreed to participate in the study.
Introduction to the Study Design

In this multi-site, multi-subject study I followed seven dietetic technician students as they completed the internship portion of their degree requirements in dietetics. Students and preceptors participated in this qualitative study. The methodologies used for data gathering included observation, interview, journal entries, and a focus group. The internship is typically completed at the end of the didactic components of the educational program. The students completed their internship in either a hospital or a long-term care facility. All the facilities were located in the mid-west.

The students were all raised in the mid-west and ranged in age from 20-50 years. The students were all female and two were married. One student had three children. The students all expected to graduate at the completion of the supervised field experience. The students all planned to take the dietetic registration examination in 1998.

The supervised practice or internship is typically ten weeks in length and a total of 400 clock hours. The students earned four-quarter credits of academic credit but did not receive a stipend or housing. Some students did receive free meals while in the facility. All students in the study spent 40 hours each week in the facility. The students had assignments to complete which required that they also spend some of their time at home working on projects. Each site set up a schedule for each intern. The student and the site supervisor planned each student's work schedule. The work schedules varied at all six sites. A site
supervisor or preceptor would complete the work schedule for each student, which could vary from week to week.

Entry Into the Site or Facility

Each student had some responsibility and choice in site selection. Because the students did not receive a stipend for the work experience, cost of living became a consideration in the selection of the site where the student would complete the field experience. Each student tended to select a location close to home or where she had friends or relatives to reduce the cost. The student met with the dietetic program director to begin the process. The students suggested facilities which they believed could meet the requirements for fieldwork.

The program director, who is also the researcher, then contacted the dietitian or dietetic technicians at the sites and asked if he or she would be willing to participate in the supervised practice for the dietetic technician program. To assist the dietetic staff in making a decision, the program mailed out a packet of materials, which included the dietetic curriculum, supervised practice objectives, suggested learning activities, and a sample contract. If the dietetic staff at the site was willing to accept the student, they returned the signed contract to the college. (See Appendix C for consent form.)

After a signed contract was received, the student then sent a letter of application and resume to the field site. Some sites accepted the student based on the letter; others required a personal interview. If the student was accepted by the facility, than the student negotiated with the dietetic staff supervisor at the
site to set up a schedule which will meet the needs of both the student and the site. The contract between the facility and college stipulated that the student must complete 400 hours of supervised practice and that the student must have experience in both the clinical and management areas of dietetics. The student could not be used as staff and could not fill an employee position. The student generally "shadowed" staff members to gain experience. The facility agreed to provide a preceptor to coordinate the supervised practice experience at the facility, and this preceptor would be a liaison between the facility and the university.

The university agreed to provide a faculty member to act as a liaison to the field site. The faculty member visited the student and staff at the field site. The faculty member also telephoned the preceptor and student at various times throughout the field experience. Student assignments completed at the field site were reviewed by the preceptor and mailed to the faculty coordinator (me) at the college.

The field sites used in this study were all in the mid-west. The sites were two hospitals, one hospital-nursing home, and three nursing homes. The coordinators at the sites were dietitians and dietetic technicians. Four of the six sites had dietetics graduates from the college on staff. The facilities were all located in small communities with a population under 10,000. Three of the facilities were in communities with populations under 2,000. The size of all six of the facilities were similar and ranged in size from 80 beds to 150 beds.
The site coordinators varied in age and experience. The ages of coordinators ranged from early twenties to late fifties. The younger coordinators had less than five years of experience. The older coordinators had more than 20 years of experience. Three of the six sites had participated in the field experience program at least once previously. Three of the sites were new to field experience program for the dietetic technician.

Student Selection

Students eligible to complete the dietetic internship were contacted by the program director by letter explaining the project. Students willing to participate were given a copy of the contract for review (see Appendix B). The contract explained the potential risks to students if they participated in the study. All students were contacted to participate in the study and asked to sign the contract, which remained with the program director. Eight students agreed to participate, but one student did not continue after the study began.

Students were asked to keep a daily journal of activities. The program director provided the students with a list of possible topics to write about in the journal. (See Appendix D for a list of the questions). The students were asked to mail the journals to the program director every two weeks. In addition to reading the journal, the program director called the students every two weeks to talk about the experience. The program director visited the students at the internship sites once during the internship. The students also returned to the college campus for a focus group meeting about half way through the internship.
experience. Following the internship, the program director conducted an exit
interview with each student, either in person or by telephone. All interviews with
students were taped and transcribed.

Preceptor Selection

The program director described to each preceptor the study underway,
and preceptors were asked their willingness to participate. The preceptor
reviewed the contract describing the study and then signed the contract. The
program director retained copies of all contracts. Preceptors at sites selected by
the students were willing to participate in the study. The preceptor was
interviewed briefly by the program director during the set-up phase of the
internship. Discussion between the preceptor and the program director during
this first meeting centered on the following: the contract between the university
and the field site, the university's expectations of the preceptor, and the program
requirements for the student while at the field site. The student and the
preceptor arranged the date for the student to begin and end the internship. The
program director called the preceptor at least once during the experience. The
calls were not taped, but a transcript of the conversation was made from notes
and memory. The program director also visited the preceptor during the site visit
to the student. The interview with the preceptor was conducted without the
student present. Each preceptor was asked to evaluate the student and the
internship.
The Interview

Interviewing is a basic method of inquiry. The purpose of interviewing is to seek understanding of people and the sense they make of an experience. It is assumed that the meaning informant make of an experience will affect the way that those people perform in the setting. In this study I used interviewing extensively, with the goal of seeking an understanding of the sense the students made of the internship experience.

Seidman (1991) recommends a three-interview series with the first interview focusing on the history of the subject. I used a two - rather than three-interview method. Seidman interviewed subjects who were unfamiliar and used the first interview to establish rapport and to learn the history of the subject. Because I had worked closely with all of the students in the study over a two-year period and knew a great deal about their individual backgrounds, I did not need the first interview for the purpose of building rapport with the students.

The first interview in this study focused on the experience of completing a dietetic internship. This was conducted at each internship site. My interview approach was open-ended questions that allowed the student to describe the experience in detail. I did ask some specific questions based on comments in the daily journals from the student.

The second interview was completed after the internship was complete. It was conducted either in my office or by telephone. The method used in the second interview was similar to the first interview method.
Seidman (1991) describes as limitation in the interview process the interaction between the data gatherers and the participants. Seidman (1991) further states that the meaning generated from the interview is a function of the interaction between the interviewer and the participant. To minimize this effect I tried to talk very little and to listen to the students' comments. I used open-ended questions and tried not to probe but to explore the topics presented by the students.

Focus Group

Focus groups are guided or unguided small group discussions on a topic of general interest. Group interaction between members can stimulate discussion as a member responds to another (Berg, 1995). About halfway through the internship, the interns returned to the campus and met in a small group setting to discuss the internship. I was the group moderator and asked the group to tell me about the internship.

The students recounted many stories about what they had been doing. Each student spoke in turn, but as the discussion progressed, it became less formal and students began responding to each other. As moderator, I tried to speak very little and to listen to students' comments. The students shared many ideas about how things were done at their facilities. Students posed questions to other students. The discussion lasted about an hour. I taped and transcribed the tape. The data from the focus group were used along with the data from the interviews, field notes of observations, and journal entries during data analysis.
Data Collection and Analysis

Data analysis using qualitative methods is a systematic process of selection, categorization, comparing, synthesizing and interpretation of data generated from inductive processes (Schumacker & McMillan, 1993). Data collection is guided by, but not limited to, the research questions. Data in this study were collected from interviews, observations, field notes, journals, and one group discussion. Data gathered from a variety of sources decrease the biases from any one method of data collection. Triangulation is the term that refers to data collection by multiple methods. By using triangulation, the researcher increases the possibility that the variance studied is a trait and not a result of the research method (Mitchell, 1986). Mitchell (1986) states, "Data triangulation is the inclusion of multiple sources of data within the same study, with each source focused upon the phenomenon of interest" (p. 20). In this study I used methodological triangulation of data by gathering data from student interviews during the internship and following the completion of the internship. In addition, I observed all students in the internship setting and wrote field notes.

Erickson (1986) states "the basic task of data analysis is to generate assertion through induction" (p. 150). To do this the researcher must review field notes, tapes, and other data seeking both disconfirming and confirming evidence. While in the field, the researcher makes assertions. Assertions are tested and re-tested against other data gathered. I made assertions as I read the journal entries and I then used the interviews and observations to confirm or disconfirm
the assertions. The student journals tended to guide my interviews as I sought to confirm or disconfirm my assertions. In some cases, the preceptor interviews also lent support to some assertions but not to others.

Erickson (1986) describes data analysis by stating, "the researcher is looking for patterns or generalizations within the case at hand" (p. 148). The task of the researcher is to find patterns and linkages to connect the data. The greater the number of linkages the stronger the assertion. The goal is not to find proof by plausibility but to make an effort to look for alternative explanations from the data (Erickson, 1975). Schumacker and McMillan (1993) state, "A pattern becomes an explanation only when alternative patterns do not offer reasonable explanation central to the research problem" (p. 501).

The method I used to search for linkages in my data was similar to the method outlined by Erickson. First, I read and re-read the transcriptions of my field notes and the interviews of both students and preceptors. I read and transcribed each student's journal. I used an inductive method of inquiry. The goal was to seek what emerged from the data and not to answer any pre-set questions (Seidman, 1991).

"Coding is the process of organizing data into classes" (Schumacker & McMillan, 1993). The strategy I used was to segment the data in topics and arrange the topics in larger groups referred to as categories. My sources for classification included my research questions and the data itself. I needed to add more categories as I continued the analysis of the data.
All of the written materials, including student daily journals, were entered into the computer. As I read the material, I marked items that seemed interesting and the topic was highlighted in the margin. From these identified topics, I generated a list of possible categories. I titled pages with categories. Using the cut and paste function of the computer, I moved marked data around and placed it under appropriate categories. After reviewing the categories, I came up with a list of possible themes. I looked for both confirming and disconfirming evidence for each category. A similar process of data analysis is described by Erickson using colored pencils and scissors to sort the data (Erickson, 1986).

Following is an example of my method of data analysis. One category is "factors used to determine the location of the internship site." In the transcripts of interviews and student journals, interns made repeated comments about where they had wanted to do their internship and why. Under the code of "reasons for site selection" emerged topics about why location was important. These topics were cost of housing, possibility of long-term employment, and family commitments. The theme that emerged from the data was that cost of housing, job possibilities, and family commitments determined where the students would do the internship. None of the students' journal entries or interviews ever mentioned anything about career goals as a factor in the selection of the internship site. The theme generated was "when selecting an internship site, students used life goals to determine location of their internship and not educational or career goals."
Reliability

Reliability, or the ability to have other researchers obtain the same or similar results, is achieved in qualitative research by study design, data collection strategies and triangulation of data. When designing the study the researcher considers factors such as informant selection, social context, the role of the researcher, data collection and analysis strategies, and analytical premises. Reliability in data collection is achieved by using verbatim statements made by participants, mechanically recorded data, participant review of the statements, and the reporting of discrepant data (Schmacker & McMillan, 1993). The major threat to the reliability in this study was the role of the researcher. The researcher was also the program director of the dietetic program and had a previous relationship with the students involved in the study. I tried to minimize this by explaining to the students that participation in the study was voluntary and non-participation would not affect the final grade they received in the internship. Students seemed interested in the study and wanted to provide as much data as
possible. I think they had a genuine desire to help me complete the study. The students were faithful in recording data in their journals and seemed very open with me in the interview process. Because the students knew me and trusted me, rapport had already been established.

Validity

Internal validity can be demonstrated if the conclusions drawn are valid only for the situations studied. In qualitative research, this is verified using triangulation of data. Triangulation of data refers to the seeking of data from more than one source. The researcher reviews all sources looking for confirming and disconfirming evidence. In this study I used several data sources including interviews, focused group, observation and student journal entries. All sources were reviewed looking for confirming and disconfirming evidence.

The second type of validity is external validity, which refers to how the study relates in a wider context to other situations and not just the situation that was studied. In qualitative research the ability to generalize the study to other situations is usually not possible. The findings are too narrow to generalize. Even if the research is replicated, the results may be different in another qualitative study. Qualitative research does provide rich information of the conditions within the findings of the research, but it applies only to the situation studied (Vierra & Pollock, 1988).
Limitations

The study had several design weaknesses. The first, the possible conflicts which arise when researchers conduct research in their own institutions, has been discussed. Other areas which could be strengthened included journal writing, visits to field sites, exit interviews and focus groups.

The journals provided a source to the emic perspective. The reason I had students keep a daily journal was to record their thoughts and feelings. I also wanted them to reflect on what they were learning. What I received was a record of what they did, especially when they first began the internship. I had given the students a list of suggested topics to write about and had mailed this to internship site, but this did not become the focus of the entries. After I discussed reflective writing with the students, they included more thoughts and feelings in the journal entries.

I visited all students at the field site. I spent two to three hours with each student and one hour with the preceptor. In retrospect, it would have been more useful if I had two visits to each site. Ideally, I would have liked to visit the field site at the beginning and near the completion of the internship. Instead, I visited about halfway through the internship. Limitations of time and financial resources dictated only one visit.

Seven students completed the internship. Four of the students graduated after the completion of the internship. Three of the students returned to college to complete an additional degree in a related field. Exit interviews were
conducted in person with the three students who returned to the college campus. The other four students were interviewed by phone. It would have been more effective to have in person exit interviews with all seven students.

The focus group was held during the seventh week of the internship. Of the seven students in the study, five were able to come to campus for the session. It would have been beneficial to have all students attend the focus group. The two students who did not attend could not make the trip to campus because of the distance.

Summary

This chapter began with an introduction to research in dietetics. Qualitative research methodology was explained. The chapter then described in detail the study that was completed, including methods used to gather and analyze data. In the next chapter the participants in the study are described in detail.
CHAPTER II

PORTRAITS OF EACH PARTICIPANT

This chapter presents a portrait of each of the participants in the study. Students and preceptors are described using pseudonyms, by giving background, goals, and personality traits. A description of the college is also presented.

Terry

Terry was a traditional age college student. She came to college from a small high school that was over 200 miles from the college. Terry grew up on a farm near a small town and lived with her parents. She was the youngest of four children. Her older brother graduated from college, but her other siblings did not attend college. Her parents attended college but did not graduate. While in high school, Terry completed a college track curriculum, which included four years of English and four years of mathematics. When she began college, her goal was to obtain an associate degree and find employment. Terry stated in a freshman survey that her primary reason for coming to college was "to get help in expressing her ideas in writing." As a beginning freshman she stated that she was somewhat sure of her career goals, which was to become a food service director. Terry described herself as being able to handle stress and anxiety well in her life. She felt able to make decisions effectively and to demonstrate
leadership skills. Terry developed some leadership strengths as an active member of 4-H at both the state and national level.

Terry lived in the dormitories while attending college. She did not go home often during college because of the distance. She worked on campus as a work-study employee for an instructor in the computer program and for campus student services. Terry also worked off campus at a local grocery store. Terry was active in campus clubs, student government, and participated in many activities. While completing her associate degree she decided to obtain a baccalaureate degree in management.

Terry completed her practicum prior to internship in the local hospital. She was described by the internship coordinator as "one of the best students I have ever had." Terry had an interest in administrative areas of dietetics. She seemed to enjoy classes in management and supervision. One supervisor described her as "calm, well-organized, dependable, and confident." Terry seemed to accept people "as they are" which made it very easy for her to work well with others. An attractive, tall girl with a friendly smile, she always appeared neat and often dressed in jeans or other slacks, rarely in a dress. Terry was friendly but was somewhat reserved when meeting new people.

Terry selected an internship site in southern Minnesota. Terry obtained the telephone number and name of the dietitian at the hospital. I made a phone call to the hospital to ask if the hospital would be willing to participate in the internship program. The hospital had not been an internship site previously. The
hospital dietitian was willing to consider accepting a student intern. A packet of materials including a sample contract, goals and objectives for the internship, catalog and course materials were sent to the site. After a review of the materials, a signed contract was sent by the hospital to the college. Terry then sent a letter of application and a resume to the hospital. After an interview with the Director of Support Services, she was selected to complete her internship in the hospital.

Abby

Abby came to college from a small town about 40 miles from campus. Her goal was to obtain an associate degree and then find employment as a dietetic technician. In high school Abby completed a college trade path, which included four years of English and four years of math. In her college entrance materials she described herself as "being able to work effectively as a member of a team." She also described herself as "friendly and meets people easily." Abby lived on campus in the dormitory during her entire college career. She did go home frequently on weekends because she had a car and a job as a dietary aid in a local nursing home. Abby also did a lot a babysitting for her parents and various aunts on the weekends and over the summer.

Abby was the oldest of several children and had siblings close to her age and others, much younger. Abby was very close to her younger brother and sister and spent a great deal of time with them and assumed some parenting responsibility for them. Abby grew up in the country and lived with her parents,
who are farmers. Abby was active in her community and won local awards, one of which was the Dairy Princess. Her parents did not attend college but did go to a trade school. Abby was the first member of her family to attend college. Her younger brother also attended college at the same time Abby did, which impacted her financial aid. During her first years of college she had loans and work study. The last two years, when her brother was also in college, she was eligible for more grants.

While attending college, Abby decided to complete a baccalaureate degree in Applied Studies in addition to her associate degree in dietetics. Abby had intended to pursue a baccalaureate degree in dietetics, but our college decided not to add the new major, and she was not willing to transfer to a college that offered a dietetics degree. Abby became very interested in marketing and management and was an active member of the Management Club. Her interest in management continues to grow. She had made some good friends within this group and even considered returning to college to complete a second baccalaureate degree in management.

Practicum supervisors described Abby, as "a hard worker, personable, gets along well with others and made them feel at ease. She also was organized and showed initiative." She stated "I don't like morning classes; it is too hard to get up in the morning." She was often a little late for morning classes and also appeared to be half-asleep when she arrived. Abby was concerned about others
and was willing to tutor fellow students in classes such as chemistry. She was quiet but rapidly warmed up to others and could easily talk to new people.

Abby selected an internship site close to home. She stated that she could not afford to go somewhere she had to pay rent. Also, if she lived at home she could continue to work at the nursing home on weekends. The site Abby selected was a nursing home a short distance from her home. This nursing home had a fairly new dietitian as the Director of the Dietetics Department. The dietitian, Karla, was somewhat reluctant to take an intern. She stated, "I don't know if I can provide enough varied experience for a student, I am so new at the job." After reviewing the expectations for the internship and talking with the administrator of the nursing home, she did agree to participate.

Nancy

Nancy was a non-traditional age student and had attended college previously, majoring in restaurant management, but never completed the degree. Nancy had worked for over ten years as a cook in a nursing home and continued to work after beginning college. Nancy was married and had three young boys in grade school and her husband was a laborer and worked at a factory in the same community as our college. Nancy lived in the country about 40 miles from the campus in a trailer house, which she stated was "too small." She complained that "I never have time to cook and clean at home because I am too busy with work and school." Nancy loved animals and had dogs, cats, and horses at her home.
Nancy could be described as a determined student. She knew what she wanted out of her education. Her goal was an associate degree in dietetics and a promotion to management level at the nursing home where she was working. She liked to talk and became excited when she told a story. Nancy's voice became loud as she talked and could often be heard by others at a distance. Nancy was often stressed about school, work and her family commitments and talked about problems with her children, her husband, her in-laws, and her employer. She seemed to be overwhelmed with all of her responsibility but relaxed as she talked and also seemed to use talking to "think-out-loud." Nancy had frequent financial crises because of a past history of non-repayment of a previous college loan and had difficulty getting college financial aid. Fortunately, with time, the problem was worked through and she began to receive some financial aid and her employer paid for part of her education. It was difficult to say if she would have been able to complete her education without the financial support of her employer.

Because of family and work commitments, Nancy did not actively participate in campus activities. She did attend some of the daylong dietetic meetings and did attend a state convention. Nancy drove to school almost every day and was not stopped by bad weather. She only missed classes if she had to stay home with a sick child or was called to work.

Nancy completed her practicum at the hospital in the same community as our college. She was described by the practicum supervisor as having,
"enthusiasm, perseverance, innovative ideas, a positive attitude, and empathy for her patients. Nancy has great management potential." An area of concern expressed by the supervisor was a need for Nancy to "take care to listen to others before making decisions. Sometimes quiet is good, hard to do, but necessary."

Nancy selected for her internship a site that had been used on numerous occasions by previous students and was within 20 miles of her home. The Food Service Director, an experienced professional who worked well with students, agreed after an interview to accept Nancy as an intern.

Alice began college a couple years after completing high school. She lived within commuting distance of the college in a small town about 20 miles from campus. During the summer between her first and second year of college, she got married and now lived with her husband in a rural setting without a telephone. Her husband was not a farmer and worked in a factory but he preferred the rural setting for their home. Alice did not share his interest in country living but did not have the ability to change his mind. Alice transferred into the dietetics program after she had attended another college, majoring in liberal arts. Alice worked during college in a grocery store in a small town close to her home.

Alice, a quiet student, was difficult to talk to and rarely volunteered any information about her personal life. Alice seemed to do well academically but did not seem to warm up to faculty. She appeared to get along with her peers and
had friends among the students but rarely volunteered to tutor or come to club activities. Alice was reluctant to participate in class and answered questions when asked but never volunteered to speak. Alice dressed very casually and commented that she did not have a lot of dress clothes. Money was a problem, so the purchase of clothes suitable for an internship became a concern for Alice.

When Alice selected an internship site, she wanted one within driving distance of her home. She also hoped the site could lead to full-time employment because her husband was not willing to relocate. The hospital nursing home she selected was about 15 miles from her home. The hospital nursing home had two dietetic technicians on staff; one of the technicians was planning to relocate to another state. The hospital nursing home had student interns previously, so Alice wrote a letter of application. She was selected as an intern after an interview.

Lynn

Lynn, from a small town, became interested in dietetics because she worked at the local hospital-nursing home as a dietary aid. Lynn lived on campus in the dormitory for the first year of college, but she did continue to work at the hospital and went home almost every weekend to work. Lynn got along well with others in her peer group, but not with younger students. Few students outside her peer group knew her even though she was the treasurer of the dietetics club. Lynn could be very quiet around others but spoke up when she had a question or comment. Sometimes she said things in a manner that
seemed negative and critical, leading faculty members to view her as a negative individual. Lynn appeared to be overly defensive in her dealings with faculty and staff. She appeared to lack self-confidence and was afraid that she would do poorly in classes. She seemed to have a special aversion to chemistry, and thoughts and fears about chemistry seemed to occupy all of her conversation, especially when she was taking a chemistry course. Lynn decided that she wanted to be a dietitian and was very afraid that she would not be able to complete the chemistry courses needed for the degree. She displayed amazing perseverance by studying chemistry ten to fifteen hours a week, and she hired a tutor for her current chemistry class because she needed to get a "C" grade in it to continue in dietetics at North Dakota State University.

Lynn selected an internship site within driving distance of her home—a new site for the dietetic program. The facility agreed to take two students. Generally each site had only one student, but both students needed to be in the same area because of living arrangements, so the hospital dietitians agreed to take both students.

The lead dietitian stated that the students would follow a tight schedule. One would start in food service management and the other would start in nutritional care. The dietitian did not want the two students to work together.

Tammy

Tammy was a local student and attended college and lived at home during the entire four years she attended college. Tammy had worked since she was
sixteen years old in a nursing home in the community and she continued to work at the nursing home while attending college. Tammy's career goal when beginning college was to become a registered dietitian but, after completing her first college chemistry course, she decided not to pursue a baccalaureate degree in dietetics. Instead she completed an associate degree in dietetics and a baccalaureate degree in health management. Tammy intended to pursue a job in dietetics first and perhaps later look for a job in health care administration.

In selecting an internship site, a location near her fiancé was her primary consideration. Tammy hoped, that by completing an internship in the community she planned to live in after college, she might be able secure a job at the same hospital nursing home following graduation. Her future mother-in-law surveyed the local health care institutions and made recommendations for internship sites. The first site selected by Tammy did not have a director of dietary that was qualified to supervise an intern, so she completed her internship in the same hospital nursing home as Lynn. The health care institution was a little reluctant to accept both students. The students talked at length with the supervisor and with the other clinical dietitians. The dietitians agreed to accept both students provided they would follow a carefully set up schedule and would not be in the same unit within the hospital at the same time.

Tammy had a soft-spoken manner but seemed very confident in her abilities. She was close to her family and often spoke of them. Tammy's interest in health and fitness was the factor which led her to select dietetics as a career.
Her work experience at the nursing home also was a factor in her selection of dietetics as a career.

Linda

Linda transferred to Prairie State from a much larger college. Her major at the previous college had been dietetics, but she became dissatisfied with the major after taking her first chemistry course. Linda completed two years of college before transferring to our college where she intended to pursue a degree in information management and dietetic technician, but she dropped out of information management after one quarter. Linda drove to college daily from her home about 30 miles away and worked at a local restaurant several nights a week as a waitress. Linda was involved in a serious personal relationship and was planning to get married after completion of her degree. Her fiancé was a farmer and Linda was concerned about finding a job in dietetics within the immediate area. Because of her daily commute to college and work schedule, she was not involved in campus activities. Linda got along well with classmates and teachers and was willing to participate in campus events during the day-time hours.

Linda has excellent people skills and she communicated easily with everyone regardless of age. Linda had excellent speaking skills and was able to address large groups without difficulty. Because of her background and the large number of credits at another college prior to transfer Linda also decided to complete a baccalaureate degree in Applied Studies.
When Linda selected an internship site, she chose one that might have employment opportunities following graduation. The nursing home she selected was close to her fiancé’s farm. It was rumored that the nursing home also had a potential for a change in supervisors and might be hiring. The supervisors at the nursing home had had interns previously and were willing to accept Linda.

Portraits of the Internship Supervisors

Seven students completed internships in six different field sites. One site had two students as interns. Within each site, one person was designated as the major supervisor or preceptor for each student intern. Within all sites multiple people worked with each student at various times during the internship experience. A portrait will be presented of the six individuals who served as the internship supervisors at each of the six sites. References may be made to other individuals from the student observations, but only the key persons at each site were interviewed as a part of the study.

Marla

Marla was a registered dietetic technician (DTR) and graduated from the dietetic technician program at our college. Marla graduated about ten years ago and had worked at two other health care facilities prior to coming to the hospital-nursing home. Marla was supervisor for the nursing home dietary department and worked closely with the dietary staff of the hospital, which was affiliated with the nursing home. She was the only DTR on the dietetic staff of the hospital-
nursing home which included two clinical dietitians and a dietary department
manager.

Marla was a woman in her early 40's and a single mother of two children
who are both in high school. Marla had an out-going personality and was very
easy to talk with. She was instrumental in setting up the internship and did a
sales talk to the rest of the dietary staff to get them to agree to accept the two
students, Tammy and Lynn. Both students instantly liked Marla because she
was very friendly and seemed like a "mom" to the students. Marla was an active
dietetic association member and an active college alumni. She was currently an
officer within the district dietetic association.

Marla was very willing to assist the dietetic technician program when
asked to serve as an internship supervisor. She worked closely with the two
dietitians on staff at the hospital to design an experience that would meet the
needs of both students. Marla was the contact person for the students and
continued to keep in the contact with the students after the completion of the
internship.

Libby

Libby, a registered dietetic technician, graduated from our college in 1979
and was employed at the nursing home for the last seven years. Prior to her
current employment as director of dietary, she worked as a dietetic technician at
a hospital for ten years. Libby was a 39–year-old, married woman and the
mother of three children, ages from 6-12. Her husband was self-employed and
this allowed him to assist her in caring for the children because Libby spent a
great deal of time at the nursing home. Some days she was there at 5:00 a.m.
and did not leave until 5:00 p.m. Libby lived in a small community about 10 miles
from the nursing home and drove to the nursing home daily. Libby was an active
alumnus from our dietetic technician program, and currently served on the
advisory board for the program. In the past, she had been an internship
supervisor for other dietetic technician students from our college. Libby was an
active member of the dietetic association and attended both state and local
meetings.

Libby, a friendly, talkative woman, was continually busy in her role as
director of the department. Libby was very exact and detail oriented and had
high expectations of students. She generally reviewed most of their work very
thoroughly. Even though Libby was eager to have a student, she was also a little
concerned about the amount of time the student might take. Libby did not have
free time. In fact, she tended to work overtime frequently. Libby had an
assistant director of dietary who also graduated from our college.

Patty

Patty was new in her role as Director of Dietary but had previous
experience as a director of dietetics. She was a graduate of a 4-year degree
program in dietetics but was not a dietitian or a DTR. Patty seemed very friendly
and talkative and willing to work with an intern even though she had not been
involved in setting up the program. Most of the plans for the student had been
set up before she began the position as department director. Patty worked
closely with the consultant dietitian and with the director of support services. The
consultant dietitian was in the hospital about three days each week. Patty was
responsible for the management of the food service operation within the hospital
and did little clinical dietetics.

Karla

Karla was a young dietitian who began working at the nursing home only
about six months prior to the arrival of the intern. Karla had recently graduated
from college and this was her first full time job after graduation. She lived in a
community about 30 miles from the nursing home and drove to the nursing home
daily. Her husband worked in the town in which they live. While the intern, Abby,
was at the nursing home Karla became pregnant with her first child. Karla
wanted to have Abby fill-in for her during maternity leave but it didn’t work out
because of Abby’s college schedule.

Karla was a little nervous about having a student intern. She was
concerned because of her lack of experience as a dietitian. Karla was also
unsure of the expectations of the dietetic technician program and the role of
preceptor. After reviewing the curriculum outline and the contract with the
college, she decided to participate.

Elaine

Elaine was director of dietary in a 75-bed long-term care facility, a position
she had held for over twenty years. Elaine was a grandmother with four grown
children; she returned to college on a part-time basis about ten years ago and completed her associate degree in dietetics in 1995. Elaine was a patient, easy-going manager and was well liked by staff. She had participated in the internship program for several years and was a favorite supervisor for many students and was well liked by the interns. Elaine had a pre-planned schedule for the student interns but she was very flexible and revised the schedule if the students needed a change. She also was a good listener and students often discussed both personal and professional issues with her. Most students remained in contact with her following graduation and asked her as a resource person and reference.

Theresa

Alice's supervisors varied and not one person could be identified as the official supervisor for the student. This created a problem for Alice. The site was a hospital nursing home in a rural setting. The clinical dietitian, Theresa, worked closely with the Alice during the clinical rotation. Theresa is employed at her first job. Theresa was very friendly and talkative and Alice seemed to enjoy working with her. Theresa was very approachable and helpful to Alice and provided direction on projects and answered questions.

Alice also worked with the Director of the dietary department. The director was the only male in the study. He had worked within the facility for many years and recently had been promoted to the position of director of dietary after the resignation of the former director. He lacked educational background for the position and was currently completing a dietary manager correspondence
course. The director seemed very interested in having a student intern. Alice was the second intern he had worked within the past six months. The director asked many questions concerning the organization of the internship prior to accepting a student. The director had a very business-like approach to students and expected them to be self-directed. He also had a strong interest in computers and their uses in food service management, which strengthened his interest in Alice. The director had an interest in having Alice complete projects utilizing computer software, and she had excellent computer skills.

The College Setting

The dietetic technician program was located in a small rural college, which was a branch campus of a large state university system. I will refer to the college as Prairie State. The total full-time enrollment at Prairie State was less than one thousand students. The dietetic technician program has been at the college for 20 years and has had continuous approval from the American Dietetic Association for all of the 20 years. Graduates had been successful on the national registration exam, passing 98% of the time.

The enrollment in the dietetic program was usually between 20-25 students. The majority of the students were female and of traditional college age. Most of the students attended college on a full-time basis and either lived on the campus or within driving distance of the college.

Prairie State had 35 full-time faculty teaching in a variety of applied baccalaureate degrees programs, in business, agriculture or health and human
services. The college also had a small number of associate degree programs. Five years ago the college added baccalaureate degree programs; prior to this time the college had associate degree programs in business, agriculture, and home economics but no baccalaureate degree programs.

The dietetic technician program had one full-time instructor and several part-time instructors. The students completed 105-quarter credits with 650 hours of practicum or internship. Some of the practicum hours were at the local hospital nursing home. The internship was completed after the student had completed the didactic portion of the program.
CHAPTER IV

THE FINDINGS, EVIDENCE, REVIEW OF RELATED LITERATURE
AND DISCUSSION

In this chapter are presented the results of the analyses in terms of the themes that emerged from the study. The words of the students and supervisors are presented as evidence for each theme. The presentation of each theme is followed by evidence for the theme, discussion, and related literature.

Theme One

Factors related to life goals for the interns, which included housing cost, employment opportunities and family commitments, determined where interns completed their internships.

Evidence for Theme One

A factor expressed by the majority of students when selecting a site for the internship was location. The request was that it be either close to home or, at another location where the student could find a place to live with minimal cost. Alice explained,

I need a place close to home so I can drive daily because I am married and I want to stay home with my husband. My husband is not willing to move and he wants me to find a job close to home.
Terry stated,

My cousin helped me find a place close to relatives so I can have a place to live free. This is also close to home and in a part of the state I want to work in when I graduate. My cousin says the hospital has a good reputation so it should be a good place to intern.

Abby explained,

If I do it in my hometown, I can live at home and save some money. I will need money to move if I find a job. I have a job at the nursing home and I can continue to work weekends. I also have responsibilities for the two younger kids in my family and I take care of other relatives' kids, too.

Nancy said,

I have to stay home, although I would like an excuse to leave my husband and three kids for awhile. I really don't have any other options. I don't want to do it at the nursing home where I work. Can you find somewhere else close so I can continue to work, too? We need the income.

Lynn stated,

I want to continue to work weekends at the nursing home. I also want to stay home so I can save some money for school in the fall. Lake City is only about 40 miles from home. I can drive that everyday, no problem.

Tammy stated,

My fiancé lives in Lake City and I want to be close to him this summer. His mom thinks this would be a good place for me to intern. She is a
health department inspector and thinks it is a good facility. I can live with his family, which will save me money. I can also plan my wedding. I plan to get married in the fall.

Linda stressed,

I need a place close to my fiancé and home because I can't afford to pay rent, too. We still have to pay tuition and it will be hard to get financial aid during the summer. I don't know if I will have time to work at night, too.

Students completing the internship register for 4 quarter credits which was $400. The students did not receive a stipend or wages for the internship. The students also were not eligible for financial aid because they were not full-time students. Students needed a minimum of six credits to be considered full-time and receive financial aid.

A second factor in site selection was the probability of the internship leading to a permanent position. All of the students were finished with the degree requirements with the completion of the internship and wanted to find full-time employment. Linda stated,

Long term care is not my first choice for employment, but I think the nursing home may be hiring later on and this could lead to a job. My fiancé is a farmer so I will have to find a job within driving distance of his home. I really don't care where I intern if you think there is a chance I can get a permanent job when I finish. I don't want to continue working as a waitress. Money is good but I am really getting to hate it.
In her interview with me prior to starting the internship, Alice stated,

I want to do mine at the hospital in town because it is the only site close to where I live. I know I can't relocate because my husband will not move. They have two dietetic technicians on staff; maybe one will leave. I heard a rumor that one of the technicians was looking for a job in Texas. I am working at a grocery store now as a checker. I really want to get a job in the field. We are living so far from any town, my options are really limited. I can't drive too far because it wouldn't pay and would wear out my car.

In her journal while still at the hospital site, Alice wrote,

I applied for the full time position, but I don't know if I will get the job. Sally, one of the dietetic technicians, has accepted a job in Texas. I am afraid that Betty, another dietetic technician who is currently working as a supervisor, will get the job. I really want to work here so I will keep hoping. Maybe I can get the supervisor's job if Betty gets the tech job? I also applied for a job at the public school. They are looking for someone part time but I will take it if they offer it to me.

Tammy also was concerned with long term employment options. She stated,

I know the supervisor at the nursing home is getting older. I think she is in her late 50's. I hope she will retire soon and I can have her job. My fiancé will move if we have to, but he has a good job in Lake City and really doesn't want to move. I like long term care so this should be a good choice for me.
she does. I would like to just work part time doing clinical, but I know they are going to expect me to still cook. I want to get out of cooking. I don’t want to supervise the kitchen, either. If I could I would relocate, but with the kids, my husband, the horses, dogs, and cats, it would be difficult. We have lots of family here, too, so it would be hard to leave.

Discussion of Theme One

Cost of the internship was a major concern for students. The selection of an internship site close to home was often related to cost. Of the seven students in this study, six received financial aid in the form of loans and grants. In addition, two of the students had scholarships. All seven of the students worked part time during the school year. Five of the seven students worked part time while completing the internship. Many students expressed concern about getting any additional loans. Comments were, “I already have so many loans, how am I ever going to pay these off?”

Colleges need to address the cost of internship. Many programs within our college have a supervised work experience and not a true internship. The
Nancy had less concern about finding employment. She explained,

The nursing home is helping to pay for my school so I need to stay working while I am interning. I think they will find a position for me when I graduate. Why else would they pay one thousand dollars to send me to school? I expect to have some problems with the current dietary supervisor. I already threaten her because I have more education than
student in a supervised work experience receives a wage for his/her work. These students are hired to do a specific job or completed a specific project and they contribute to the productivity of the work-site. The wages received by these students may off-set the costs incurred during the internship experience. In the medical fields and in education, the possibility of receiving a stipend or wage is very limited. Students in these majors need additional help to meet the costs associated with the internship or student teaching. The college needs to review the internship program within each major and provide more support for students in programs where there is not compensation in the form of wages or a stipend.

The possibility of permanent employment following internship also determined where students completed the internships. When selecting the internship site, if there were more than one choice in the community, the students would ask which facility might be more likely to hire them after graduation. The students stated, "I want to get my foot in the door if there is a possibility that they might be hiring".

Employment in rural areas was a problem. Students who planned to return to rural areas had been advised that finding employment as a dietetic technician is difficult. The only employer in most rural towns was the local nursing home that generally hired one to two dietetic technicians. Even when advised of this lack of employment opportunities, some students still selected the career and hoped something would open up for them.
Employment became a concern because most of the students at our college came from rural areas and may return to rural areas. The dietetic students are mostly female. If dietetic students became engaged to a male student who plans to return to his hometown or the family farm, employment becomes hard to find for the dietetic graduate. Most of the dietetics students had traditional values and expected to follow the male in his career choice. The female students' reliance on the significant males in their lives was apparent even in the selection of the internship site. Most of the females in committed relationships wanted to intern at a location selected by the male. Males seemed unwilling to follow females in their career choices and encouraged the female students to find an internship and a job where they currently lived. Many previous dietetic graduates are stay-at-home moms or work in other jobs because of the location of their home. Dietetic graduates must be willing and able to relocate to insure finding a job in the field.

The career goal of the students prior to internship was employment as a clinical technician in a hospital or public health setting. None of the students in this study indicated employment in a nursing home as a career goal. In fact, these students stated that they did not want to work in long term care. Their reluctance to work in long-term care was possibly a result of the laboratory experiences the students had while in other classes in college. When students were sent to the nursing home for labs, they frequently made very negative statements. Examples of student statements are "it is depressing," "I can't see
what good it does," "The old people scare me," "I've never been around old people," "I don't feel comfortable." Students seemed to discard this previous experience when selecting a site for internship and interned in a nursing home if there was a potential for employment or if it was close to home. When non-nursing home internships, such as hospitals or public health, were available, the student would select those, but if the nursing home was the only health care site in their hometown, they selected it. When confronted with this observation students, stated that "it wasn't that bad" or "I will adjust and need to be home."

The internship site should be selected to meet the students' career goals and be in an area of dietetics that is interesting to the student. Students seemed not to consider long-term career goals or even five-year career goals in the selection of an internship site. The overriding factors seemed to be close to home, inexpensive, and the possibility of permanent placement.

Discussion of Literature Related to Theme One

Literature which discussed the cost of education and employment is available. Factors in selection of location for employment are reviewed. Literature on the effect of significant others on the location of internship was not available.

The college catalog at Prairie State estimated the cost to attend one year of college to be between $8,000 and $9,000. This figure included tuition, books, supplies, room and board and computer rental. Eighty percent of the student body at Prairie State are currently on financial aid including loans, grants, and
work-study. The college also provided numerous scholarships. Internships are typically completed during the summer, but they can be completed any quarter during the academic year. Student loans are the only form of financial aid available during the summer months to students registered for less than 6 credits (College Catalog, 1997-98).

Employment was a goal of the majority of the students of Prairie State. Surveys conducted by our college placement office indicated that less than 20% of the dietetic technician graduates transferred into baccalaureate degree programs in dietetics. The majority found employment with hospitals, followed by nursing homes. Our program has typically placed for employment all students who were able to relocate. Usually there were more openings for dietetic technicians than there were graduates. A problem did result if a student is placed bound because of family obligations. The majority of students at Prairie State came from within a 100-mile radius of the college. Students expect to find jobs in their hometowns, they may not be available (Stewart, 1993).

In a survey of dietetic technician graduates from William Rainey Harper College, Lucas (1993) found only 37.5% of the graduates were employed full-time, and another 37.5% were employed part-time. The reason for the low rate of employment was location of the graduates. It appeared that graduates were unwilling to leave the city or to relocate to other cities. This was also a problem within our state. Graduates from the Metro State dietetic technician program are often unwilling to relocate to rural areas or to other states. The majority of the
students are women who are married or recently divorced and needed a job within the city (Erdman, 1997).

Theme Two

Students felt that it was advantageous to be assigned to a previously used internship site because the preceptors were experienced. Students relied on the program director to contact, set-up, and direct the internship but wanted contact with each other while interning.

Evidence for Theme Two

All students within this study were able to complete the internship at the site that was their first choice. Three of the sites selected by the students had been used in previous years by the dietetic technician program as internship sites.

When selecting a site, the students asked a few questions about the health care facility or the site preceptor. A common question was the age of the preceptor. The students seemed to have a preference for younger preceptors who were close to their own age. Students also asked if the preceptor was nice and friendly. The preceptor was not an overriding concern to the student prior to selecting an internship site. Location was the key factor considered when selecting a site.

Once a student indicated the preferred location, each student seemed to rely on me to help select the site. The students said that they trusted me to place them with a site preceptor who was a good mentor and teacher. Some of the
sites selected by the student had not been used previously. Of the three new sites, I was most concerned about the site selected by Terry. Terry stated,

I plan to do my internship at a hospital in the southern part of the state. I have heard from my cousin that this is a good hospital. Would you set it up for me?

This was a site not previously used in the dietetic technician program. I did not know the director of dietary. In a phone call I learned that the hospital had just hired a new director of dietary who had not yet arrived. I set the internship up through the Director of Support Services. I did have some concerns about using the site selected by Terry but she was most insistent.

I really want to do it there. I have it all planned. I don't care if the director is new or doesn't have a lot of experience. You said you know the part time dietitian and she is good. I will work more with her.

Unfortunately, my concerns about the site were justified. Terry quickly discovered that the new director would be of little help to her. The new director was inexperienced and overwhelmed by the new position at the hospital. The director of dietary asked Terry for help frequently, rather than Terry asking her for help. When I visited the site and visited with both Terry and Patty, the director, I wrote in my report, “It is difficult to tell who is the student and who is the director. I think Terry seems more in charge here and knows more than the director of dietary”. Terry’s journal also stated her concerns,
I really don't have any supervision from Patty. If I have question I have to ask the clinical dietitian or the director of support services. Patty asks my opinion a lot, and I have done stuff that I think is her job. Fortunately, the part time clinical dietitian and the director of support services were strong, competent individuals, and this did help to improve the quality of the internship experience for Terry. The director of support service was also aware of Terry's skills and stated to me, "I wish we could keep her. She does an excellent job."

Alice also had some problems with her site. She wrote in her journal, I worked on my menu changes and did a few things on the computer. Some days it feels as though there is nothing to do, and the department does not have any certain projects they want done and I am trying to think of something on my own. The manager does talk to me but doesn't give me anything to work on. The best days are when I work with the shift supervisor or diet clerks. Those days I feel like I learn something.

The site had a student previously, but seemed to be providing little direction for Alice. The previous student was much older than Alice and had extensive work experience as a cook at another facility. Alice was a traditional age student without extensive experience and needed more direction than the site was willing to provide. This was especially a problem in food service management. The situation improved when the student went into the clinical areas. When Nancy began her internship, her journal stated:
The director seems to know what I need to do. She met with me and we reviewed the outline. We set a tentative time schedule to complete assignments.

Nancy's preceptor, Elaine, had been a regular participant in the internship program. Five students had used the site for internship. In addition, the site was frequently a lab site for dietetic classes. Elaine was also a graduate of the dietetic program at Prairie State and understood what was expected of the interns. Linda and Tammy stated in a phone call the following:

Everyone seems to know about us. Because one of the managers is a diet technician, she has oriented everyone to our internship and what is expected. The dietitians also seem to know what we need to learn. One of the dietitians has worked for an area college as a preceptor for another dietetic program and has also worked with dietetic technicians. The site has had other students so they know what we should be doing. One concern is that Marla has very high expectations of us. She only accepts excellent work and will have us re-do things that are not up to her standards. Are the other students doing all right?

Abby's preceptor was also new and Abby wrote in her journal,

The director seems a little confused about what to do with me. She is nice enough, but I think I will have to get more direction from you about my assignments. Right now she is a little vague and she often asks me what am I supposed to be doing.
Lynn also expressed some concerns about her preceptor in her journal.

Libby knows what I am supposed to do. She has had many students before me. She has very high expectations of me. I have to write out my progress notes before I put them in the chart and she makes lots of changes. I wonder if I will ever do it right? Do the other students have to re-do everything, too?

**Discussion of Theme Two**

Students wanted to do the internship close to home, but using the same sites every year would be beneficial for learning. By using the same sites, the preceptors would be familiar with the program and the requirements of the internship. The students would receive the benefits of experienced preceptors. It would also be easier for the college to provide preceptor training prior to placing an intern. Most preceptors seem to improve with continued involvement in the internship program. Experienced preceptors seem to know what experiences are beneficial for students and how to organize an appropriate schedule. These preceptors are also more comfortable with evaluation of the student and are able to give more helpful assessments. A disadvantage of using the same sites could be preceptor “burn-out”. Another disadvantage would be the cost of housing for the student.

Students' contacts with the sites prior to their internships varied. I asked all students to send a letter of application and a resume prior to beginning the internship. The majority of the students did do this and had me review their
letters and resumes prior to mailing them to the sites. Once the letter was sent, the method used by the students to contact the site varied. Abby called the internship director and made an appointment to go over and see her and set up a schedule. Linda and Tammy talked to the internship director at a local dietetic meeting and again over the phone but did not go to the site before the day the internship began. Terry made all contacts with the internship site by phone. Alice relied on me to set up the internship and then called the dietitian to determine when she should start. All students seemed to rely on me to get things going. They all seemed reluctant to make contact with the internship without consulting me first. The majority of the students expressed fear about beginning the internship. Some of the concerns were related to their competency and a fear of not knowing what to do. Some common student comments included, "Are you sure I am ready to do this?" "What happens if I make a mistake?" "I don’t think I know anything." "I am going to have to call you every day to help me."

I do have a concern that the students are overly dependent on me. This is probably a result of my nurturing style of interaction with students. While this is helpful to students while on campus, it does present problems when they leave campus.

I met with each student individually before she left campus. During this meeting I reviewed the internship goals and objectives and suggested learning activities. I reminded the students that the preceptor has the authority to make
changes in the requirements to fit the needs of the site. The students were instructed to keep a portfolio of all work completed to be reviewed by the preceptor and myself. The students were also instructed to keep a daily journal and to record daily activities, interactions with staff, and their thoughts and feelings about the experience. I asked that the journals be mailed to me every two weeks. The journal was my major means of communication from the students. Based on their entries I determined if I should phone or make a quick visit. I would like the journal entries, to be a means of communication of the students with each other. All students wanted to know how their classmates were doing and wanted to see each other. I think communication between students would be beneficial to them and assist them to adapt to internship.

The protocol for setting up the internship is very informal at our college. By reviewing the data from the study, I believe that there needs to be more structure in the internship program. This would help the students know what to do and when they should do it. It would also help the preceptors to know what to expect from the college and the students. I need to expand on the journal writings and encourage the students to reflect on a variety of common topics. The reflection could be shared with students at other sites. When the students did meet in the one large group setting, the common theme was a comparison of how other students were doing their assignments. Other items for discussion concerned how the facility did normal dietary tasks. The students discussed assessments, charting, purchasing, employee relations, the staff, and how they
were treated by the staff. The meeting was an excellent experience for student sharing of thoughts and feelings with others in similar situations. The students learned from each other.

Discussion of Literature Related to Theme Two

Alm (1996) states that the full benefits of internship can be difficult to achieve because they are conducted off campus and are out of full control of the college and the college faculty. My study suggests that by using the same sites year after year, the benefits to the student can be enhanced because the preceptors are familiar with the college faculty and the goals of the dietetic technician program. Alm further suggests how the use of journals may enhance the quality of the internships. Some of the benefits cited included the opportunity to speculate, probe, attach meaning, question, hypothesize, express emotions or evaluate. The use of journal writing facilitates the integration of classroom experiences with the workplace and encourages reflective thinking. Students write observations and insights in their journals and then share their observations and thoughts with each other. The suggestions from Alm could be used effectively at Prairie State by using e mail or chat rooms on the web. Students are isolated from other interns. Communication between students could enhance the internship experience. Some of the fears identified by students in their journals could be reduced by contact with other students. The day the students met at the college and discussed the internship, student confidence increased. Students learned that they all had similar fears and concerns.
The journal assisted the faculty member in assessing the students' learning and it provided a tool to guide the students. The faculty member recommended to students additional readings or projects, based on journal entries, and provided support to the students with written or oral responses (Alm, 1996).

Through reflection, the students learned from the experiences within the internship, not just doing tasks without thinking about how and why. Feedback from others, including other students, helped the student interns discover and deepen their level of thinking. The reaction from others to feedback helped learning. A typical response to feedback from supervisors was for the student to become defensive, but comments from other students were viewed as less threatening. The benefit of peer mentoring could be maximized with more contact with others (Menges & Svinicki, 1991). The use of web based chat rooms and e mail could be a part of student-to-student interaction. Within our college, students do have the option of taking the computer with them to the internship. It had not been mandatory because of the cost, but this may need to be re-evaluated by the college.
Students indicated that the first day of the internship set the stage for the entire experience. When it was positive, the students experienced a better internship.

Evidence of Theme Three

In reading journal entries from the first day, the students' apprehension and excitement about beginning a new experience was apparent. Fortunately, most of the site supervisors were very friendly and relaxed and tried to set the student at ease. Most of the students reported that the supervisor gave them a tour. Abby stated,

Karla gave me a tour of the facility and introduced me to the dietary staff. Then she took me out on the nursing floor and introduced me to the nurses and other department heads. I think I met everyone except the administrator.

Alice, on the other hand, did not receive this kind of personal attention. Alice stated,

I began my internship at a hospital nursing home. I arrived at 8:00 and began reading the policy and procedure manual; it was a very large manual and took me over four hours to finish. After that was completed, I started doing some of the required work for the internship and went home at 4:30.
Alice did not receive a tour of the hospital. She had to learn her own way around the building. She also had to introduce herself to staff. Fortunately, there were two graduates from our program who tried to help Alice. Little attention was paid to Alice by the Food Service Director who was busy doing his own job and only talked to Alice to tell her to do an assignment.

Terry also had an interesting first day. Terry stated in her journal,

The director, Patty, met with me but seemed to have little idea what to do with me. Patty was new, too, and was unfamiliar with the department or the staff. We reviewed the internship outline. She is friendly but doesn't seem to have much idea about what I should be doing. I would like an outline of what is expected of me. They have a tentative schedule for a couple of days.

Tammy and Linda had a more positive experience Tammy stated in her journal,

Today was my first day as an intern. Linda and I were introduced to the staff; everyone was helpful and greeted us with a smile. Everyone seems to be easy going and very easy to get along with. Marla showed us around the hospital and nursing home. We toured the kitchen and then I was assigned to the clinical dietitian to begin my work. I was shown the medical records and I saw a patient.
In her journal the first day, Nancy wrote,

Elaine and I talked and she introduced me to the staff. Elaine had already prepared a schedule with the dates for each project completion. We reviewed this schedule and when my projects and assignments were due. She did allow me to make changes if I needed any. After that we went out on the nursing floor and got a medical record. She went through the chart with me and explained how it is organized. Elaine showed me where to chart and how she wanted me to chart. I left the site that day feeling very relaxed because I knew what I was supposed to do.

Lynn wrote in her journal,

I was introduced to the staff as the intern. I didn't need a tour of the facility because I had lab here. I talked with Libby and the assistant director about what I would be doing. They knew I had experience with assessments so they gave a list of residents to see. I told them I don't like food service so we started in clinical. Libby asked me about the computer. She needed some help so I showed her how to do the job she was working on.

Discussion of Theme Three

One of the challenges for a program director in a dietetic technician program is to find many field sites with staff who are effective teachers. Generally, if the preceptor is not comfortable with being a preceptor, it is visible to student almost immediately. The first day can set the stage for the whole
experience. If that day does not go well, both the preceptor and student may have difficulty with the remainder of the internship. The student arrives at the internship site excited and fearful. An effective preceptor can reduce the fears of the student by providing a learning environment that is well defined. If students are left on their own the first day, it does not build an effective environment for learning. Alice was faced with this situation and she did not have good feelings about the internship until the last rotation when she worked with a preceptor who took time for her and included her. This was in contrast to Nancy who felt like a member of the staff from the first day of the internship because Elaine, her preceptor, took time for her and helped her to become comfortable with the field site.

The data from this research indicates that in my role as program director, I need to help preceptors become more effective teachers, or at least give them some pointers on how to conduct the first day. I should spend more time with new preceptors to suggest methods for working with students. Internships need to be planned if they are to achieve the goals of the student, the college and the health care facility. A schedule of what the student will be doing during the internship helps to define the experience for the student and increases the student's level of security. Also, a list of any special projects and due dates for each should be given early in the internship to reduce student anxiety. Explanation of the evaluation procedures and when they will be completed also helps reduce anxiety for students. Beard (1993) reported in her study of
accounting interns that infrequent evaluation or no evaluation by preceptors was a source of frustration for students. Her study also stated that accounting interns had difficulty making the transformation from the college classroom where the expectations are clearly defined to the work site where there were not clearly defined goals and objectives for the students.

Discussion of Literature related to Theme Three

Teaching implies different meanings to teachers. Generally three orientations to teaching can be identified: orientation to content, orientation to process, or orientation to motivation. The orientation of the teacher can be seen in the teacher's attitudes toward the student and the teaching-learning process. Preceptors are also teachers. Most have not had formal training in education, but their approaches to learning and students seem to follow the three orientations suggested by Menges and Svinicki (1991).

Students also have learning strategies. Students need to know themselves as learners. Students also need to know the course requirements and expectations of the teacher. Students come to the internship directly from several years of college experience. They know how to function in the classroom; now they need to learn how to function in the internship setting. On the first day of class in a college setting, the course organization and the expectations of the instructor are explained. The student expects the first day of internship to be similar. Students can be helped by knowledge about learning strategies that are appropriate in a specific setting, such as the internship.
Knowing what is expected is especially important on the first day in a new setting such as an internship.

Students are learners and the teacher is a facilitator of learning. In a new setting with a preceptor who is not a trained teacher, this becomes even more important to the student. The preceptor must identify what is to be learned and what is important. If the preceptor can tie this to information previously learned by the student, it will make knowledge more meaningful to the student. If the preceptor can help the student to organize information, it will facilitate long-term learning. Helping students to identify similar situations and appropriate strategies helps to build competent practitioners (Menges & Svinicki, 1991). Because preceptors are not teachers on the staff of a college, it is important for the program director to help the preceptor become an effective teacher. One cannot assume that because the person holds a key position within a health care institution he/she also possesses the skills of an effective teacher.

Theme Four

Although I had provided the interns with a list of possible topics for journal writing, their entries focused on lists of tasks completed each day.

Evidence for Theme Four

The first journal entries were lists of tasks the students accomplished with few comments about anything else going on in the institution. The interns wrote much like a job schedule with times and what they were doing at each time.
Tammy said, “We worked on menus for next week. Linda and I helped with a hospital board supper.” Alice described,

I typed in inventory sheets, and budget control items. When I finished I asked if there was anything for me to do. There wasn’t, so I worked on my assignments.

Abby stated,

I checked to see if there was significant weight change. Karla let me do all the charting. I charted on several residents and made changes in their nutrition plan. I talked to Karla about the changes and then I wrote up the changes for the kitchen.

Terry wrote,

We made menus and I ordered food on the computer from the grocery company. I also helped out in the kitchen. They were a little behind so they could use my help.

Linda wrote in her journal,

I arrived at 5:30 a.m. to work with the cook. I helped to prepare several items and took a break at 7:00 before we began tray line. I came back and made cookies, helped with lunch preparation and finally left for the day at 2:30.
Tammy explained,

I worked relief today for the renal dietitian. I saw patients, gave diet instructions and charted on the patients. Then I went down to the office and worked on my assignments.

Terry stated,

Today I cooked with the PM cook. We helped serve dinner in the cafeteria and then prepared the supper meal. I helped with trayline for the hospital and helped with the clean up for the night.

Alice reported,

More menu writing. The supervisor asked me to plan a supper menu to replace an unpalatable one. Decided on pork fritter with steak fries. I wrote the modifications for this menu.

Tammy wrote,

When I arrived, I briefly introduced myself to the supervisor and she did the same. Then we went down to chart on weights that are taken weekly at bath time. Every resident in the nursing home is weighed weekly. I checked to see if there was a significant weight change. Next I went to report with Candy. In report, the charge nurse on each wing gives details on residents.

Discussion of Theme Four

Students listed items that they had accomplished each day. Most did not reflect on how they were feeling at this point of the internship or other activities
happening in the hospital. They also made little mention of the larger internship assignments. The focus of their journal writing was completion of daily tasks assigned by the supervising dietitian. At this point in the internship, it was beneficial for both the students and the preceptors to focus on routine tasks. Later in the internship, the students may be more willing to reflect on other aspects of the field site. Dietitians may have other reasons for the assigning of routine tasks early in the experience.

Dietetics has routine tasks and a common culture. Perhaps the dietitians were helping to convey the culture of dietetics to the students by having them complete routine tasks. Many of the dietitians were excited about working with a student and wanted to share their insight into the profession gathered through years of experience. During the first days of the internship it seemed reasonable that students complete routine tasks such as diet histories, assessments, calorie counts, etc., not only to develop these skills but to see how these items are integrated into their new settings. Because these are more typical of the tasks the students would have completed as students at the college, it makes sense that they would focus on them at first. The listing of tasks was an easy way for students to measure their accomplishments and was consistent with seeing the workplace as a classroom. With more experience the students were able to focus less on tasks and more on the broad picture.

If internship is part of a process to ease the transition from school to work, as the internship progresses these routine items, although, still important, should
cease to be a focus. The student should become more fully integrated into the work world with the completion of the internship. This was what I did see in the journals of the students. The students explained more fully their feelings and thoughts as they became more comfortable in the internship.

I provided the students with a list of possible topics to write about in their journals. By providing this list, I changed the research from inductive to deductive. This was not my intent and if I were to re-do the research, I would not provide a list of guiding questions. Most of the students totally ignored my suggestions for topics. I had hoped that by providing ideas for the students about topics, the students would be more reflective. I had suggested that students comment on the amount of supervision received, how available the staff was for questions, whether they were included in the department activities, whether they needed more help, whether they wanted me to call them, and how their attitudes and feelings were changing.

Discussion of Literature Related to Theme Four

Internship, much like student teaching, is intended to facilitate the transition from the role of student to the role of a professional. Internship is a cooperative venture much like student teaching. In student teaching, the cooperating institutions are the university and the school, and in the situation of the dietetic internship, the cooperating institutions are the college and the health care facility. As in student teaching, the students are placed under the care of a supervisor who is a supervising dietitian with a day-to-day responsibility for
guiding the education of the intern. The students in both student teaching and the dietetic internship act out the behaviors they will need in their professional roles. Observation and the completion of routine tasks needed in the professional workplace accomplish much of this preparation for the future.

Vierrna and Pollock (1988) state "it seems clear that the important learning about the role of teachers does occur during student teaching and that this time may be useful for transmission of written and oral traditions about teaching from one generation to the next" (p. 263). The same is probably true for the dietetic internship. The students are reporting in their journals the skills and traditions they have learned in the workplace. The students write down the tasks completed to show the internship coordinator that they are learning the skills of a dietetic technician.

Langdon and Judd (1994) state that one of the goals of practicum is to link theory to practice. Internship is an opportunity for students to link theory to practice, and by the listing of tasks completed, students are demonstrating their ability to use the theories from the classroom in the workplace.

**Theme Five**

*Although students disliked food production, they were comfortable with it because they seemed to know what to do and had to ask few questions*

**Evidence for Theme Five**

Most of the students began their internships as food production workers. Some of the students were frustrated with this and complained that they were
"free labor." Others realized that they needed to understand how the kitchen operates if they were to do anything else in the dietary department. Tammy and Linda both began in the kitchen. Their journal entries described food production and shadowing of cooks and dietary aides. Tammy stated in her journal about this food management experience,

> It was stressful to do this but I guess if we are to be managers of the food service we need this experience. I worked with the cook and helped to prepare many items. The staff seemed to like having me help them.

All students seemed very comfortable during the food production experience. They often "shadowed" a cook or dietary aid. A majority of the students had been employed as dietary aides and were very familiar with the work-flow within the kitchen. Abby stated,

> Once the cooks knew I could cook, they seemed to have greater respect for me. They seemed to listen to me more and included me in their conversations. I think they have more respect for me than they do for Karla. Karla openly tells everyone that she can't cook. The cooks expect the supervisor to know how to cook. The staff knows I am the weekend cook at another nursing home. They ask my ideas about how to make things. They never ask Karla.

Nancy reported,

> Most of the staff knows that I cooked for 10 years at another nursing home. They seem to be very comfortable around me. The staff knows
that I could go into the kitchen and do their job. When we were short
staffed I did fill in and help with production.

Nancy continued,

The supervisor seems to have confidence in my ability to work in food
service management. This is what happened during the first week. Elaine
told me I work well independently so she wanted me to do the grocery
order. Elaine handed me the menu and told me to do the order. I was
afraid I would goof it up but it went all right. I was able to do the order
again the next week. I was pleased I knew what to do.

Terry wrote in her journal the following:

Today was a continuation of the first day with more of an outline. We
made menus for Meals on Wheels and one for Real Life. They work
around the 7-day cycle menu of the hospital to coordinate with the other
meals. I ordered the food for the food order by computer. First of all, we
went and checked all the food that needed to be ordered. We checked in
the purchase order from Wed. We started running off menus that we
would like to have standardized. Some of the cooks don't follow recipes,
making food preparation very difficult.

Abby continued about her experience as a food service supervisor:

I worked last week as the supervisor at night. I think I made some of the
staff mad at me because they were not doing their work right. I came
back to Candy with a list of items that were not being done. One cook
really hates me. She talks about me when I am not in the kitchen. Oh, well, I guess that is O.K. Karla and I are going to have a mandatory in-service to discuss the stuff I found.

Tammy wrote in her journal the following:

Monday morning I worked with the cafeteria aide. Here we provide rolls and juice for the staff and guests in the morning. We then dish up salads and desserts for the lunch line. We served dinner and helped with dishes throughout the day. We are in charge of gathering dishes throughout the hospital which were used for catering events.

Next day she added,

I baked today. First off I made garlic toast for dinner today. Then I made 100 cupcakes for the nursing center residents to decorate for activities. We prepared rice crispy bars for lunch on Wednesday. The baker is in charge of setting up the catering events that take place throughout the week. We delivered the food to the nursing center. I sure will be glad when I finish with food management and can go to clinical.

In a site visit with Alice I asked her how the internship was going. She said, "better than I expected." She then told me about her special menu for employees in the cafeteria and stated, "it went very well, the comments on the taste of the food were excellent." Alice continued, "I sure will be glad when I am done with food service and can get to clinical. I definitely want a job in clinical."
Discussion of Theme Five

Food production and service were major responsibilities of departments of dietetics in hospitals and nursing homes. Food production was one of the five areas of practice for the dietetic technician. The goal of many students was to secure a position in clinical dietetics or nutrition education. Few students expressed an interest in food service management. The problem was, in part, the perceived status of food service management by the student. Food service personnel are often poorly educated and have lower wages. The work they perform was often hard without many rewards. Food service personnel received little recognition for their work from other department staff or from patients. Failure to perform work adequately resulted in criticism and reprimands from other departments within the institution and from patients.

When students were asked to work in the kitchen, some felt that the work is beneath them. Comments heard were "I don't have to go to college to learn to peel potatoes." It was difficult for instructors to help students understand that food production is the beginning point of dietetics. Food must be produced and consumed if the patient is to gain the nutrients it contains. Poor food quality results in poor intake of food and poor nutritional status.

Persons with a degree in dietetics will not be doing actual production after completion of their degrees, but the graduate must understand how the kitchen operates and how to produce high quality food. The graduate must also know how to work with people, including the dietary personnel. Dietetic personnel
must have an appreciation for the nature of the work in a kitchen and be able to perform basic functions because it increases the respect of the dietary personnel for them. Also, to be an effective manager, one must know what each aspect of food production and service requires for training, scheduling, and evaluation.

During the college experience the students had several food production classes. Some students think this should be adequate and that it need not be repeated in the internship. Three of the students in my study did see the value of completion of the food production experience. All of these students had goals of working in food management positions. Four of the students did not repeat the food production experience in any depth. They did spend time in the kitchen but often they were in a supervisory position. Abby and Nancy had previous work experience as cooks in other facilities. Because of this previous experience, the site supervisors did not see a need to have them repeat the food production experience. Linda was assigned projects in the kitchen such as revision of job descriptions, update of menus and food purchasing. This required that she spend time in the kitchen, but she did not shadow an employee. Alice did shadow the food service supervisors in the kitchen, but she did not shadow any production employees. The facility that Alice was in was a larger facility, and there were food production supervisors for all shifts.

Each internship site supervisor does have a choice about how to organize the experience. This was apparent in the area of food production. Food production must be a part of the experience, and how the site supervisor
chooses to cover it varies. I do see some merit in having the student actually do production, but in some situations this might not be possible. Some site supervisors did not want the student in the kitchen because of union rules or liability issues. It would be interesting to see if the students who spent more time in the kitchen do better on the national registration examination in food service management. Food service management is frequently the area of lower scores on the national examination.

Some students felt comfortable in the kitchen. The work was well defined. There was little question about what to do next. Most of the staff were friendly and treat the students well. One student reported that after the kitchen staff learned that she was not there to take one of their jobs, they were really glad to have the additional help.

Discussion of Literature Related to Theme Five

Dietetics education has reduced the emphasis on food courses and replaced them with courses that seem more appropriate for entry-level positions in dietetics. Foods courses allow students to develop skills in food preparation and menu planning. Dietitians need skills in food production and menu planning to be effective in counseling patients and to manage dietetics departments. In a recent study, it was shown that dietitians considered courses in food safety, basic food preparation and quantity foods essential. Dietitians working in food service management considered courses in culinary skills of high to very high
importance, whereas those engaged in other areas of dietetics practice rated them of medium importance (Marsico, Borja, Harrions, & Loftus, 1998).

Bach (1996) states that dietetics is the intersection of health and food. In his study of the future of dietetics, he notes the need for greater emphasis on food. The dietetic professional needs to know more about how food is created, produced and distributed. Dietetic professionals need to know what, how and why people eat, what foods are available, and current food values and prices.

Food production courses are typically taught using the college food service and the hospital or nursing home kitchen. Fraser and Rock (1996) found food production and food service management were taught using a variety of community nutrition programs including a soup kitchen, Head Start program, and a drug rehabilitation center. Students were assessed by both quantitative and qualitative methods. Prior to the class, students reported that they were neutral about food production and food service management. After the class students reported "overall this is an excellent course."

Theme Six

Students believed that the internship was the most valuable part of the college experience because they learned how to apply the skills of a dietetic technician.

Evidence for Theme Six

After the completion of the internship, students' comments were extremely positive.
Abby lamented,

I hated to leave, it was the best experience. I really learned a lot. I know I had a lot of this stuff in class but I didn't remember it. Karla had to go over things with me and I seemed to learn it easier when I got to do it right away. I did so many assessments and MDS forms, I know how to do this now.

Alice stated,

I think I learned more during internship than I did during all my classes. It sure is different writing menus that will be used than just doing a classroom assignment. You know it has to be right or everyone will complain at you.

Nancy reported, "Elaine knows so much and she was so willing to help me learn. I think I learned more here than I do in school." Tammy wrote in her journal,

I really liked working with real patients and not just patients in case studies. I wanted to do the best for my patients. I didn't mind looking in my books for information about diets and recipes because I wanted to give my patients the best.

Linda apologized as she wrote in her journal,

I hope you won't be offended, but I feel like I learned more here than I did during the two years of classes at Prairie State. I know we spent a lot of time on diabetes in my classes but spending a week working with diabetic kids really opened my eyes to what it means to be diabetic. I feel like I
really know diabetes and carbohydrate counting now. Seeing a kid in a diabetic reaction at 3:00 in the morning really makes it sink in. I wish there was some way we could get more experience with our classes.

Terry wrote in her journal.

I wish I could get a job like this. I really like what I am doing and I want to stay. I think I can do the job now. I like doing rather than writing a test. You know I never do as well on a test as I can do in real life. Somehow knowing this is real makes me want to work harder.

Discussion of Theme Six

Internship was meant to be a "capstone" experience for students. It allowed them to practice skills needed in the workplace in a supervised setting. Internship allowed students to ask questions and to practice many tasks in a less threatening setting than on their first job. It was designed to be a positive experience for students.

Students often fail to realize that if they had not had two years of classes to learn theory, teamwork, critical thinking, communication, and the standards of education for the dietetic technician, they would not be successful in the internship. The internship was designed to allow the students to build upon the two years of didactic education. It provided a setting for the students to practice and to demonstrate competency in the performance skills of the dietetic technician. Not all students were successful in the internship and even fewer would be successful without the skills learned during the first two years of
education. Students would not be able to complete the tasks at the internship without their earlier education.

The internship was critical in preparing students to be successful in the workplace. Some administrators in higher education question the cost in terms of time and dollars of the internship. It was my observation that students needed this experience. Most students go into the internship very uncertain of their ability to meet the demands of the workplace. The majority of students left the internship confident that they would be able to do the job. Internship, the final supervised practice, allowed the students one last chance to be students and ask questions about events that occur in the workplace. It also provided a method for the culture of dietetics to be passed from one generation to the next. The students learned from practicing dietitians, in addition to the faculty at the college, what it meant to be a dietetic professional.

Discussion of Literature Related to Theme Six

In a qualitative study of students recently completing supervised practice as a part of the coordinated program in dietetics, Wolf (1996) stated that students reported their greatest learning occurred with individual responsibility. Examples given by students were conducting in-service for food service employees, performing patient education activities, and making patient care plans. Students also stated that they valued being appreciated by the staff at the intern site. Examples of appreciation given by the students were written or verbal thanks from the staff. When students were asked the most important thing they learned
about themselves as student-interns they responded that they now knew they could perform satisfactorily and to their own satisfaction within their chosen career field. One student stated, "I can utilize what I know to arrive at a valid decision regarding clinical situations that are complicated and critical" (Wolf, 1996, p. 802).

"Unfortunately, students tend to do as they see," stated Vickery, Cotugna and Hodges (1995, p. 13). By studying the counseling skills of students from coordinated programs in dietetics (CUP) and then comparing the CUP students to the students in a traditional dietetics program (post-baccalaureate), Vickery, Cotugna and Hodges determined that students in the traditional group did significantly better in all areas evaluated. Because students in the CUP program had more practice with professional dietitians and less classroom theory and experience, the students tended to model their behavior after the practicing dietitians they saw in the CUP program field experience component. Many of these practicing dietitians had completed their educations before counseling received the attention in traditional dietetics programs it does today. In contrast, traditional students had completed a one-semester course in nutrition counseling which included appropriate modeling of nutrition counseling using videotapes, practice, and feedback. This was followed by actual experience doing nutrition counseling. Because the traditionally prepared students had learned theory and had practice prior to actually doing counseling, they performed better as nutrition counselors (Vickery et al., 1995).
Beard (1993) stated in her dissertation that accounting interns expressed a strong preference for learning on-the-job over learning in school. Students valued the social interaction on the job and the emphasis on cooperation over competition. She also observed that students did not feel they knew how to do tasks in the work setting. The students expressed the concern that the skills in the classroom did not transfer well to the work site.

A practicum provides students with many opportunities, which include insights into the nature of work, developing job skills, developing interpersonal communication skills, and enhancing employment prospects. Other positive aspects of practicum are developing maturity in students, improving students' attitudes toward supervision, improving self confidence, and increasing job knowledge and practical reasoning.

Negative aspects of practicum included lack of student ability to integrate theory and practice, focus within the internship on too narrow a range of technical skills, poor supervision, and lack of preparation of preceptors to be supervisors. Another negative experience, which undermined the educational program, includes the exploitation of students as cheap labor. Fortunately, this was not a common experience (Ryan, Toohey, & Hughes, 1996).
Theme Seven

Students expressed a dislike of food service management because they did not feel capable of doing it and did not want the stress it generated. Most expressed a desire to work in the clinical areas of dietetics.

Evidence for Theme Seven

Lynn stated, "I hate management. I can't imagine doing this everyday!" Linda commented, "I don't like management; it's too stressful!" Nancy stated, "I can do management maybe, but I don't want to." The reasons for this dislike identified by these three students were several fold: "I can't listen to everyone complain. It is not just the residents, but the nurses too. The dietary staff come in and complain and want changes in their schedules," Linda stated. She continued, "The staff just doesn't show up some days. The supervisors spend huge amounts of time dealing with personnel problems."

Lynn commented, "I can't even imagine doing this every day; it's too stressful." Other students stated that not only did they dislike it, they did not feel prepared to be successful in food service management. Others stated that they might like to do it if they felt better prepared to do the job. Lynn also said that she did not feel as prepared for management,

We need more classes in menu planning, food production, and how to handle problem employees. I don't know what to do when employees complain about each other or have verbal fights. One staff member right now isn't talking to another. We even have to be sure we don't schedule
some people together because they don't get along. We can't have some staffs' disagreements affect the residents' food or other dietary staff. If we fire the problem staff it is really hard to find someone to apply. I can't believe how hard it is to get dietary workers.

Other students made similar comments, especially in regard to menus. Many stated that they "felt lost" when asked to write a cycle menu. Nancy commented, "Writing the menu was O.K. but the modification for carbohydrate counting are making me scared." Terry continued to describe what the college needs to do to help students.

We need more management practica. The one we currently take at Riverview Hospital is not enough. We take it as a freshman and there is a lot of food production and food service in it. We need more hands-on experience writing menus, purchasing and dealing with staff.

Other students did not want additional practica because they "dislike management". One comment often heard was "why can't we just be clinical dietetic technicians?" One student felt differently about this. Abby explained her feelings concerning management as follows:

I kind of like management; it is challenging. I don't have a lot of trouble with the dietary staff because they know I cook and they respect me.

They don't respect Kara (supervisor) because she says she can't cook.
Terry found management to be challenging and stated,

I like food service management better than clinical. I find clinical to be kind of boring and a little repetitive. We do the same things over and over like assessments and MDS forms. I really dislike charting, it seems so pointless.

Terry continued,

I plan to find a job in food service management. I like the challenges and variety. I know I will have to do some clinical but I hope I can minimize it in my job.

**Discussion of Theme Seven**

The food service manager of today has many challenges in supervision and management of dietary employees. A basic problem was how to adequately prepare the students for the challenges of management. It was difficult within the classroom setting to teach management skills. Simulations, case studies, menu assignments, group discussions, guest speakers, field trips, and readings all provide background, but it was not the same as having to deal with employees' complaints, groceries not arriving, or residents complaining about the quality of the food. Until students are in a management situation, they are not ready to learn the skills needed to be an effective manager. The classroom theory and discussion of management skills was difficult to learn without real world experience.
I believe some of the students' dislike of management may be related to their youth and lack of work experience. Many of the student-interns in this study were supervising workers much older than themselves. Only a few students in this study had work experience in food service prior to college. The students had work experience primarily in food production and service. Few had cooking experience or supervisory experience.

The ability to teach management was difficult because there are not simple answers. Many situations are unique, and theories of management provide background, but experience was essential to be effective as a manager. Students in the internship were experiencing the roles and responsibilities of management for the first time and were unsure of what to do and afraid of making mistakes. The students had higher expectations than may be reasonable, given the level of knowledge and experience of the students.

Students who seemed to like management were often older with more experience in food production, especially cooking. The older students seemed to see management as a challenge. Because of their previous background in food service, the older students often gained more knowledge and skills in management from the classroom. They cited examples of management situations that illustrated theories in the textbook. This ability to see connections between theory and practice enhanced their learning.

In a study conducted by Kobel (1997), the author stated that most students selected dietetics as a career because of an interest in nutrition and the
relationship of food and health. Most students made the decision while attending college, often after having taken a nutrition class. The motivating factor in selecting dietetics as a degree program for students in this study was not the management of a food service.

Kobel (1997) identified a second group of students who selected dietetics as a career field. These students were generally older than average and had work experience in hospital food service. Because this second group of students was generally older, they were often interested only in food service management because they wanted to utilize their past experience and to earn a higher salary. Clinical dietetics usually had lower salaries than food service management.

I believe that it was important for all students at the undergraduate program to see dietetics as a broad discipline. Specialization in one area of dietetics was possible with additional education and experience. All dietetic professionals must possess basic skills in food management, clinical dietetics, education, and community dietetics. These basic skills are the foundation of the profession of dietetics and are provided as a part of the undergraduate education. The registration examinations for the dietitian and the dietetic technician were developed to measure competency in all areas of dietetics. Although students expressed interest in clinical dietetics and not food service management, both areas must be taught if the students are to pass the registration examination.
Discussion of Literature Related to Theme Seven

Puckett (1997) stated that graduates need skills in management. Some of the skills cited included the ability to re-engineer a dietetic department, understand managed care and capitalization and their effect on the profession, develop an integrated delivery system, successfully negotiate for the department, be team players on an interdisciplinary team, and develop strategic business alliances. Puckett adds that the dietetic professional needed more educational preparation in management and business to meet the demands of employers in health care.

According to Kogel (1997), students entering the profession of dietetics generally had a strong personal interest in nutrition and the role of nutrition and health. Another characteristic of those individuals who pursue dietetics careers was a strong desire to help others. Salaries did not seem to be a big motivator in career selection (Kobel, 1997). In this study, none of the participants mentioned food service management experience or a desire to work in food service as a motivating factor in selection of dietetics as a career choice.

The 1985 report of the Study Commission on Dietetics indicated that the education of dietitians needed to be strengthened in areas of management and business. In an article by Carey and Manola (1994), the authors identify the need for increased management skills including political savvy, qualitative communication skills, critical thinking, problem solving, and quantitative and analytic skills. As a career path, management provides dietetic professionals
with opportunities in health care and business. The compensation for managerial dietitians is much higher than for other areas of dietetics.

Dietetic professionals needed academic preparation and experience to be effective in food service management. Changes within the health care industry are creating an environment where the director of the dietetics department must be focused on cost-efficiency and cost effectiveness. The management skills needed today in dietetics are increasing. Competition for management of health care by other fields, including food service management companies, exists. The American Dietetic Association stated that dietetic professionals are the best choice for management of health care food and nutrition services. If dietitians want to continue to be accepted as the appropriate professional to direct health dietary departments, they must posses additional skills in management (ADA, 1997).

In a survey conducted by the American Dietetic Association on employment location of dietetic technicians, it was reported that 45% of dietetic technicians worked in acute care and 44% in long-term care. Seventy-six percent of technicians job responsibilities were clinical, and 23% reported job duties consisting of a combination of clinical and management tasks. Dietetic technicians had greater responsibility then dietitians for food production, menu planning, and safety and sanitation. The survey further indicated that dietitians have higher levels of responsibility than did dietetic technicians for management (Kane, Cohen, Smith, Lewis, & Reidy, 1996).
Internship preceptors expressed positive feelings about having a student intern but had difficulty with assessment and evaluation of the intern.

Evidence for Theme Eight

Site supervisors often commented, "It was great to have someone to talk to who has an understanding of dietetics; no one else in the facility has any understanding of what I do."

Elaine observed, "It is good to see the enthusiasm the students bring to the facility. It makes me feel more positive about my job."

Kara explained, "Abby saw things I didn't, perhaps because she was new and had a fresh perspective. The staff even refers to her as "our intern." The staff seems to be pleased to have Abby in the kitchen."

Libby stated, "I liked the opportunity to have the student do some in-service training for staff. I selected the topics, and the intern prepared the in-service."

Libby also added, "The intern did special projects and made special meals. She planned a special meal and even made individual menus for the residents using the computer!"

Marla added, "The students did special projects for the community. This brought people into the hospital. We don't have time to do this normally."
Internship preceptors expressed positive feelings about having a student intern but had difficulty with assessment and evaluation of the intern.

Evidence for Theme Eight

Site supervisors often commented, "It was great to have someone to talk to who has an understanding of dietetics; no one else in the facility has any understanding of what I do."

Elaine observed, "It is good to see the enthusiasm the students bring to the facility. It makes me feel more positive about my job."

Kara explained, "Abby saw things I didn't, perhaps because she was new and had a fresh perspective. The staff even refers to her as "our intern." The staff seems to be pleased to have Abby in the kitchen."

Libby stated, "I liked the opportunity to have the student do some in-service training for staff. I selected the topics, and the intern prepared the in-service."

Libby also added, "The intern did special projects and made special meals. She planned a special meal and even made individual menus for the residents using the computer!"

Marla added, "The students did special projects for the community. This brought people into the hospital. We don't have time to do this normally."
Commented Libby,

I don't know what we would have done without Lynn. She knew so much more about computers than we do. She entered all of our menus on the computer and taught us how to use it. She provided more computer-training than anyone else did. The administrator of the nursing home even asked her to train the other department heads on how to use Microsoft.

Marla continued,

Having an intern increased my status within the facility. Other department heads wanted a student. The administrator seemed to see that dietetics is a field with education and respected the department more than before the student came.

Patty praised Terry stating, "Terry seemed to know more than I do. I don't know what I will do after she leaves. She really helped me a lot with the staff and the administration." Elaine added, "Nancy filled in for me when I left for vacation. It was wonderful leaving for a week and not coming back to a week of work. She had everything done and I didn't have to make any changes." Libby appreciated having someone to delegate responsibilities to.

Lynn really helped out. I asked her to do community projects. We wouldn't be able to do some of these projects without her. She also did an in-service education program that I didn't have time to develop. I really hate to have her leave.
All of the preceptors expressed difficulty when assessing the student's performance and making recommendations to me for a final letter grade. Elaine stated, "Nancy did a great job and was here all the time. I think she should get an "A," but I am not sure if she did everything you expect of her. Karla stated, "Abby helped out a great deal and I think did a great job. I would recommend an "A" grade. Was I supposed to evaluate on specific competencies?" Libby also expressed concern about how to grade the student: Lynn helped us so much, but I am not sure if she did everything needed. I hate to give her less than "A" because she was here for ten weeks and did a lot of projects and we did not pay her. I almost feel obligated to give her an "A."

Some of the preceptors were unwilling to assign a grade. Terry's supervisor did an evaluation but would not suggest a final grade. Alice also had an evaluation but not grade recommendation. All preceptors who recommended a grade recommended only the grade of "A."

Discussion of Theme Eight

Dietetic student interns can bring much to dietetic departments, with little cost to the facilities. The student brings current knowledge in the field of dietetics along with an eagerness to learn and apply current knowledge in a clinical setting. The enthusiasm of the students is a great benefit to many health care facilities. Because most of the facilities in this study were small, the director of dietetics was often the only dietetic professional within the facility. The student
provided these directors with someone with whom to share ideas about dietetics. Preceptors related to me how much they enjoyed having someone to talk to about problems within the department or about the care of a specific resident.

A common concern in rural health care is the isolation from others in the field of dietetics. By participation in the dietetic internship program the preceptor had the opportunity to work with the college faculty as well as with the student. The preceptor also had a chance to have the student complete projects and community outreach that she or he could not complete alone because of a lack of time.

The students shared knowledge of computers with the facilities. Most of the rural facilities were only recently coming into wide use of computer technology. The students often were more knowledgeable than the preceptors in computer usage, which increased the value of students to facilities. The students' college is a leader in the use of computer technology. The students have had their own personal computers since beginning college as freshmen. All students were taught how to use Microsoft Office and Windows 95 in a required course during the first year. The computer has been used extensively in all of the students' classes. The computer knowledge provided by the students was an example of a benefit to the institution for participating in the internship program.

One reason given for not participating in the internship program was the amount of preceptor time required to orient, instruct, and communicate with an intern. This concern about the time needed to train the student is real but most
students learned quickly and quickly began to contribute to the facility. Once a facility's staff had participated in the internship program, they were eager to have another student. A common comment for previous years' preceptors is, "I hoped you would ask, I really enjoy the students and they can be a great help to me." Many administrators stated that the students were an asset to the department and did not reduce the efficiency of the department.

A responsibility of the college is to adequately assess a student's skills to determine when the student is ready to begin an internship. To place students in an internship setting before they are ready causes many problems for preceptors, especially in assessment. If this happens, it could limit a preceptor's willingness to take students in the future. This is sometimes difficult to accurately assess. Sometimes students are placed too early and this does result in frustration for both the preceptor and the program director. It also can cause the internship preceptor to give the student a low grade or in some cases refuse to pass the student.

Review of Literature Related to Theme Eight

Results of a survey reported by Gilbride (1996) stated that dietitians derive professional benefits from interaction with students in practice settings. Benefits cited include increased knowledge in areas of practice, a sense of satisfaction and achievement, and the completion of projects by students which enhanced the credibility of the dietetic department.
A study of dietetic internships completed by Conklin (1994) stated that internships provide benefits to the health care facility. A benefit of the internship to the department was staff relief for dietitians for vacations, holidays, weekends, and other days off. The students completed independently without dietitian supervision many projects that are useful to the department and would not have been completed without student labor. Students routinely performed duties typically completed by dietitians including assessments, diet instruction, inventories, in-service education, planning and supervising catered functions, chart audits, calculation of financial information, and employee performance appraisals. This allowed the staff dietitians to do other projects.

Gates (1995) identified additional benefits to preceptors of involvement with students. "Supervising students increased the preceptor's visibility in the institution, brings new ideas to practice, attracts potential employees, and increases productivity of their department. Supervising students can serve as a mirror that allows practitioners to evaluate and improve their own practice" (Gates, 1995, p. 225).

Toohey, Ryan and Hughes (1996) have researched the topic of assessment within the practicum setting and have identified five models of assessment. The first model is the Attendance Model. Within this model, satisfactory completion requires the student to attend and the preceptor verifies the time spent. Toohey et al. state that the educational institution utilizing this model may assume that the real learning takes place in the classroom and the...
practicum’s value lies in socializing the student to the world of work. A second interpretation of this model is that the educators believe that learning does take place in the practicum, but they have difficulties in determining how to assess it.

A second model of assessment is the Work History Model. This model is slightly more defined than the attendance model. Students keep a journal of tasks completed and reflect on the value of each task. Assessment of the journal writing is not usually done because of difficulty in setting criteria for successful performance. Educational institutions adopt this model because they feel they have little control over the development of a structured learning environment within the workplace.

The Broad Abilities Model attempts to provide students with an opportunity to acquire and demonstrate broad abilities such as critical thinking or interpersonal communication within a workplace setting. The educator asks the students to provide reports based on specific topics. In the reports, the students need to make an analysis of events, evaluate judgments, and relate theory to practice. It can be difficult for the assessors to determine what constitutes satisfactory performance.

The Specific Competencies Model is a more structured approach to assessment of the practicum. In this approach, the key roles and competencies are identified, and the practicum is structured to offer the students the opportunity to practice these skills. Students must demonstrate their abilities within the key roles identified. The assessors may rate performance on a numeric scale.
advantage of this model is its similarity to evaluation in the workplace. Disadvantages include a need to insure that all students are exposed to all expected tasks. Also, the working relationship between the educational institution and the workplace must allow for the use of this model. This is the model generally used in medical education and works well in teaching hospitals where doctors have joint appointments. It is also the model used in dietetics education, where joint appointments are less common.

The final model of assessment is the Negotiated Curriculum Model. Within this model, a learning contract is negotiated between the workplace and the educational institution. The contract specifies learning objectives, learning activities, personnel from both institutions available to the students, final products required of the students, and the person making the final assessment and the criteria used by this assessor. Students may even contract for their final grades. The advantage to this model is a high level of commitment from students because they can pursue some of their own interests. This model is very time consuming for the educational institution.

The choice of who should assess students in a workplace setting is also a concern. The possibilities include the preceptor, the educational supervisor, or self or peer assessment. Frequently the preceptor makes recommendations to the educational supervisor for the final grade. A concern expressed is that preceptors are reluctant to make negative comments about students. There is also a lack of consistency between the assessments of a wide variety of people
who will act as preceptors. Many of these people are not experienced or trained in how to make an assessment. The reliability of the assessment usually increases with the number of people asked to assess a student (Toohey, Ryan, & Hughes, 1996). Within dietetics the assessment usually consists of review by both the preceptor and the internship coordinator. This still presents problems because often the preceptor is reluctant to suggest anything but an “A” final grade. The preceptors complete an assessment form, which lists personal traits and professional skills. The preceptor shares the information with the student before sending it to the program director. The program director uses the assessment along with evaluations of the internship coordinator to determine the final grade.

Theme Nine

Effective preceptors exhibit some common characteristics such as patience, kindness, approachability, and availability to students, which increase their effectiveness as teachers.

Evidence for Theme Nine

Students in the study stated that they liked to work with certain preceptors and not with others. Of the seven students, four students had specific concerns about dietitians and managers in their field sites. Not all of the persons mentioned by the students had any direct responsibility for the students. Some of the persons cited by students were other managers, staff, or other dietitians.
Concerns expressed by students ranged from, "She couldn't explain it" or "didn't really have time to answer questions" or "didn't know the answers to questions I asked" or "too harried" or "had lots of information about budgets but reluctant to show me."

Examples of positive comments about preceptors are the following. Nancy made positive comments concerning Elaine; "She is friendly, never makes you feel like you are stupid or in the way."

Abby commented about Karla, "She shows you how to do it and asks if you have questions. Then she lets you do it." Linda commented about Marla, "She is always available and makes you feel like you are not in the way."

Terry noted that her supervisor was very quick to give her positive feedback and tell her she was doing well.

Other student comments included, "My supervisor was so patient with me even when I did not get it very quickly."

"Elaine was very open and told me the why. She went out on the floor with me and showed me how to do specific tasks. Elaine watched me and assured me that I was doing well. Then she left me on my own to practice," stated Nancy. Nancy's supervisor did not forget her. She told Nancy to come to her with any questions. Nancy stated, "She never was too busy for me." Nancy added, "Sometimes I felt guilty taking her time, but she never appeared hurried or frustrated when she worked with me."
Tammy stated she couldn't believe that the dietitian trusted her judgement and left her alone with the patients while she attended a meeting. Tammy continued "I did o.k. and I feel like I can do it now."

Linda stated,

I don't really like the internship. I am anxious to be done. I don't really like to work with Libby because she is such a perfectionist. She is so detail oriented that it is hard to please her. I also don't like the conflict within the nursing home. Dietary and nursing really don't get along very well.

Terry commented:

The hospital seems to be separated from the rest of the community. The clinic and the hospital do not have anything to do with each other. The clinic does have a dietitian but I haven't been scheduled to work with her. There is also a dialysis center, but this is also separate from the hospital. I think the dietitian comes from another hospital in the city to see patients. I would like to work there, but the hospital doesn't know if they can arrange it. The hospital consultant dietitian does go to the nursing home on a separate contract. The nursing home is separate from the hospital. The nursing home is having problems, too. The staff are going out on strike. Preceptors are also aware when they are not providing an effective learning experience.
Alice's preceptor and director of the department commented,

I know I am not spending enough time with Alice. I meet with her and give her assignments, but I just don't have the time to check on her. She has to work independently. I really appreciate having her. She is making contributions to the department by doing projects. I want to do a good job for Alice, but I know she needs more of my time.

Tammy commented about working with the food service director:

Well, it was ok, but really unorganized when I worked with her. I was basically being her guinea pig—go copy this, go do that. I didn't learn anything with budgets, I didn't get to do the schedule because it was very complicated during the summer with everybody taking vacation. This would have been good for me because I don't feel comfortable with the budget. She just doesn't know how to explain it. I guess the thing that really got me was that I am paying for this and I am making copies and I am supposed to be learning something useful. She also made comments I didn't like. One day she said to another dietitian in front of me, "When are you going to be done with this little weasel so I can have her?" You know I was hurt, for one thing, because I'm not a weasel and it was really demeaning.

Discussion of Theme Nine

The attitudes of the preceptors and the other professional staff within an institution are critical elements in the learning process for the student. Ideally all
staff within the institution are interested in having a student intern. If not, all staff, and at least the preceptor, should have keen interest in working with students. Both the review of literature and this study show that personal skills such as friendliness and enthusiasm are important. In addition, teaching and evaluation skills are needed. None of the preceptors in this study were educated to be teachers. All of preceptors did learn some teaching skills as a part of community nutrition or diet instruction while students. Some of the preceptors taught classes within the health care institution as a part of their job responsibilities.

Because of the lack of background in education of preceptors, it should be the responsibility of the college to provide more assistance to the practicum site. Currently I do not provide assistance on how to be an effective preceptor or how to evaluate student learning. I do see a need for preparation of the field site and the education of preceptors to work with students. In this study, only one of the seven students had a site that was not as effective as I would have liked. The preceptor at this site was hired about two weeks before the student arrived. The preceptor not only did not know the student or the expectations of the internship but was unfamiliar with the health care institution. The student was able to deal with the situation in a very satisfactory manner because of her background and strong personal abilities. Other students would not have been so successful.

I have used several internship sites repeatedly because of an excellent preceptor. New internships need to be thoroughly evaluated to determine if the preceptor is adequately prepared to be an effective teacher and role model for
the student. Students frequently are insistent on a specific site because of location. This student pressure should not be the key factor in the selection of the internship. More student education on the purpose of the internship needs to be completed. Students too often see this as just one more class to complete and not as the critical part of the learning experience that it is. As a program director, I must more effectively convey to students the importance of the internship experience and of selecting sites with preceptors who are effective teachers or are willing to learn teaching skills. New sites must be carefully screened, and the dietetic program should provide some education to the site on the goals and expectations of the internship experience. This must include teaching skills and methods of student evaluation.

Student orientation should be completed. Currently the college does not orient students to the goals and expectations of internship. Interns could help preceptors guide their learning if they were aware of what they were required to learn.

Evaluation is a key component in learning. Most preceptors are reluctant to provide the student with any written feedback. Terry did not receive any evaluation from her preceptor until three months after the internship. Abby never received any written evaluation, even after I repeatedly asked her preceptor to please provide one. The need for written evaluation also needs to be included in the pre-training for preceptors, and assistance in how to evaluate students
should be taught. Students need to learn not to fear evaluation but to see it as a way to increase learning.

**Discussion of Literature Related to Theme Nine**

Gates (1995) states the preceptors who are effective teachers have good interpersonal skills and are able to serve as a resource persons for the student. These preceptors can effectively evaluate student performance. The interpersonal skills most often sought after by students are friendliness toward students, enthusiasm for teaching students, interest in the patients and respect and confidence in the student interns (Gates, 1995).

When preceptors serve as a resource to students, the preceptors' teaching skills become increasingly important. The preceptors need to clearly communicate the reasons for their actions and allow students to ask questions. With this background, students can begin to develop critical thinking skills needed by a professional. This also helps to build student confidence. Effective preceptors are there to guide the students and to be available to help with questions. The preceptors allow the students to make independent decisions.

Modeling of professional behavior is also an effective teaching tool used by the preceptors. Preceptors model technical skills, organizational skills, planning and priority setting, ethical behavior, team-work, and enthusiasm.

Evaluation of the students is an important part of the learning process. Effective preceptors provide frequent and specific feedback to the students. This
helps students to identify their strengths and weaknesses. Students seemed to appreciate honest and direct information about their progress from preceptors.

Gates (1995) recommends that preceptors use a three-stage teaching continuum: students observe practitioners, preceptors observe students, and students perform independently. It is often difficult for the preceptors to know when the students are ready to perform independently. Some factors which may indicate readiness are students and preceptors both agree that the students are ready; the students ask for more challenging tasks; the students have demonstrated to the preceptors performance without mistakes; and the students accurately present patient findings and knows the limits of their knowledge.

In a study by Wolf (1996), students stated the most frustrating and disappointing experiences related to the "look it up syndrome." This syndrome resulted when the students did not feel wanted or appreciated by the preceptors. The preceptor in these settings discouraged student participation, re-wrote their work extensively, curtailed questions, and refused to discuss patient or treatment options with the students. Other negative behaviors identified by students included appearing too busy for students, correcting students in front of other students, failing to use the students' names, asking questions in an intimidating manner, and providing mostly negative feedback. In this study it was noted that some students were more easily humiliated than others by critical comments from preceptors (Wolf, 1996).
Wolf's (1996) study offered helpful behaviors from preceptors stated by students. These behaviors included patience, kindness, a sense of humor, and a willingness to share knowledge. Open communication between students and preceptors was necessary to meet the performance expectations of the internship.

Theme Ten

Students possess excellent computer skills. Because of their skill, student interns teach the preceptors how to use the computer.

Evidence for Theme Ten

Computer technology is rapidly entering the health care field. Many practitioners in dietetics do not have the skills to use the computer effectively. Interviews with preceptors reflect this lack of confidence about technology. Libby stated,

I have been out of school for twenty years. When I was in school we didn't use computers. How am I supposed to learn computers? I can't keep up now! When do I have time to go back to school?

Her sentiment is similar to that expressed by Elaine.

When I decided to go back to college and get my associate degree, I was forced to learn computers. I was terrified! I called my daughter in the south and made her help me over the telephone. When she moved back to town she helped me a lot. I am doing better with computers now. I use
one every day but it sure was stressful to learn. The interns were surprised by the lack of use of computers in the health care institution.

Terry stated,

They have a computer in the office but there isn't much for software. Please send me a listing of where to purchase nutritional analysis software. I plan to meet with the director of support services and see if we can buy some. I am using the computer to update job description and costing sheets. I don't think Patty knows much about the computer. She asks me a lot of questions.

Linda was surprised by her computer skills, in comparison to the skills of much of the staff at the nursing home.

I worked extensively on the computer. The director wanted me to put the menus on the computer. The director did not know how to do it, but she wanted to learn. She asked me lots of questions. I ended up teaching her how to use the computer. The administrator also wanted to learn and then he decided the whole staff of the nursing home should be there. He asked me if I would teach classes for everyone. I am a little nervous about this.

Nancy's computer skills were not as strong as others. Because she had attended college previously, she did not take as many classes where computer skills were required. As a result, she was not as competent as many of her classmates. In the internship this became more apparent.
When I was in school, I could always ask one of the girls for help. Here I
don't have them to help me. Elaine can answer some questions, but
sometimes I have to call the "help desk" at the college. I hate to ask
questions because I should know how to do this.

Abby seemed pleased about computer usage at her site. "They use computers
for ordering food and they even use the computer to do MDS forms on-line."

Terry stated in regard to the computer:

I was asked to update the job descriptions on the computer. The problem
was the program. You have to go in and write all their tasks, detail what
they have to do, but the computer program will only allow you to go down
so far and it wouldn't let you type anymore, so we had to fuss with all of
that and that's all on Lotus. (Lotus is a computer program not supported by
the college, so Terry had not been trained to use it, but she learned
quickly).

Linda also had been working with the computer for a menu project.

I have been having a problem with the computer. I called the computer
instructor at the college for help. I also called central office for the nursing
home chain and the company that makes the computer and the printer.
No one has been able to solve the problem of the computer's failure to
print the menus at the size specified. No one at the nursing home can
help me at all. I know more than they do.
Alice contributed to the work of the department. Her preceptor stated that

Alice is doing actual menus that would be used. She is also costing out the menus, which saves me time. I really appreciate her doing this. She is also costing menus and doing nutritional analysis on recipes, all things that need to be done but there is usually no time to do it.

Discussion of Theme Ten

The use of computer technology in dietetics has increased tremendously during the last ten years. Many dietetic professionals now are expected to use a computer daily as a part of their current positions. Many employers have provided only limited training for the staff. Some employers expect the dietetic staff to learn computer skills on their own through workshops or college classes.

Students currently in college have used computers extensively. Some have used the computer since grade school or at least high school. Our college also makes extensive use of computers. We were one of the first "lap-top" universities in the area. All of the students have their own computers, which they use on a daily basis. Students do not seem to realize that they possess up-to-date computer skills when they leave college. Even though computer skills are stressed in college promotional materials, most students seem to just take it for granted.

In the internship site, students saw first-hand how much their computer skills surpassed what was available in the health care institution. I believe this
increased the students' self-confidence. Students also seemed to have increased their opinion of the education they had received in the college setting.

Students know how to use e mail and the World Wide Web. These tools can be incorporated into the internship requirements. Students currently are not required to take the computer to the internship site because of cost. I think this may need to change. With computer technology at the site, students would have access to a lot more information to use in in-service education, case studies and projects. Also, students could use presentation graphics such as Power Point to develop and present in-service training.

Discussion of Literature Related to Theme Ten

The rapid changes in technology are causing profound changes in dietetics. Dietetic education must incorporate the use of technology in and beyond the classroom. It is suggested that students learn teleconferencing, electronic mail, the Internet, multimedia software, and distance education while students. There is a fear among dietetic professionals of knowledge obsolescence in light of changes in technology.

The use of technology has many implications for education. The use of distance education is increasing in dietetics. It is suggested that perhaps students will be able to take not only traditional courses but also supervised practice using distance education technologies. An example is Johnson and Wales University's use of two-way interactive television broadcasts with live interaction occurring between master chefs and students at several sites. This
perhaps could be adapted for use with dietetic students at field sites and instructors in the college. (Spangler, Spea, & Plavcan, 1995).

The American Dietetic Association is aware of the increasing use of computer technology by its members and the public. The association believes that dietetics practitioners benefit from using computer technology by increasing access to literature and data bases. Dietetic professionals must be able to use technology to effectively manage their departments (ADA, 1997).

Theme Eleven

Students report that internship builds their self-confidence and Increases their motivation to seek employment.

Evidence for Theme Eleven

Linda stated, "I love it here, I wish I could stay. I just love clinical, especially dialysis. Everyone treats me great, and I feel like I am a part of the team." Tammy also thought she learned valuable skills:

I did charting, diet instructions for low cholesterol and no added salt diets. I got a chance to observe the state health inspectors in the kitchen and in the nursing center. It was very interesting to learn what they look for and why. This was a beneficial experience that we will later use if we become managers or use our clinical skills in a nursing home.

Tammy continued,

Today I gave three diet instructions all on low cholesterol, no added salt. I did a chart note on all of them. I went through the hospital census and
decided who needed to be assessed and who I should visit on meal rounds. I did three assessments this afternoon and visited two patients with diabetes. They both requested information and a meal plan to follow. I will give a diabetic instruction and offered a meal plan I have made to meet the caloric needs due to the current weights, blood sugar level, and daily activity. The dietitian I work with starts vacation tomorrow for a week, so I will be by myself. One of the dietitians will be available to me when I need her assistance.

Another entry from Tammy's journal stated,

I worked independently today doing clinical duties while the dietitian is on vacation. I did a few assessments and meals rounds. I'm learning quite a bit of information because I am on my own. I feel better about providing patients with information pertaining to their diets and giving diet instructions. This type of work is intimidating to me, but I am feeling more comfortable with the patients.

Nancy's confidence increased with the internship:

I am going to do some presentations for the nurses on the low cholesterol diet. The nurses are in home health and need to be updated. The director of the program asked me if I would go to other communities and give the presentation. I said I would. It seems to be going well.
Linda's confidence also increased, and she seemed pleased with her progress in community nutrition:

Social service went good. Only three people showed up. They liked the flash cards. Some maybe will change their lifestyle. One kid age 15 really had an attitude. He didn't want to be there. He disagreed with me and said he ate once a day and lost weight. I didn't get flustered or intimated by the "punk." The girls seemed very interested and so did the supervisor.

Lynn continues as she describes her experiences with home health:

The diet instruction to the diabetic was kind of hard because he was hard of hearing. I had to scream and he still couldn't hear me. He was doing good and I reassured him of that. I like doing home health. It's more fun. It gets me out of the nursing home. I like the variety and it is less boring.

Discussion of Theme Eleven

The evidence presented by the student interns and the review of related literature support the value of internship to the student. The student has the opportunity to practice skills used daily by professionals in the work environment, which builds confidence. The students can learn from their mistakes in a protected environment with the continual feedback from preceptors. This is an effective way to learn for many students. Students also discover that they are capable of doing many tasks being done by the dietetic professional within the work-site. Students always seem amazed when they discover that they do know how to do dietetic tasks needed within the work environment.
The college needs to help the internship site be as effective as possible when working with students. Close communication between the faculty of the college and the clinical staff of the health care facility can help to provide a better learning environment for the student. The college provides professionals who are effective educators. The health care facility provides professionals with the latest technical and application skills. The two working closely together can provide a sound environment for teaching and learning.

The internship also helps the students determine what type of jobs they would like when they finish their educations. Dietetics is a broad discipline; dietetic professionals are engaged in food service management, clinical dietetics, community nutrition, education, business and research. Within the internship setting, students get to experience several of these potential areas of employment. Students learn quickly areas that appeal to their interests and areas of little interest. This may reduce student frustration caused by inappropriate job placement.

Effective preceptors are critical in building student confidence and preparing the students for their first jobs. Preceptors who are positive in their approach to students and encourage rather than criticize students will help the students to grow into effective practitioners. Allowing students to function in the role of dietetic technician for staff members who are on vacation or on leave, also builds confidence. Preceptors must be able to accurately assess the students' skills before using the students for staff relief. If the student is ready and can do
the job, this will build confidence. If the student is not ready, this could be detrimental to the student.

**Discussion of Literature Related to Theme Eleven**

Internships are of benefit to students. Some of the benefits include the ability to see what their chosen profession is really like. They also have the opportunity to practice what they have learned in the classroom. Internships allow the student the opportunity to make mistakes in a supportive environment. Students develop more realistic expectations of the job requirements. They also develop role models of effective practice.

Students in an internship must make the internship their top priority. The students must accept responsibility for their own learning. This means asking questions and doing research. Projects may provide an effective method of learning in the internship site. By working with a project, students have the opportunity to create something of use to the facility. This provides an excellent method to build self-esteem (Flescher, Leach, & Westphal, 1996).

Experiential education, which includes the internship, has its beginning with John Dewey who was a proponent of "learning by doing." It can include many aspects of traditional education for dietetics including the practicum and the internship. Internships provide students with the opportunity to practice skills. Most students report that the internship was "The most I've learned in college."

Teachers have some difficulty when it comes to evaluation of the learning experience in the internship setting. It is difficult to evaluate journals or
reflections or a portfolio of work completed at the field site. Reflective skills for journalling must be taught to students before they begin the internship experience. Reflective journals include observation and analysis of their own work, not merely an account of what they did on any given day. Students almost always increase their knowledge base through the internship. The personal growth in each student is most remarkable. Students are better able to evaluate their own strengths and weaknesses, and they know that they can make it in the world of work. Other students need the assistance of the preceptor to see better ways to do a specific task (Ryan & Cassidy, 1996).

Theme Twelve

Preceptors state that interns are an asset to the dietary department because they add to the department productivity and increase service to customers.

Evidence for Theme Twelve

Tammy stated, "I will be doing staff relief for a week. One of the dietitians is going on vacation." Linda and Tammy stated, "We helped with the board supper, for 17 people, where we cooked and served supper. They continued, "We sent out letters to the hospital and nursing center regarding our community nutrition project and invited them to come."

In an interview about her work with the director of support services, Terry stated,
I did a lot for her, but it was kind of fun, I got to do a lot of the office budgets. This was really interesting. Patty and I took a whole day off and worked on budgets because that was a priority the director wanted done this summer. I also re-did the job descriptions because the hospital had been bought out by another company and the new company mandated the changes.

Nancy also had to do staff relief. "Elaine is gone today, and tomorrow so I have to do care plans. I also have to do two assessments on residents who have just been admitted to the nursing home." Lynn did community nutrition teaching and in-services within the nursing home, which would not have been done if she had not been doing an internship. She reported in her journal the following:

I met with a county social worker. She asked me to teach nutrition, menu planning, and grocery shopping to a group of foster kids who are now 18 and going to get their own place to live. The group is 6-8 kids. I agreed to do this and will come back at night to meet with the group. Libby asked me to develop an in-service for the dietary staff on carbohydrate counting. This is new in the management of diabetes and the staff needs an update. I guess the presentation will also be open to other staff members and the nursing department. I am nervous, but I will do it.
Nancy also reported that she was contacted by the Home Health Agency at the nursing home.

They want me to do several in-services for the nurses on the cholesterol diet. The agency has nurses in several area communities and they want me to go to these towns and give the same in-service. If you think I should, I will do this. It makes the nursing home look good in the area.

Alice wrote in her journal, “Wrote menus for the facility that will be used not just for practice. I also am working on recipes for the menus. The food service manager really appreciates my help. He didn't know when he would have time to do them.” Linda also reports on her week at diabetic camp. “I really felt valuable here. I help with food production and service and help the dietitian with education classes for the kids. I am working long days, 12-14 hours; we even have to get up during the night to check on the kids.”

Discussion of Theme Twelve

The evidence from this study and the review of literature supports the value of internship to the institution. The benefits cited were many including staff relief, completion of projects, enhancing the image of the institution within the community and professional development of the staff within the institution. This information needs to be shared with health care institutions when they are making a decision concerning participation in an internship program. Most of the students in this study quickly learned the tasks at the field sites and did not require an extensive amount of staff time. In this time of tight budgets,
administrators need to be aware of the benefits to the institution in sponsoring student-interns. With the limited amount of dietetic staff in most of health care institutions, this can be a mutually beneficial arrangement.

Students also need to know the benefits to them from completion of the internship. More time should be spent in orientation of the students to the internship experience and the expected outcomes from the completion of the internships. This may improve the attitude about completing an internship and reduce the complaints about being "free labor" and "how am I going to live when I can't make any money."

A recent trend in allied health education is for the health care institution to charge the educational institution for practicum and internship experiences. This additional money is paid directly to the hospital or nursing home to cover the cost of training the students. The educational institution will pass on these costs to the students in the form of higher tuition. If the health care institution could see that students provide benefits to the institution and do not cost the institution in terms of staff time, they might not charge the educational institution for the internship or practicum experience. Students give back to the health care institution in the form of projects and staff relief and are not a financial burden for the health care institution.

Discussion of Literature Related to Theme Twelve

Internships are beneficial to business. If the internships were not beneficial, they were not being managed effectively. Benefits to business
included flexible staffing by using interns to fill in when staff is absent. Most businesses had a need for additional staff to work on projects for the organization; interns can provide this.

Internships can be beneficial to both the interns and the business. Access to current academic curricula can be an asset for business. If business works with a quality academic program, it will have knowledge about innovative course offerings, access to continuing professional education for staff, and an opportunity to recruit high quality staff members. Interns will provide business with access to faculty and institutional resources. Interns can be involved in staff development through in-service training or projects.

The students also benefit from the internship. Benefits to the students include assistance in making career decisions. By spending time in the work environment, students develop realistic expectations of the work environment and how this differs from the college classroom. Students learn appropriate behaviors expected of them in the work place. Learning-by-doing helps many interns improve their technical skills (Flescher, Leach, & Westphal, 1996).

Pharmacy requires an internship after all the didactic work has been completed. The goal of internships is to provide interns with an opportunity to apply principles learned in the classroom. Costs to the health care facility associated with student interns include use of facilities and supplies, time of preceptors to teach them, and the space students occupy, which might be limited in a pharmacy. Benefits to the pharmacy include that interns can do routine
tasks such as filling prescriptions and counseling staff. Another benefit cited was maintaining and upgrading preceptor's skills (Selander & Larson, 1996). Other allied health professionals cite similar advantages to both the student and the preceptor in participation in an internship program.

Theme Thirteen

Dietetic technician interns state that they have less status than does the dietitian within the profession, while dietitians state that they do not understand the role of the dietetic technician as a member of the dietetic team.

Evidence of Theme Thirteen

In the college setting, the students had little contact with registered dietitians other than the college faculty. In the internship setting, they now worked with dietitians on a daily basis. Some of the students felt that they had little status within the profession of dietetics.

Terry stated, "I need to be a dietitian if I am going to get anywhere in this profession." Lynn said, "I really want to be a dietitian. I know I will not be happy as just a diet tech." Other students commented that the dietitians encouraged them to go on to more school to become dietitians. They told them that they would have more opportunities for employment as registered dietitians. "Don't be satisfied with being just a technician," stated Karla.

In part, some of this may relate to a lack of knowledge concerning the role of the dietetic technician. In soliciting health care institutions to take a dietetic
technician intern a common comment was, "I don't know what a dietetic technician does; I have never worked with one."

Students reported that the sites that had a dietetic technician on staff had a better understanding of their job title and provided an internship that more closely reflected their academic preparation. A dietitian who has not previously had work experience with a dietetic technician tends to expect too much from the student. Examples are Karla and Abby.

Karla had not worked with a dietetic technician previously and had worked only six months as a dietitian. She was a little afraid to take Abby as an intern because of her lack of experience and a fear that she would not teach Abby enough. Instead, Karla taught Abby how to do everything she did. In short, she trained her to be a dietitian. Fortunately, Abby is a very capable student who was able to handle the additional responsibility, but now Abby has an increased expectation of her job responsibilities. When Abby begins her first professional job, she will expect to do tasks that may be the responsibility of a dietitian, and Abby could then be frustrated with the job. Abby is over prepared for a job as a dietetic technician. Abby told me "I expect to get a salary of at least $13/hour because I am worth it." This is the wage of a dietitian. Abby had the goal of becoming a dietitian but pursued a baccalaureate degree in business. She was unwilling to transfer to another college that offered a baccalaureate degree in dietetics.
Dietetic technician interns trained under dietetic technicians seem to have a better understanding of job expectations and skills needed on the job. Marla is a dietetic technician. Tammy stated, “Marla is so competent. I hope I can be as successful as she is. She made sure that I knew how to do her job.” Lynn commented, “Libby really knows food management, even though I don’t want a job like hers, I respect her ability. I want to be a dietitian because I don’t want to do any management and I think it would be easier to specialize as a dietitian.”

Discussion of Theme Thirteen

The students perhaps do sense that some dietitians are not supportive of the dietetic technician as a member of the dietetic team. Some dietitians are threatened by the use of dietetic technicians in health care. Generally, these are dietitians who have not kept up professionally and often are functioning at the level of a dietetic technician. Because the salary of technicians is less than that of dietitians, some dietitians are fearful that technicians may replace them in job market (Stewart, 1993).

Other dietitians do not understand the education and training of the dietetic technician. I am frequently called with the question, "Can dietetic technicians write in the medical record? Do I have to co-sign?" or "Is it o.k. for dietetic technicians to give diet instructions? Are there any diets that they cannot instruct?" These questions indicate a lack of knowledge concerning the dietetic technicians. It is apparent that some dietitians have not reviewed the current Standards of Practice for either the dietitians or the dietetic technicians.
Dietitians that have hired dietetic technicians are generally very pleased with their skills and contributions. At present, there is a shortage of dietetic technicians, and many dietitians are seeking to add technicians to the dietetic department.

ADA has done much of late to promote the role of dietetic technicians as members of the dietetics team. Recent graduates of dietetic programs have worked with technicians as a part of their supervised practice and see the benefits of having technicians as a part of the dietetics department. These dietitians are not threatened because they understand the education and job responsibilities of the dietetic technicians. The newer dietitians will also delegate tasks to the dietetic technicians that are more consistent with their education and training. Many dietitians now see the dietetic technicians as the dietetic professionals better qualified for food service management. Dietitians, especially young dietitians, often prefer to work in clinical dietetics and to delegate food service management to the dietetic technician.

Dietitians currently employed need to up-date their knowledge concerning dietetic technicians. Technicians possess skills that can improve the efficiency of the dietitian. The dietitians need to show the technicians that they need and appreciate their professional contribution.

Some dietitians do view dietetic technicians as less-than a dietitian. These dietitians need to realize that we need paraprofessionals in the field of
135

dietetics. Without these paraprofessionals, many tasks which do not need the
skills of dietitians would become our responsibility.

Discussion of Literature Related to Theme Thirteen

Dietetic technician membership in ADA has increased from 130 in 1975 to
2,800 in 1996. The association has done much to enhance the job opportunities
for dietetic technicians. Role delineation studies have been conducted which
identify the skills performed by dietetic technicians in the work place, yet many
ADA members do not know what roles and responsibilities dietetic technicians
can perform. ADA has been aware of the problem and has addressed it in
several ways, striving to increase the visibility of the dietetic technicians both
internally and externally. Internally, each year the association honors both an
Outstanding Dietetic Technician and a Dietetic Technician Educator. Externally,
brochures have been developed to promote the career opportunities for dietetic
technicians. Letters have been mailed to potential employers promoting the skills
of the dietetic technician (Arena & Waters, 1997).

Bach's (1996) study of employers' perceptions of the roles of dietetic
practitioners states that some of the study participants were unfamiliar with
dietetic technicians. Those who were familiar saw them as a low-cost alternative
to dietitians to perform routine tasks. Some saw diet technicians as "room
service partners" who inquire about the food preferences, clean the room, and
contact person for the patient. Some viewed technicians as potential adders of
value by extending the dietitians' capabilities.
In a study by Lucas (1993), dietetic technicians indicated dissatisfaction with their current job description. Many technicians stated that they were prepared to do more in the clinical setting. Some technicians stated that the dietitians allowed them to do clerical and routine tasks but not nutritional assessments or other technical tasks that they had been trained to do. Others felt that a dietetic technician was a dead-end job with little chance for promotion. The salaries received by clinical diet technicians were seen as being inadequate when compared to other health care professionals with similar education such as licensed practical nurse.

A study (Gilmore, Maillet, and Mitchell, 1997) was conducted of educational preparation of dietetic technicians and dietitians and job expectations on the first placement. Forty-seven percent of competencies reported as taught in the educational program were not used in the first job placement. Most of the unused competencies were in community nutrition skills, not clinical or food service management. Considerable overlap was observed in the work of dietetic technicians and dietitians. The recommendations from this study need to be shared with the professionals within the profession of dietetics. The data suggest that educational programs make some revisions in curriculum to better meet the needs of the profession.

Educational programs need to be flexible in both curricula and methods. The programs for both levels of professionals need to emphasize critical thinking, problem solving, communication, and life-long learning. It also is recommended
that programs increase management skills. The dietetic professionals can expect more of recent graduates and help to promote teamwork between the dietetic technicians and the dietitians. Also, the career ladder for dietetic technicians who want to become dietitians needs to be improved (Gilmore, Maillet, & Mitchell, 1997).

Summary of Themes

The themes presented in this section provide support for my conclusions and recommendations presented in Chapter V. Each of the themes was grounded in the words of the students and preceptors. Their words provide a detailed description of situations, events, people, interactions, and behavior, which is the strength of qualitative research.
CHAPTER V
SUMMARY, CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

Summary

Internship was a required part of dietetic education. Dietetic educational programs for both the dietetic technicians and the dietitians required supervised field experience to meet the accreditation standards of the American Dietetic Association. Past studies, primarily quantitative in design, have focused on criteria for effective preceptors, criteria for acceptance and non-acceptance into an internship program, and the cost effectiveness of internships. Most of the studies reviewed were completed on the post-baccalaureate degree internship programs. Little research has been completed on dietetic technician programs. Only a few studies looked at the internship from the perspective of the student-interns.

This study was designed to look at internship from the perspective of students in a dietetic technician program. The methodology used was qualitative. Seven students and five preceptors participated in the study. The study was conducted over the ten weeks the students were in the internship site and the time prior to the internship when the students selected the internship site. Qualitative methods including journal writing; interviewing both before, during, and after the internship; and observation provided the students' perspective. The
preceptors' perspective were obtained from interviewing. The data obtained from all sources were transcribed and analyzed. Chapter IV provided the evidence for themes identified using the words of the students and the preceptors. It also provided a discussion and analysis of the data, which led to the themes identified in this chapter. The following themes were identified:

- Life goals including housing costs, employment opportunities and family commitments determined where students completed their internships;
- Students felt that it was advantageous to be assigned to a previously used internship site because the preceptors were experienced. Students relied on the program director to contact, set-up, and direct the internship but wanted contact with each other while interning;
- Students indicated that the first day of the internship set the stage for the entire experience. When it was positive, the students experienced a better internship;
- Despite the fact that I had provided the students with a list of possible topics for journal writing, entries focused on a list of tasks completed each day;
- Although students disliked food production, they were comfortable with food production because they seemed to know what to do and had to ask few questions;
- Students believed that the internship was the most valuable part of the college experience because they really learned how to apply the skills of a dietetic technician;
• Students expressed a dislike for employment in food service management because they did not feel capable of doing it and did not want the stress it generated. Most expressed a desire to work in the clinical areas of dietetics;

• Preceptors expressed positive feelings about having student interns but had difficulty in assessment and evaluation of the interns;

• Effective preceptors exhibited some common characteristics, such as patience, friendliness, kindness, approachability and availability to students, which increased their effectiveness as teachers;

• Students demonstrated excellent computer skills and taught the preceptors how to use the computer;

• Students reported that internship built their self-confidence and increased their motivation to seek employment;

• Preceptors stated that interns are an asset to the dietary department because they added to the department productivity and increased service to the customer;

• Dietetic technician interns stated that they have less status than did the dietitian within the profession, while dietitians stated that they did not understand the role of dietetic technicians.

Conclusions

The conclusions of this study are grounded in the collected observations of the dietetic interns and their preceptors. Internship was an important part of the education of the student. While in the internship the student developed the
skills of practicing dietetic technicians. It also built student self-confidence and helped to identify career areas of interest to the students as well as those of dislike.

Internship was also a benefit to the sponsoring health care institution. Benefits to the institution included the opportunity to learn new skills from the students, such as computer skills. It also allowed the health care institution the opportunity to complete projects and provided relief time for staff. Internship provided an opportunity for dietitians and dietetic technicians to learn about each other. Joint training of dietitians and dietetic technicians helped to increase the knowledge of dietitians regarding the role and training of the dietetic technicians.

Because internship was such an important part of the educational experience for the students it needed to be well organized. The primary responsibility for organization of the internship rested with the college faculty. Preceptors were experienced dietitians, not experienced educators. To be effective as educators, the preceptors needed to be trained and guided by the college faculty. Preceptors should be selected for their ability to demonstrate interpersonal skills and not only for their professional competence. An example of interpersonal skills was the organization of the students' first day at the internship.

Students were anxious, excited, and a little fearful when they began the internship. Some preceptors were sensitive to this and arranged a first day which reduced fears and made the students feel welcome. Health care facilities
which were familiar with student-interns were more sensitive to the needs of students and tended to have a day of orientation. It was important that the preceptors and the students understand that the students were in the facility to learn and the preceptors had a responsibility to facilitate the learning process. It was the role of the college faculty to assist the preceptors in setting up the experience. The college could not assume that the hospital or nursing home knew how to develop an internship or how to guide students.

Preceptors also needed training in evaluation of students. Evaluation was an important part of learning, but preceptors either did not want to do it or did not know how to fairly evaluate student performance.

Most preceptors enjoyed having a student. The students often have a high level of excitement and energy, which rejuvenates the preceptors, who made comments such as "I can remember being so excited about the job" or "It's fun to be around someone young and positive." Preceptors reported that students completed projects, planned community events and conducted training that the preceptor did not have time to do. Preceptors also stated that having a student increased their own learning. Students brought new information to the preceptor. Because the students were very recently in class, the materials brought to the site might be more current than that of the facility. This can help to update dietetic staff. Preceptors are asked questions, which caused them to review or dig deeper to find the answers. Students had access to college faculty and the college library and technology. This was useful to the internship site.
Students indicated that the use of an internship site previously used by the college was advantageous. Advantages to the student included an understanding of the goals of the internship, an understanding of the tasks typically completed by a dietetic technician, and familiarity with serving as a teaching hospital or teaching nursing home. This theme also supported the need for an internship site to be prepared for its role as an educational institution.

Students needed to be better prepared to learn in a non-classroom setting. The program director needed to explain the goals, expectations, and evaluation procedures used in the internship. The use of journal writing and reflection needed to be better explained before the student left campus. Students needed to learn how to be independent learners and not to rely on the hospital staff or the program director to direct their learning. Students indicated a desire to communicate with other students to increase their learning. This could be a part of the internship by having group meetings, chat rooms on the web, and having the students communicate with each other using e-mail.

Students used life goals, not career goals, when selecting an internship site. The overriding factor was location of the internship. Although this may be short sighted on the part of the students, there were reasons for this decision. The decisions were often made for social or financial reasons. All of the students in the study received financial aid, which was not available to students during the internship. Many students already had large amounts of loans and did not wish to add to the loan debt. Some of the students had jobs in their hometowns and
could work on a part time basis while interning. The internship was a major financial burden for students. The student did not receive a stipend or wages. The internship was full-time, 40 hours per week. The cost of room and board would have added substantially to this cost. The college must address how to help students meet the costs of internship.

Researcher Recommendations

The recommendations are directed at four separate groups: the college, the health care institution, the student, and the American Dietetic Association. The college was asked to take seriously its commitment to provide quality internships for students. The health care institution was asked to be more willing to accept and provide adequate training for students. The students were asked to be more open minded to the opportunities offered by the profession of dietetics. The American Dietetic Association was asked to improve the climate for dietetic technicians and to facilitate the development of a career ladder in dietetics.

Recommendations for the College

1. The college should provide resources for the development and supervision of the internship program.

Students have clearly identified benefits of the internship to their education. Colleges give "lip service" to the educational benefits of internships. At Prairie State all programs require internship for graduation. It is listed in campus promotional materials as a benefit of attending Prairie State, yet, the
The dietetic internship is much more developed and closely supervised than other internships programs on the campus, but there are still many problems. One is funding for the internship program. One visit from a supervisor is not really adequate. At least two visits are preferred, one at the beginning to facilitate in the set-up, and a second near the end. If the students or the preceptors are having a problem, then additional visits are needed. With the technology available at the campus, students should be able to contact the internship coordinator at the college using e mail and the World Wide Web. Because of the cost of summer rental of the computer, students rarely used the computer during the internship. This eliminated the possibility of contacting students using e mail.

The college does not allow the faculty release time to set up internships for students. Set up could include training for the preceptors in the expectations of the internship and providing tips on how to work effectively with students.
Ideally, the internship coordinator should go to each internship site before the student arrives to train the staff to work with students.

Evaluation of student-interns was difficult for the field-site. Teaching the staff how to evaluate students would be useful for both the students and the staff. The coordinator could help with appropriate scheduling of students, possible projects/assignments, and community out-reach experiences.

The funds available from financial aid for the internship program also need to be reviewed. Because the internship was only 4 credits, the student was not eligible for a financial aid as a grant or loan at PC. If the internship was of the perceived value in the educational process for the students, finances must be addressed. Internships in health care and education are typically not paid. Many of the programs within the college have a supervised work experience or cooperative education where the students do a specific job or projects and receives a wage. This was not the model for health care or education, and given the financial problems within both industries, I do not expect it to change. In fact, the trend in health care is for the health care facility to charge a fee to the student or the college for providing an internship experience.

My recommendations for the college are to provide financial aid for students in health care fields. This could be done by allowing them to register for 2 additional credits or by making an exception to the 6-credit rule for financial aid. The additional costs charged by health care institutions could be passed on to
the students in the form of fees. The fees charged would increase the amount of financial aide received by the students.

2. The college must develop clearly written goals, objectives, suggested learning activities and evaluation methods for each internship site.

   It should not be assumed that the health care institution knows what the students need to learn during the internship. The institution must be provided with a detailed outline of what was expected. If the internship coordinator from the college could bring the outline to the institution, many of the activities for the student-intern could be planned with the dietetic staff.

   The college had assumed, without evidence to support it, that the dietetic staff was effectively teaching and that the staff had the interpersonal skills to work effectively with students. Again, by having the internship coordinator work with the dietetic staff, many topics, including teaching techniques, mentoring, behavior modeling, counseling skills, and evaluation can be reviewed with the staff.

3. Care must be taken to insure that the health care institution are familiar with the Standards of Practice for the dietetic technician. The sites should have detailed knowledge of the Performance Requirements for the Dietetic Technician as delineated by the American Dietetic Association.

   The Council on Accreditation/Approval for Dietetic Education (CAADE) has recently revised the Standards of Practice for both dietitians and dietetic technicians. Dietetic practitioners may or may not be aware of these changes.
CAADE has also developed Knowledge and Performance Requirements for the Dietitian and the Dietetic Technician. These requirements are used to develop the registration examination for each level of practitioner.

If the internship sites are aware of the expectation for dietetic technicians from the American Dietetic Association, they would be better able to assist students in developing the skills needed. Many dietetic practitioners are unfamiliar with the expectations from CADDE for dietetic technicians, so the college should provide them before the institution agrees to accept student-interns. Wherever possible, health care institutions that employ dietetic technicians should be used for internship. The staff dietetic technician provided the student-interns with an appropriate role model.

4. The college should send only students who are prepared to an internship site. Students who lack the motivation, maturity and technical skills should not complete an internship. It should not be the responsibility of the field site to weed out unqualified students.

A method should be in place to identify students who are not ready for an internship. By sending students who are underprepared to an internship, both the site and the students are disserved. By having practicum experiences throughout the didactic training, the college staff should be able to identify students who need additional time and training prior to internship.

Students are poorly served and the college is poorly perceived by the health care facility if the students are not ready. The students need technical
skills, appropriate attitudes, a work ethic, communication skills, and a desire to learn to be successful on the internship.

**Recommendation for the Health Care Institution**

1. **The health care institution should encourage dietetic staff to participate in internship programs with area colleges.**

   The health care institutions receive many benefits from participation in the internship program. These benefits include an opportunity to update the skills of staff members, the chance for departments to work on projects, staff relief, community outreach; the chance to recruit employees, and the ability to influence the curriculum at the college. Too often health care institutions are unwilling to participate because of the time commitment and the potential cost in terms of staff time. These costs need to be weighed against the benefits to the institution.

2. **The health care institution should allow the dietetic staff time to work with the college staff in the development of effective internships.**

   Dietetic staff members are often willing to work with colleges. Some staff members realize that they need training in how to be an effective preceptor. Time was is very short supply in most health care institutions. Many departments are in the midst of down sizing and laying off staff. It is difficult, given these constraints, for the staff to be willing to budget time to developing an effective internship program.

   The college internship coordinator needs to be sensitive to the time constraints and to come to the facility prepared and organized. All materials
needed by the site should be presented to the health care facility in an organized manner. The site should be provided with easy access to the program director via, e-mail, telephone, and fax.

Recommendations to Students

1. Students should keep their minds open to all career opportunities when completing the internship.

Dietetics is a broad field with numerous career opportunities for a dietetic technician. Students come into the internship with preset notions of what their career will be. I completed an unpublished quantitative follow-up study of 1993-94 graduates from our college. Eleven students returned the survey. All eleven were employed—seven as clinical dietetic technicians, two as food service supervisors and two in public health nutrition. The positions accepted by these students did not necessarily reflect their interests in school. Too often students come into the profession of dietetics and want to work in clinical dietetics or a nutrition-wellness program. These positions may not be available or students' interests can change with time and experience. Several graduates' have stated, "I can't believe it, but I like management. When I was in school I only wanted clinical!"
2. **Students should take the responsibilities of the internship very seriously by being prepared and working hard because this will have a direct impact on future employment.**

Internship is not like other classes. It is similar to a work experience. Attendance is mandatory. Absences are always made up at the convenience of the field site. The work completed must be of high quality and cannot be just good enough. Inferior work will be re-done to meet the standards of the internship. The performance of students will impact the willingness of the site to accept future students. This transition from student to employee can be difficult, so students must be prepared.

When applying for a permanent position, the recommendations from the internship preceptor are as critical as recommendations from the dietetic technician program director. Students need to work to build a positive relationship with the internship site. Keeping samples of assignments and projects completed during the internship and including them in portfolio to demonstrate skills is essential.

The registration examination consists of questions related to both the didactic and supervised practice portions of students' education. The internship provided the supervised practice and students will be tested on this experience when they take the registration examination. The internship preceptors are aware of these competencies and will help the student-interns develop skills to pass the examination.
Recommendations for the American Dietetic Association

1. The ADA should continue to strengthen the identity of the dietetic technician within the organization.

   The ADA programs in place are helping to increase the visibility of dietetic technicians within the profession of dietetics. Most helpful in this awareness is the inclusion of internship sites where both the dietitians and the dietetic technicians are trained together so that all can learn about the education of the others. Dietitians trained with dietetic technicians see them as assets and not as threats.

   The profession needs to help professionals in other fields understand the education and training of dietitians, dietetic technicians, and dietary managers. Frequently hospital or nursing home administrators will advertise for a food service director and then state the qualifications as dietitian, dietetic technician or dietary manager. The education and training of these practitioners varies greatly. The dietary managers do not have classroom training and are educated on the job. The dietetic technicians have an associate degree, and the dietitians baccalaureate degrees. Both dietitians and the dietetic technicians have completed internships. The lack of knowledge about both the dietetic profession and the competencies of dietetic practitioners are a problem for the profession.

   Membership in the American Dietetic Association consists primarily of dietitians. In a follow-up survey conducted by Lucas (1993), only two of thirteen graduates were members of the ADA. In a survey I conducted of our graduates
in 1993-94, only two out of eleven graduates were members of the ADA. The reasons most frequently stated were the cost of the membership and the lack visibility with the organization. The comment I hear most frequently, "It's expensive and what does it do for me?"

ADA needs increased visibility to dietetic technicians and to build awareness of the benefits of membership. Dietetic technicians need to be included on committees within the organization.

2. **The ADA should continue to develop a career ladder in dietetics for dietetic technicians who desire to become dietitians.**

Eighteen percent of graduates from our college will eventually obtain baccalaureate degrees in dietetics. For many of these students it will be a difficult process. Average students will need to complete up to three years of additional college training. Articulation processes presently in place have been negotiated between colleges. ADA has not been involved in the process, but ADA does encourage educational programs to develop articulation procedures. Perhaps ADA needs to take a more active role in the process.

Martin (1992) states that one of the recruitment goals of the American Dietetic Association is to maintain high quality applicants for the dietitian educational programs. The pool of qualified students is declining along with population shifts and the declining number of high school graduates, especially in rural areas. Articulation from dietetic technician programs into baccalaureate degree programs could be one method of providing a pool of highly qualified
professionals to the profession. The present system which requires the technician to repeat courses taken and to do a full 900 clock hour internship discourages many from pursuing the education needed to become registered dietitians.

Not all technicians wish to become dietitians. Many purposely chose to be technicians and are happy in the position. For those students who wish to become dietitians, a better method should be developed to facilitate the career advancement in dietetics. ADA could provide leadership for this important topic.

Topics for Further Study

Dietetic education has focused largely on the education of the dietitian. Little research has been published on the education of dietetic technicians. One area for study concerning dietetic technicians is job satisfaction. Is the technician doing the job skills identified in the Standards of Practice for the Dietetic Technician? Another study could look at the attitudes of dietitians concerning dietetic technicians. Career ladder opportunities available in dietetics could be identified and evaluated by the American Dietetic Association. ADA could study the involvement of dietetic technicians within the association. Effective ways to increase involvement in the association also could be studied.

Dietetic technician programs have looked individually at the graduates' skills. Most programs conduct follow-up studies. Usually programs are interested in whether the students conclude they were prepared for their first jobs. Employers should also be surveyed to determine if employers were
satisfied with the level of preparation of the dietetic technicians. Are educators preparing the graduates adequately or are there areas of over and/or under preparation? The results of surveys within individual programs could be useful to other dietetic technician programs in planning and updating curriculum.

Program evaluation is needed to determine whether the program is meeting the goals of the profession and the needs of the student. Program evaluation in the baccalaureate and the associate degree dietetic programs has been limited. Evaluation has been the responsibility of each program, and little data are available in the literature concerning the effectiveness of the internship experience for either the dietitian or the dietetic technician (ADA, 1997). The American Dietetic Association accredits both baccalaureate degree and associate degree programs in dietetics. The association sets the standards of practice for each degree program in dietetic education and accredits those programs that meet these standards. Each program may be accredited for ten years after completing a self-study to continue as an accredited program. Program evaluation is included as a part of the self-study.

Each program typically looks at the following factors as a part of program evaluation:

1. The pass rate on the registration examination.
2. Evaluation by the graduates of program quality.
3. Evaluation by employers of graduates of the technical competence of the graduate.
4. Evaluation by students currently in the program.

The results of the evaluation are included in the self-study as one of several factors in determining if the program should continue to be accredited. The evaluation was typically completed by each educational institution and not by an outside agency (ADA, 1994).

Program evaluation data are generally limited to what can be quantified and statistically manipulated. Forms mailed to graduates and employers typically have a list of program outcomes. The graduates/employers rate the program elements on a Likert scale. Most forms have a place for comments, but it is difficult to quantify such data; so many programs do little with the information gathered. The reliance on statistical information limits the usefulness of the data to the program because it does not allow the opportunity for questions and explanations. This approach fails to describe the program from the students' perspective and focuses only on the outcomes. The study and evaluation of the dietetic technician programs is even more limited because the programs are relatively new and the number of associate degree programs is far less than the number of baccalaureate degree programs. Professional education has been subject to criticism for failure to produce graduates who have acquired the rudiments of effective and ethical practice (Schon, 1987). This is an area that evaluation could address.

Within the American Dietetic Association, CAADE has mandated that all dietitians received a minimum of 900 clock hours of supervised practice and
dietetic technicians receive a minimum of 450 clock hours of practice. The evaluation of supervised practice is very limited. Several studies described the studies looking at traditional internship programs for the dietitians; one study looked at a CUP program, but no studies have focused on the dietetic technician internship. Additional study of internships is needed.

The role of the dietetic professionals in food service management is also worthy of further study. The number of dietitians employed in food service management positions has decreased. Food management companies often hire institutional management or restaurant management professionals to direct hospital dietetic departments. Why are dietitians choosing these management positions? Should dietetics include food service management? Food service directors in nursing homes are often dietetic technicians or dietary managers. The food service director is often seen as an administrator which requires management skills. Is it appropriate for these positions to be filled by dietetic professionals with less than baccalaureate degrees?

Many of the topics for further study could be completed using a qualitative method of research. There are advantages to looking at problems within dietetics using more than numbers and statistics. One of the most valuable studies I read in researching this paper was a qualitative study on dietetic preceptors (Gates, 1995). I have not found any additional studies using a qualitative format. I am hopeful that dietitians will see the value of looking at a
situation within dietetics using an inductive method of inquiry and utilizing qualitative methods.
The American Dietetic Association (ADA) is the largest professional organization for food and nutrition professionals. It has over 69,000 members. The ADA is the advocate for the dietetics profession.

The Commission on Accreditation/Approval for Dietetic Education (CAADE) set the Standards of education for entry-level dietetics education and is the accrediting body for the ADA. CAADE is the only accrediting agency for dietetic education recognized by the United States Department of Education.

The Commission of Dietetic Registration (CDR) is the credentialing agency for the ADA. CDR is a member of the National Commission for Certifying Agencies (NCCA). CDR certifies that registered dietitians and registered dietetic technicians have met, maintained, and continued to advance their professional skills.

Coordinated Program in Dietetics (CUP or CP) is a program designed to include the supervised practice as a class within the baccalaureate degree program. The baccalaureate degree is awarded when the student has completed both the didactic and supervised practice components of the educational program. This is followed by the registration examination.
Dietetic Technician program includes a wide variety of topics in food, nutrition and management in addition to course work in physical and biological sciences, behavioral and social sciences, and communications. The academic preparation is combined with supervised practice and leads to an associate degree from an institution that is accredited by CAADE of the American Dietetic Association. The program has been designed to provide 450 hours of supervised experience as either an internship and/or practicum. It is similar in design to the CUP or CP program for the dietitian.

Dietitians are trained in food, nutrition, and management with additional courses in physical and biological sciences, behavioral and social sciences, and communication. The program is either combined with supervised practice or is followed by an internship. The program is accredited or approved by CAADE and leads to a baccalaureate degree. The program has been designed to provide a minimum of 900 hours of supervised practice as either an internship and/or a practicum.

Field site refers to the institution where the student is completing the internship. It could be a hospital, nursing home, or public health agency.

Internship is typically completed after the baccalaureate degree in a program for the dietitian. Internship is also used to refer to the full-time experience completed by the dietetic technician. In the technician program this is the last experience for the student before graduation.
Preceptor is the on-site person with responsibility for the student. In a CUP program this is typically an instructor from the college. In an internship program it is the dietitian at the field site that is responsible for the interns. The preceptor is a member of the professional staff of the field site.

Registration Examination can be taken by the dietitian and the dietetic technician after they have completed the didactic and supervised practice requirements of their respective programs. Only graduates from programs approved or accredited by CAADE are eligible to take the registration examination. Dietitians who pass the examination are referred to as "registered dietitians" or "R.D.". Dietetic technicians who pass the examination are referred to as "dietetic technicians, registered" or "DTR.". Continuing education is required to maintain registration.

Supervised practice or practicum is the work experience in the coordinated program in dietetics (CUP) and the coordinated portion of the dietetic technician program. This is typically completed while the student is also taking didactic courses. It is completed at the field agency usually under the supervision of the faculty from the college. It generally is completed over several semesters. The number of hours increases weekly as the student moves through the program.
APPENDIX B
CONSENT FORM FOR STUDENTS
A Qualitative Study of Dietetic Students Completing Supervised Practice in a Dietetic Technician Program

Description of the study:
The Purpose of the study is to learn how you and your supervisor perceive the supervised practice experience (internship). The study will consist of interviews of you and your supervisor during and following the internship. You will also be asked to keep a journal of your daily activities. The journal will be transcribed but I will change your name so no one will be able to identify you from your journal writings. I may quote you in my dissertation but the quotes will not be attributable to you or the internship site. The major risk to you as participant is confidentiality and I will minimize the risks by the methods I have described. If you choose not to participate it will not effect your grade of your graduation from the dietetic technician program at the University of Minnesota, Crookston.

Agreement:
I agree to participate in a qualitative study during my internship Spring semester 1998. I understand that the researcher will observe me in the internship field site and will interview me at least twice times during the semester. I understand that the interviews will be taped and that the tapes will be transcribed. I will have an opportunity to review the transcribed tapes for accuracy. I understand that all of these materials will be kept in a secure place and that my name or any information that could be used to identify me will not be disclosed. I understand that following the study, all materials will be kept for three years and than destroyed. I also understand that any material gathered will in no way be used by my instructor to grade or evaluate my performance at the internship site. I understand that at any time during the study I may contact the researcher or the advisor by phone of e-mail with questions or concerns.

____________________________________________________________
signed, name

____________________________________________________________
date

Researcher:
Sharon Stewart M.S., R.D.
University of Minnesota, Crookston
Crookston Mn, 56716
Telephone Number 1-218-281-8202
Email sstewart@mail.crk.umn.edu

Advisor:
Dr. Janet Ahler
Education and Human Development
University of North Dakota
Grand Forks, North Dakota 58201
Telephone: 1-701-777-3158

162
APPENDIX C

CONSENT FORM FOR SUPERVISORS

A Qualitative Study of Dietetic Students Completing Supervised Practice in a Dietetic Technician Program

Description of the study:
The Purpose of the study is to learn how you and your intern perceive the supervised practice experience (internship). The study will consist of interviews with you and your intern during and following the internship. The interview will be taped and transcribed. I may quote you in my dissertation but the quotes will not be attributable to you or the internship site. The major risk to you as participant is confidentiality and I will minimize the risks by the methods I have described. If you choose not to participate it will not effect future participation in the internship program at the University of Minnesota, Crookston.

Agreement:
I agree to participate in a qualitative study during Spring semester 1998. I understand that the researcher will observe a student in the internship field site and will interview me once during the semester. I understand that the interviews will be taped and that the tapes will be transcribed. I will have an opportunity to review the transcribed tapes for accuracy. I understand that all of these materials will be kept in a secure place and that my name or any information that could be used to identify me will not be disclosed. I understand that following the study, all materials will be kept for three years and than destroyed. I understand that at any time during the study I may contact the researcher or the advisor by phone of e-mail with questions or concerns.

Signed, name

Date

Researcher:
Sharon Stewart M.S., R.D.
University of Minnesota, Crookston
Crookston Mn, 56716
Telephone Number 1-218-281-8202
Email ssstewart@mail.crk.umn.edu

Advisor:
Dr. Janet Ahler
Education and Human Development
University of North Dakota
Grand Forks, North Dakota 58201
Telephone: 1-701-777-3158
APPENDIX D

INTERNSHIP QUESTIONNAIRE

In a journal format please respond the following questions during you internship experience:

What do you want to learn while at the field site?

Did you receive a schedule prior to starting the internship?

Who do you report to? Do you shadow other workers?

How do the other workers treat you? Do you feel like they want to help a student?

What areas do you feel like you need to be better prepared to do a good job?

Does anyone tell you how well you are doing? It written or oral form? Is it helpful?

Do you feel like learning new things? Do you feel like you are just another worker?

Are you able to ask the supervisor for additional assignments or to change assignments?

How could this be made a better experience for you?

Does the supervisor have the same expectations of you as she would have of a dietitian?
REFERENCES


Erickson, F. (1986). Qualitative methods in research on teaching. In M. C. Wittrock (Ed.), Handbook of research on teaching (3rd ed.) (pp 119-161). New York: Macmillan.


University of Minnesota Crookston Catalog, 1996-98.

