

ANALYSIS OF THE FOODSERVICE SYSTEMS MANAGEMENT
COMPONENT OF THE AMERICAN DIETETIC
ASSOCIATION PLAN IV
ACADEMIC PROGRAMS

By
DOROTHEA CLARA JESKE
Bachelor of Science
University of Arkansas
Fayetteville, Arkansas

1979

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
MASTER OF SCIENCE
December, 1983

Thesis
1983
J58a
cop. 2



ANALYSIS OF THE FOODSERVICE SYSTEMS MANAGEMENT
COMPONENT OF THE AMERICAN DIETETIC
ASSOCIATION PLAN IV
ACADEMIC PROGRAMS

Thesis Approved:

Lee L. Ebo

Thesis Adviser

Esther Winterfeldt

W. M. W. W.

Charles B. B. B.

Norman D. Durham

Dean of the Graduate College

ACKNOWLEDGMENTS

Appreciation is expressed to those who assisted in the completion of the thesis and the graduate program of the author. Special and sincere thanks are extended to Dr. Lea L. Ebro, my adviser, for providing guidance, encouragement and the right perspective. The thesis committee deserves credit for their insights invaluable suggestions and assistance: Dr. Esther Winterfeldt, Professor and Head, Food, Nutrition and Institution Administration; Dr. G. Baker Bokorney, Professor and Director, School of Hotel and Restaurant Administration; and Dr. William D. Warde, Associate Professor, Statistics Department.

The interest and enthusiastic support of family members and friends, too many to mention, are gratefully acknowledged. Special thanks are extended to Faria Emamian for his warm friendship, loyalty and concern.

Finally, the writer expresses her deepest appreciation and love to her parents, Bertha and Robert Jeske, staunch supporters, whose inspiration and immeasurable moral support made this endeavor a reality.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Purpose and Objectives.	4
Assumptions	6
Limitations	7
Definitions	7
II. REVIEW OF LITERATURE	13
Dietetic Education.	13
Early Dietetics.	13
Dietetics is Created	17
Formal Dietetic Education.	19
Education Standardization.	23
Additional Relevant Opportunities and/ or Advancements in Dietetic Education.	30
Toward Competency Based Education in Undergraduate and Postgraduate Programs	33
Competencies in Allied Health Professions	41
Professional Standards.	42
Evaluation, Registration, Licensure and Certification	48
Summary	51
III. RESEARCH METHODS AND PROCEDURES.	53
Research Design	54
Sample.	54
Data Collection	56
Planning and Development	56
Instrumentation.	56
Survey Procedures.	58
Data Analysis	58
IV. RESULTS AND DISCUSSION	59
Percentage of Response to Survey Questionnaire	59
Implementation and Evaluation of Food- service Management Competencies in the Dietetic Programs	63

Chapter	Page
Comprehensive Course Titles	63
Foodservice Systems Management	63
Advanced Foodservice Systems Manage- ment	64
Quantity Food Production Management.	64
Insitiution Organization and Manage- ment	64
Field Experiences.	65
Average Number of Foodservice Systems Management Faculty and Full-Time Equivalents Employed In Plan IV Programs.	104
Experience of Faculty and Staff In Teaching and Administrative Foodservice	115
Number, Academic Level and Frequency Distribution of Courses	117
Field Experience(s) of Students in Plan IV Programs.	120
Laboratory Locations and Extra Laboratory Charges	123
Textbooks Utilized.	123
Quantity Food Production Management.	125
General Management	126
Purchasing	126
Equipment.	126
Faculty Degree Attainment and R.D. Status Concomitant to Teaching Lecture and/or Laboratories.	126
Sequence of Foodservice Systems Management Courses	127
"Dress Code" for Foodservice Systems Management Laboratories	129
Course Credits.	130
V. SUMMARY, RECOMMENDATIONS AND IMPLICATIONS.	133
Recommendations	134
Implications.	135
A SELECTED BIBLIOGRAPHY	136
APPENDIXES.	150
APPENDIX A - RESEARCH INSTRUMENT	151
APPENDIX B - CORRESPONDENCE.	156
APPENDIX C - LABORATORY FEE ASSESSMENT IN TRADITIONAL PLAN IV UNDERGRADUATE PROGRAMS.	159

LIST OF TABLES

Table		Page
I.	Percentage of Response to Survey Questionnaire	61
II.	Implementation of Foodservice Systems Management Competencies in Traditional Plan IV Programs	66
III.	Implementation of Foodservice Systems Management Competencies in Coordinated Undergraduate Programs.	85
IV.	Evaluation of Attainment of Foodservice Systems Management Competencies in Traditional Plan IV Programs	95
V.	Evaluation of Attainment of Foodservice Systems Management Competencies in Coordinated Undergraduate Programs	105
VI.	Average Number of Foodservice Systems Management Faculty and Full-Time Equivalents Employed in Plan IV Programs	108
VII.	Rank of Faculty and Staff Teaching Foodservice Systems Management Courses and Laboratories.	110
VIII.	Position Titles of Faculty and Staff Teaching Foodservice Systems Management Courses and Laboratories	112
IX.	Highest Degree Level Attained by Foodservice Systems Management Faculty	113
X.	American Dietetic Association Registration Status of Faculty.	114
XI.	Experience of Faculty and Staff in Teaching and Administrative Foodservice	116
XII.	Number of Foodservice Systems Management Courses Offered.	118

Table	Page
XIII. Level of Courses in Foodservice Systems Management	119
XIV. Field Experiences of Students in Plan IV Programs	122
XV. Types of Laboratory Facilities Where Foodservice Systems Management Courses Are Taught.	124
XVI. Degree Attained and R.D. Status of Faculty In Both Program Types Teaching Lecture and/or Laboratory at the Different Levels of Food- service Systems Management Courses	128
XVII. Acceptance of Course Credits From Other Institutions	131

LIST OF FIGURES

Figure	Page
1. Conceptual Framework of Research Variables. . . .	55
2. Average Number of Lecture and Laboratory Hours in Foodservice Systems Management Courses . . .	121

CHAPTER I

INTRODUCTION

Socrates was killed by the ancient Athenians in 399 B. C. primarily for the alleged cause of being a corruptor of the youth through his teachings. Even preceding that time period, academicians who were and those who are today concerned about educational transformations have been caught in the continuing dilemma of developing curricula which reflect state-of-the-art practices. The curriculum plans must present to the students a solid base of time-tested seemingly factual information with conceptual and/or theoretical reasoning skills. A reasonable combination of these two entities, factual data and conceptual reasoning skills, needs to be formulated in order that the students may acquire the intended capability of dealing with the unknown, ever changing future (Perkinson, 1980).

Centuries of debate to date still have not produced any proven best philosophy on teaching rationale. Teachers are not the only group that have recognized this problem. Students also have shown a deep concern for being well prepared for meeting the requirements of the working world (Wuellner, 1982; Norton, 1980). Two beliefs are now widespread. First, periodic reevaluation of foundational

teaching processes are necessary in order that graduating students will have the basic competencies demanded of them as new professionals in their career fields. Second, the reevaluation is mandatory in order that students will not have been taught menial techniques dooming them to rapid obsolescence (Lewis, 1982; Bell, 1976; Chambers, 1975; Comm. on Goals of Education for Dietetics, Dietetic Internship Council, 1969).

Education in the science and art of dietetics has had to be modified as technological advances and societal needs so dictate. Dietetics had as its roots the cooking schools of the late 1800's. Soon the field began to become more structured with the advent of undergraduate academic degree programs. Traditionally, persons who wanted to train to be dietitians would successfully complete an undergraduate academic degree program in dietetics followed by a dietetic internship. During the early 1960's the coordinated undergraduate program (hereafter may be referred to as "CUP") came into existence. This educational route integrates clinical experiences into the undergraduate academic plan of study. Other means of preparation for professional practitioners have included the bachelor's degree followed by a dietetic traineeship (program discontinued in 1979), or master's degree with approved work experience, or doctorate degree. Today the search continues for the most viable means of preparation for professionals in the field of foodservice management.

There are several reasons why this research is needed. First, there is the need for determining how competencies are taught to and developed by students in preparation for foodservice management responsibilities. Second, there is not a particular predetermined standard and/or method established for how foodservice management lecture and laboratory activities are implemented, facilities where experiences are provided, and how supervision is performed. Third, there is a lack of analysis of the perceived level of desirability or necessity for students to obtain field work experience. Finally, analysis needs to be made to how attainment of foodservice systems management competencies are evaluated. The current status of each of these factors needs to be assessed.

Information obtained from conducting this research will hopefully be useful to dietetic educators. The ascertained data could be an aid to formulating and/or restructuring the organization of curriculum plans for foodservice systems management components. The data concomitant to course organization derived from this research could probably be adapted to the specific needs of individual educational institutions; therefore, the findings from this survey may be used by educators in guiding or directing students through their undergraduate academic preparation. It is hoped that further results of this research will be helpful to professional organizations, foodservice institutions, and the foodservice industry in

general. This may be possible by making available to them a solid base for reference as to what in actuality constitutes the foodservice systems background of the professional, university-trained dietetic practitioner.

Purpose and Objectives

The purpose of this research is to discover how the foodservice management competencies in the Plan IV academic requirements of The American Dietetic Association are implemented and how their attainment is evaluated in the dietetics curricula of the traditional Plan IV approved programs and the Coordinated Undergraduate Programs in the United States.

Specified objectives in this study include:

1. To determine the titles and types of courses where foodservice management competencies are taught.
2. To determine the percentage of time in each course where foodservice management competencies are taught.
3. To determine how competency attainment is evaluated.
4. To discern characteristics of faculty and others responsible for teaching the foodservice management competencies. These include:
 - a. Title
 - b. Rank

- c. Highest degree attained
 - d. Registration status
 - e. Post-secondary teaching experience
 - f. Foodservice management teaching experience
 - g. Foodservice management administrative experience
5. To discern the course characteristics where foodservice management competencies are taught. These include:
- a. Number of credit hours
 - b. Level
 - c. Number of lecture hours
 - d. Number of laboratory hours
 - e. Where labs are taught
 - f. Lab fee assessed
 - g. Textbooks used
6. To discern program characteristics of traditional Plan IV programs and Coordinated Undergraduate Programs in dietetics associated with the foodservice management competencies. These include:
- a. Area(s) of emphasis
 - b. Degree(s) granted
 - c. Enrollment
 - d. Internship applications/appointments
 - e. Full-time equivalents (FTE) of foodservice management faculty/staff
 - f. Course sequence

- g. Description of Quantity Food Production Management course laboratory facility or facilities
 - h. "Dress code" requirements for foodservice management laboratory courses
 - i. Transfer course credit acceptance
 - j. Course exemption due to prior work experience
 - k. Summer work experience or work experience not directly connected with another course as a requirement.
 - l. Credit hours awarded for work experience not directly connected with course
7. To make recommendations for further research concomitant to foodservice systems management education.

Assumptions

These statements were accepted as true for this research:

1. Program representatives for the approved traditional Plan IV programs and the program directors for the approved Coordinated Undergraduate Programs as listed in the 1983 Directory of Dietetic Programs published by the American Dietetic Association are knowledgeable about the information being requested of them.

2. The approved plans of study on file at The American Dietetic Association are the plans of study being fol-

lowed at the institutions.

3. Respondents to the survey will answer the questionnaire with responses of actualities not idealisms, objectively, and without bias.

Limitations

The following were recognized as limitations in this study:

1. The Directory of Dietetic Programs for 1983, published by the American Dietetic Association, was the source of the sample population.

2. Generalizations that are based on the findings of this research will be applicable only to the sample surveyed.

Definitions

1. Administrative Dietitians: apply the principles of nutrition and sound management to large-scale meal planning and preparation, such as that done in hospitals, prisons, company cafeterias, schools, and other institutions. They supervise the planning, preparation, and service of meals; select, train and direct food service supervisors and workers; budget for and purchase food, equipment, and supplies; enforce sanitary and safety regulations; and prepare records and reports. Dietitians who are directors of dietetic departments also decide on departmental policy; coor-

dinate dietetic services with the activities of other departments; and are responsible for the dietetic department budget, which in large organizations may amount to millions of dollars annually. (U.S. Department of Labor, p. 160, 1982)

2. American Dietetic Association, The (ADA): A professional organization responsible for establishing educational and supervised clinical experience requirements and standards of practice in dietetics. (American Dietetic Association Reports, p. 66, 1981)
3. Competency: The minimum knowledge, skills, affective behavior, and/or judgment which a person is certified to possess on a set of criteria and level of expectation. (Bell, p. 133, 1976)
4. Coordinated Undergraduate Dietetic Program: (established in 1962): The coordinated undergraduate dietetic program is a formalized baccalaureate educational program in dietetics sponsored by an accredited college or university and accredited by The American Dietetic Association. The curriculum is designed to coordinate didactic and supervised clinical experiences to meet the qualifications for practice in the profession of dietetics. (American Dietetic Association Reports, p. 66, 1981)
5. Dietetic Intern: Performs supervised duties in planning and directing food service programs for specified length of time to gain practical experience immediately

following graduation from a university, as an additional qualification for employment as DIETITIAN. (U. S. Department of Labor, p. 61, 1977)

6. Dietetic Internship (established in 1927): The dietetic internship is a formalized, post-baccalaureate educational program in dietetics sponsored and conducted by an organization and accredited by The American Dietetic Association. The curriculum of the program is designed to provide didactic and supervised clinical experience to meet the qualifications for practice in dietetics. (American Dietetic Association Reports, p. 66, 1981)
7. Dietetic Student: A person who is enrolled in an undergraduate coordinated dietetic educational program accredited by The American Dietetic Association to fulfill the academic educational and the didactic and supervised clinical experience requirements to become a practicing dietitian. (American Dietetic Association Reports, p. 67, 1981)
8. Dietetic Trainee: A person who has completed the academic requirements of professional education in dietetics and is enrolled in a dietetic traineeship approved by The American Dietetic Association to fulfill the didactic and supervised clinical experience and educational standards to become a practicing dietitian. (American Dietetic Association Reports, p. 67, 1981)
9. Dietetic Traineeship: (established in 1973): An in-

dividualized, post-baccalaureate educational program in dietetics sponsored by an organization and approved by The American Dietetic Association. Each program is designed to provide didactic and supervised clinical experiences to meet the qualifications for practice in the profession of dietetics. The approved preplanned experience program was the forerunner of the dietetic traineeship. (American Dietetic Association Reports, p. 66, 1981)

10. Field Trip: 1. A trip by students to gain first-hand knowledge away from the classroom, as to a museum, factory, geological area, a region where certain plants and animals may be found, etc. 2. A trip by a scholar or researcher to gather data first-hand, as to a geological, archaeological, anthropological, or other site. (Random House Dictionary, 1971)
11. Fieldwork: Work done in the field (as by students) to gain practical experience through firsthand observation. (Webster's Third New International Dictionary, 1976)
12. Foodservice Systems Management: **SYSTEMS**: An array of components formed into a unified whole to perform a systematic, purposeful activity. When used in connection with food service, it would be the components that make up the production and service of food. **MANAGEMENT**: The process of achieving desired results by the effective use of human effort and facilitating re-

sources. (American Dietetic Association Reports, p. 67, 1981)

13. Plan IV, Minimum Academic Requirements for A.D.A. Membership: Approved as a pilot program in 1970 and officially became effective July 1, 1972. Academic requirements for Plan IV are expressed in terms of knowledge areas and basic competencies rather than mandating specific courses and semester hours of credit. The intent of this plan is to provide a conceptual framework which permits freedom and flexibility for the development of curricula and courses by individual institutions. (Chambers, p. 598, 1978)
14. Profession: A career requiring specialized knowledge and intensive preparation, including instruction in skills and methods, as well as in scientific, historical, or scholarly principles underlying such skills and methods, maintaining by force of organization or concerted opinion high standards of achievement and conduct, and committing its members to continued study and to a kind of work which has for its primary purpose the rendering of a public service. (American Dietetic Association Reports, p. 67, 1981)
15. Professional Education: A prescribed program of study and experience to develop competence in the practice of a profession, social understanding, ethical behavior, and scholarly concern. (American Dietetic Association Reports, p. 67, 1981)

16. Registered Dietitian (R.D.): A specialist educated for a profession responsible for the nutritional care of individuals and groups. This includes the application of the science and art of human nutrition in helping people select and obtain food for the primary purpose of nourishing their bodies in health or disease throughout the life cycle. This participation may be in single or combined functions; in foodservice systems management; in extending knowledge of food and nutrition principles; in teaching these principles for application according to particular situations; or in dietary counseling. This dietitian has also successfully completed the examination for professional registration and maintains continuing education requirements. (American Dietetic Association Reports, p. 63, 1981)
17. Specialization in Dietetics: Three basic branches of dietetic practice: clinical, management of food service systems, or community dietetics, each requiring defined competencies. Generalist programs include education in all three basic branches of dietetic practice. (American Dietetic Association Reports, p. 67, 1981)

CHAPTER II

REVIEW OF LITERATURE

Dietetic Education

Early Dietetics

Dr. E. Neige Todhunter presented a toast to the dietetic profession at the Third International Congress of Dietetics. (Todhunter, 1961) Opening comments in the toast related to who the patron saints and founders were of health professions. It was noted that dietetics does not have any one particular founding father; her origins are, in fact, a little hazy.

This young profession probably has the longest gestation period known to any profession. Babylonian clay tablets of 2500 B.C. were inscribed with details about food. Pythagoras of ancient Greece advocated exact measurement of food and drink. Hippocrates taught the value of a simple diet as the best way to cure disease; and in like manner, we can trace dietetic references throughout history.

But the profession of dietetics was born in modern times. Biologic sciences and food technology were the midwives, and the period of labor was long and not without complications! However, the lusty infant profession has had a vigorous growth - and why not? Of all groups, it knows the secret of health - proper diet! (Todhunter, p. 337, 1961)

She continued:

Our's is a profession dedicated to the service of mankind, firmly grounded in science, and practiced with all the art and skill of human understanding. May our profession continue to grow in knowledge, wisdom, and service with the years! (Todhunter, p. 337, 1961)

Indeed, the profession of dietetics is a relatively modern art and science. Florence Nightingale, who is usually considered the founder of nursing, may have been one of the first persons to fill a role similar to a dietitian's role. In 1854 Florence Nightingale was in charge of serving cooked food to nearly one thousand men each day at an English military hospital.

This was one of the earliest demonstrations of the need for organization and supervision of the kitchen for the careful and adequate feeding of the sick. (Lipscomb, p. 103, 1966)

The American Medical Association appointed a "Committee on Dietetics" in 1887. A challenging question was then asked: "Which American college will be the first to have a Professor of Gastronomy, or, if preferred, of Dietetics?" (Huddleson, p. 575, 1947)

For centuries prior to this, diet therapy had been practiced. Knowledge about planning food for the sick and skill in its preparation was handed down from generation to generation. (Gilson, 1947) In addition, this information was thought of as an important part of training given in the home. It was not until the 1870's that food clinics in conjunction with medical care began to emerge. The Diet Kitchen Association in New York City started in 1873 when physicians sought help from prominent women in helping

destitute families secure nourishing food.

In 1874 The Boston Dispensary, which had been organized in 1798, 'to give medical advice to the sick poor,' arranged with the South End Diet Kitchen for nourishing food for certain patients. (Gilson, p. 761, 1947)

During the 1870's the concept of cooking schools also came into existence. It seems almost indisputable that the cooking schools of the 1870's, 1880's, and 1890's were instrumental in creating an interest for the profession of dietetics.

Juliet Corson opened the New York Cooking School, which is believed to be the first of it's kind, in the mid-1870's. (Gilson, 1947) The curriculum consisted of a series of lessons covering food preparation techniques. The cost of the lessons is reported to have been

. . twelve lessons at a price of \$1 per lesson or twelve for \$10. Private lessons were given at \$1 each, and the student furnished the materials and disposed of them after the lessons. (Shircliffe, p. 776, 1947)

In 1878 the New Century Cooking School opened, having as a student in it's first class Sara Tyson Rorer. (Rorer, 1934) She reported that "the full course" had

two practical lessons a week for three months and a course of twenty-four demonstrated lectures. (Rorer, p. 290, 1934)

Later Ms. Rorer founded the Philadelphia Cooking School. We are able to note the difference in curricula when we read of one of Ms. Rorer's student's accounts. M. G. Byerly relates that she enrolled in Ms. Rorer's "Normal Course" in cooking in 1891. Of her experiences she writes

that the course consisted of little theory

and we had not made the acquaintance of calories, vitamins, etc. We learned of food values and of proteins, carbohydrates, etc. We had ten lectures on chemistry and several on physiology and hygiene and we were taught that diabetic patients must avoid sugars and starches and nephritic patients must avoid proteins. We were taught to cook, and to cook well. (Byerly, p. 166, 1926)

She continues:

We had ten lessons on cooking for the sick and emphasis was laid on attractiveness of trays and color schemes. Then we were examined and received our diplomas, and my classmates started out to lecture and to teach. (Byerly, p. 166, 1926)

It was common practice for these graduates of cooking schools to educate nurses for the task of meal preparation for the sick. (Byerly, 1926; Domitilla, 1927; Lipscomb, 1966)

It is believed that the first time cookery was offered as a portion of a college course was at Iowa Agricultural School at Ames in the mid-1870's. (Shircliffe, 1947) People who have analyzed educational opportunities for women have recognized that progress has been evident only within a relatively recent era.

Until modern times, the growth of education for women has been a slow and gradual development. During most of history, women were under the control of father, husband, or some other male relative, and their education was generally confined to training in the home for home activities. It is difficult for you, today, to realize that there were very few women graduating from professional schools prior to 1920. (Porter, p. 876, 1947)

"Dietetics" is Created

A lesson in the orthography of the word "dietitian" and synonymous terms is useful. An editorial indicates that there has been confusion in the past as to the acceptable terminology. Some of the terms reportedly used in the past included: "dietist," "dietician," "dietetics" (defined as a branch of medicine in Hooper's Medical Dictionary, 1839 - but no designation given for one who specializes in this), "dietarian" (defined as a physician in Gould's Medical Dictionary, 1897), and "dietetist" (defined as an expert "dietarian"). (A Lesson In Orthography, p. 218, 1929) In September 1899 the designation of dietitian was initially used at the Lake Placid Conference on Home Economics. (Johnson, 1974) Dietitians were already making valuable contributions to the health care field by the time the eighth Lake Placid Conference was held in 1906. However, at that time "controversy about the term 'dietitian' raged." (Todhunter, p. 618, 1958) We read

The members of the Conference said there was need to find a better term than 'dietician' for the institutional food expert, as all terms based on the word 'diet' implied a hospital atmosphere. Several terms were suggested; 'eufagist (euphagist)' would mean the eater rather than the provider; 'dietist,' the main entry with 'dietician' as a variant; and 'refectioner' as the correlative of the revived word, refectory. 'Refector' was proposed as shorter and better formed. Nothing was agreed upon, however, and suggestions for a better word were requested. (Lipscomb, p. 105, 1966)

By 1931, a committee of the American Dietetic Association reported that the official definition of the term

"dietitian" was

any person who is qualified for membership in the American Dietetic Association is, by virtue of uniform basic training and required experience entitled to be designated as a 'dietitian'. (Official Spelling and Definition of the Term 'Dietitian,' p. 350, 1931)

Their definition continued by delineating the various capacities in which dietitians were being employed. Sporadically thereafter the definition of a dietitian had to be revised as conditions and expectations changed. (Feeney, 1930; Current Comment, 1933; Mitchell, 1936; Current Comment, 1943; Editorial, 1946; Dictionary of Occupational Titles, 1955; Dictionary of Occupational Titles, 1959; Dietitians and Nutritionists Defined, 1960; More Definitions of Dietitians, 1960; Who Are Nutritionists?, 1960; Comm. on Goals of Education for Dietetics, Dietetic Internship Council, 1969; American Dietetic Association Reports, 1981)

An outcome of the eight Lake Placid Conferences was the establishment of the American Home Economics Association (AHEA) in 1909. Since its inception, AHEA has been concerned about dietetics. (Lipscomb, 1966; Chambers, 1978) Members of the Institution Administration Section of the AHEA felt the need

for a conference to formulate a plan for dietetic communication and to consider means by which dietitians could best serve the war needs, both at home and overseas. (Horton, p. 17, 1982)

Thus, such a conference was held in October 1917 from which the American Dietetic Association (ADA) was founded. As

Mitchell stated in her presidential address:

The American Dietetic Association was organized in 1917 by a group of women who anticipated the growing demand for persons trained in the science of nutrition and the art of feeding people. (Mitchell, pp. 293-294, 1936)

During the early years of the ADA, membership requirements were not restrictive. The second president of the ADA is reported to have said that a white uniform qualified you for ADA membership. (Horton, 1982) Annual dues were one dollar, payable by anyone wishing to claim membership in the association.

Early membership cards reveal male members, not dietitians, some of whom had business connections with ADA, were exhibitors, wanted to give, support, or just liked being with the girls. These men were members for a few years and then dropped their membership. (Horton, p. 18, 1982)

In later years, membership in the ADA became contingent upon meeting educational requirements.

Formal Dietetic Education

Commitment to the education of its members and of those preparing to enter the profession of dietetics has been a characteristic of the ADA throughout its history. Four sections were provided for by the first constitution, one of which was a section on education. (Johnson, 1949) Since the first volume of the Journal of the American Dietetic Association concern has been expressed about the need for ". . . well organized intensive and progressive instruction. ." (Morgan, 1926) The same author noted that the

bachelor's degree granted after "the four year college course" was just beginning to be generally recognized as the standard training for dietitians. Of that undergraduate education, Morgan wrote:

No practical medical man who is abreast of the times can any longer believe that fundamental training in the pure sciences, particularly in chemistry, physics, physiology and bacteriology is unnecessary in the education of the dietitian as well as of the physician. The dietitian who shows a clear and sound understanding of these principles and a first hand acquaintance with these laboratory practices will command the respect and the cooperation of the medical men with whom she works in a way impossible to the untrained worker. The dietitian must speak the language and practice the suspended judgment of the scientists whose findings she is using practically before she can hope to be counted among those who rank with officers in the medical army. (Morgan, p. 175, 1926)

Other early dietetic authors related associated educational concerns. At the annual business meeting in October 1928 the activities of several committees were reported on. One committee had the responsibility of considering

whether or not the American Dietetic Association should formulate recommendations for courses of study followed in colleges by students planning to enter hospital work. (Thoma, p. 177, 1928)

The reporter claimed that the committee had done little up to that time. They had written to the members sending to them the curriculum which had been used several years in the past and asked for suggestions.

The general opinion is that . . . (the) committee did a very nice piece of work on the curriculum as planned. The committee further suggests that this curriculum be available for

distribution from the American Dietetic Association office. (Thoma, p. 177, 1928)

Other committees had also been appointed to report on outlines of courses for student nurses in dietetics, to consider problems associated with the teaching of nutrition to patients and public, and to list the hospitals which were following the outline of a standard course for dietetic interns (called "student dietitians") at that time (Editorial, 1939; Robinson, 1964) as was approved at the ADA meeting in October, 1927. (Thoma, 1928)

For many years general beliefs about the type of information and standards that should be incorporated into the undergraduate curriculum were promulgated. It is possible to trace through history the state-of-the-art concept progression of published works on the topic.

The primary works of the "Education Section" in 1931 were the personal inspection of hospitals on an approved list for the training courses for dietetic interns and the desire to make progress in developing a tentative list of colleges considered as "offering adequate academic preparation for dietitians." (Bryan, p. 348, 1931) By December 1931, there was a list of approved educational institutions available from the ADA office. (Bryan, 1931) A concomitant concurrent study was being made of

courses and prerequisites for a major in foods and nutrition in all colleges offering home economics courses toward the Bachelor's degree. (Bryan, p. 294, 1931)

The question of the advisability of these projects had

been discussed earlier at the thirteenth annual convention of the American Dietetic Association in December, 1930. (Feeney, 1930) It was only a short time later that a Journal of the American Dietetic Association article reported

One of the most important contributions of the American Dietetic Association to the development of the profession of the hospital dietitian has been the establishment of standards for hospital courses for dietitian internes. Since its organization, the Association has worked toward this end, and recommendations for the adequate training of these students have been increased from year to year to keep pace with the demands of the increasing responsibilities of the hospital dietitian. For three years, representatives of the Association have inspected courses offered by those institutions desiring to meet its standards for approved listing. (Editorial, p. 216, 1933)

Harrington noted in 1931, that while grades had been the accepted ability rating in the classroom. there did not seem to be any device "for measuring the correlation between theoretical learning and its practical application." (Harrington, p. 164, 1932) Soon thereafter, and for years to follow, reports were published on various aspects and value of combining classroom theory lectures with summer work, laboratory. and/or field trip experience(s). (Editorial, 1933; Current Comment, 1935; Association Progress, 1935; Howe, 1936; Marshall, 1936; Current Comment, 1938; Mitchell, 1939; Gleiser, 1939; Bowes, 1939; Wood, 1940; Current Comment, 1943; Project I of the Professional Education Section, 1944; Bay, 1953; Coon, 1955; Schroeder, 1960; Robinson, 1965; Weigley, 1966; Webber, 1972)

Education Standardization

Frequently through the history of the American Dietetic Association, concern was expressed about the quality of professional training for both undergraduate and postgraduate education. One of the initial attempts at the evaluation of educational institutions was the tabulation of the total number of successful dietetic students to graduate from individual educational programs. (Fingerhood, 1938; Blood, 1938; Blood, 1942) The validity of this practice was questioned due to the fact that high quality students sometimes were products of institutions having small graduating classes. (Fingerhood, 1938; Blood, 1938) Evaluation of dietetic internships programs and undergraduate course curricula formats were originally left to the sole discretion of the program directors. In order to increase continuity between programs and to assure high standards of training, site visits were initiated. (News Notes, 1939; Morrill, 1940) These site inspections have continued to the present time.

Starting during its early history, the American Dietetic Association endorsed suggestions for curricula plans. In January, 1934, a report was published which had been presented by the inspection chairman in October, 1933. In the report Bryan stated:

Professors of home economics have been the leaders in the Association in determining the portion of this information which should be taught in colleges and in establishing the

basic courses in the sciences and arts essential to sound knowledge. Much of the specialized subject matter is in tentative form; we are still in the experimental stage as regards course content and the best method of presentation; and opportunities for the development of technical skills are just beginning to be available in many institutions, but the colleges are working constructively in the field of certain specialized knowledge and skills. (Bryan, p. 377, 1934)

She continued:

Professional study must be based upon 'a cultural setting, a liberal education which gives breadth of view and that largeness of life which form that very foundation of every kind of professional service.' This is the training for which the college stands. This is the point of view of the Association in its suggestion of college courses prerequisite to the entrance into approved hospital courses. Less than half of the credits of the usual college curriculum are designated; the remainder should be spent in acquiring the intellectual perspective which is essential to the full use of specialized knowledge. (Bryan, p. 377, 1934)

The curriculum plan designation which Bryan made reference to was called Outline Number 1. Outline Number 1 was a listing of the minimum distribution of semester hour course requirements necessary for students applying for postgraduate dietetic training. At different times the colleges and/or the number of graduates not meeting all the academic requirements (with the concomitant course deficiencies) were reported (News Notes, 1936; Small Kansas Colleges Offer Degree in Dietetics, 1952) and outline requirements were questioned and subsequently revised. (Feeney, 1939; Editorial, 1939) Outline Number 1 was also published with the courses required by dietetic internship program

admittance "over and above the minimum." (Hall, 1940)

Outline Number 2, "Requirements for Food and Nutrition Major and Institution Management Major as Basis for Active Membership," became effective January 1, 1934. (Association Progress, 1934) This guide was mentioned in the "Association Progress" report as being an improvement over past standards.

The basic training for students applying for admission to graduate training courses approved by the Association has been even more clearly defined to meet the special requirements of this group.

Graduates of these approved courses whose undergraduate training meets all requirements may be granted membership in the Association upon the completion of the prescribed course. In other words, the post-graduate approved course is accepted as a membership requirement in lieu of other experience. (Association Progress, p. 68, 1934)

For several years generalized concerns were expressed about upgrading and standardizing course curricula.

Gleiser proclaimed:

While great progress has been made in standardizing the college and university training of the student and the hospital training courses, there is much yet to be done in our college and university training of the young women who will become a member of a hospital dietary staff. It is a challenging and serious responsibility to those of us engaged in this program. (Gleiser, p. 558, 1939)

Part of the "President's Address" in 1939 stated:

As adults, we will recognize our shortcomings, but we will note our progress, too. In this past year we have made a bachelor's degree prerequisite for any type of membership. Through our Committee on Professional Relations we have brought our standards for

membership to the attention of many of our allied professional organizations and with expectation that these membership qualifications will stand the test of acceptance on the part of the organizations in their standardizing activities. (Tracy, p. 726, 1939)

Later, in the presentation she noted:

It seems likely that there is a body of basic knowledge essential to the performance of every individual calling herself a dietitian, regardless of the field of her employment. And it seems to me that it is our responsibility to be concerned with the determination of what constitutes this basic body of knowledge. We have done so to a degree with our Outlines I and II. It is essential, however, that these outlines be constantly studied in the light of changing educational concepts, trends and techniques, and in terms of the changing activities of the dietitian in her job. (Tracy, p. 727, 1939)

An editorial in 1942 likened the struggle to maintain high educational standards and requirements to a war.

Yes, this is war, and technicians may not need a scientific background to perform the routines assigned to them. Many of the things a dietitian does could be done by a technician; but that is not all, for we owe the world far more than the routine performance of set tasks. (Editorial, 1942)

It was not until April 1944 that required courses and their semester credit hours were published. (Academic Requirements for Active Membership in the American Dietetic Association and Entrance to Courses for Student Dietitians Approved by the Executive Board, 1944) These requirements, as delineated by the Veteran's Administration for education and experience for dietitians entering the military service at different grades were published. (Dietitians in the

Veteran's Administration, 1946) The years that followed again brought publication of general ideas about what should be thought of in respect to education and/or course curricula. Examples of the most notable statements include those from B. B. West:

It is our hope, too, that professional education for dietitians both at undergraduate and graduate level will soon include courses in human relationships and citizenship, for only through an understanding of the basic needs and urges of all peoples and more mutual understanding and appreciation can we hope for lasting peace and goodwill among all the nations. (West, p. 1063, 1946)

C. O. Houle:

It might well be said that all dietitians are teachers some of the time and some dietitians are teachers all of the time. It follows that all members of the profession should have some understanding of the process of teaching and some proficiency in using its techniques, particularly with mature people. (Houle, p. 837, 1948)

Report of the Executive Board, 1948-49:

The committee has no concrete recommendations to report at this time. It has been suggested that a survey of college catalogues be made to determine the degree to which these basic courses are required of foods and nutrition students and the courses which they replace in the curriculum. (Walsh, p. 1007, 1949)

Taba and associates on gaps in the training of dietitians:

(a) Students need to improve their ability to apply general knowledge to specific situations.

(b) Students need to learn how to relate facts to each other. At present they tend to acquire specific detail which they cannot translate into general principles.

(c) Students need to develop ability to

consider several conflicting factors in making decisions. (Taba, p. 435, 1950)

F. A. Fallgatter, then President of the American Dietetic Association:

In fairness to leaders in home economics, we must admit at once that recognition of the need for a broadened curriculum has been apparent for some time. Rigid science requirements are less sacred than they were and the kind and amount of chemistry, physics, and zoology are being revised. No longer is it deemed necessary for all home economics students to pursue the same science courses that are given for the science majors, the pre-medics, or the research workers. This modifying of the chemical, physical, and biologic sciences is permitting a better balance with the social sciences. At no time in history has it been more essential for all students to have a broad understanding of the social, political, and economic forces at work in the world. It is no mere happenstance then that more and better courses in the social sciences are included as requirements in the home economics curriculum, nor that students themselves are electing such courses. (Fallgatter, p. 647, 1951)

New academic requirements for American Dietetic Association membership became effective in November 1955. (Membership Requirements Committee, 1955) Within this set of guidelines applicants for membership needed to be graduates of an accredited college or university and have completed 60 semester hours from four groups of specified courses. Each of these four groups had a designated minimum number of hours which had to be completed in order to meet the academic requirements for American Dietetic Association membership.

Three years later, in November 1958, Plan III for academic requirements for American Dietetic Association

membership was adopted. (New Requirements for A.D.A. Membership, 1959) Plan III was a set of guideline requirements for the applicant's education, experience, endorsement, and supervision. In addition, Plan III also outlined academic requirements by specifying semester credit hours that should be met for core subjects, a chosen emphasis and a chosen area of concentration. In 1965, Robinson held the opinion that

. . . we have not yet begun to realize the implications of this plan or the possibilities it provides for the beginnings of our professional education. (Robinson, p. 91, 1965)

Until this time persons who wanted to train to become dietitians would successfully complete an undergraduate academic degree program in dietetics followed by a dietetic internship. (Robinson, 1961) During the early 1960's the Coordinated Undergraduate Program (CUP) came into existence. (Robinson, 1965) This educational route integrated clinical experiences into the undergraduate academic plan of study. Through the majority of the 1970's, there was a type of postgraduate educational program known as the dietetic traineeship. (Wenberg, 1973; Hart, 1974; Schiller, 1974; Scott, 1974; Cloud, 1974) This type of program was discontinued in 1979. Other means of preparation for professional practitioners have included the master's degree with an approved work experience or the doctoral degree. Today, the search continues for the most viable means of preparation for dietetic professionals.

As has been alluded to previously, the American Dietetic Association since its beginning has had well-delineated academic recommendations and/or requirements. These requirements in the past were listed as specific courses and hours of credit. Current standards for educational preparation of the professional dietitian have been established by The American Dietetic Association in the Plan IV minimum academic requirements. (Junkermier, 1982) Plan IV was adopted July, 1, 1972. For the first time in The American Dietetic Association's history, these requirements are expressed as basic competencies and knowledge areas. Under this plan there are four areas of emphasis: general, management, clinical, and community. Both the traditional undergraduate programs and the Coordinated Undergraduate Programs must submit to The American Dietetic Association a curriculum outline which shows compliance to the Plan IV requirements. It is then the decision of The American Dietetic Association whether or not that program's curriculum does comply and therefore should or should not be approved. (Junkermier, 1982) Presently there is very limited information on how the competencies are implemented and evaluated by the individual educational institutions.

Additional Relevant Opportunities and/or
Advancements in Dietetic Education

American Dietetic Association members have long been informed of academic considerations and/or training recom-

mended for dietetic practitioners in other countries. Among the many different countries educational programs reported on have included Hungary (Current Comment, 1931; Current Comment, 1933), Denmark (Bloetjes, 1956), United States as compared to other countries (Ohlson, 1952; Larrison, 1969), Iraq (Eppright, 1959), India (Armstrong, 1959), Latin American countries (Hopkins, 1962; Mackinnon, 1966; Bosley, 1968), and Middle Eastern countries (Turnland, 1983; Ishkanian, 1983). Here, it was recognized that our system of dietetic education could be enhanced and advanced through learning about various international curricula. As Ohlson pointed out in 1952

It is suggested that an interchange of dietitians with certain of these countries in the next few years could be mutually profitable and that means be sought to effectuate such exchanges. (Ohlson, p. 945, 1952)

Just as dietitians have recognized the value in evaluating curricula from other countries so have they also long recognized the potential value of dietetic interest/practice specialization(s). It has been shown pictorially how the profession of dietetics has broadened through the years, emerging from the base of the "Hospital Diet Kitchen" to the many existing practice group areas. (Johnson, 1960) Specifically, the management or "administrative dietitian's role has shown the most marked change over the years." (Johnson, p. 594, 1960) During the earlier years, and occasionally during more recent times, much of the discussion about dietetic education were managerial concerns which

were related to personnel management and the personality traits perceived as necessary in the practice of the profession. (Copher, 1925; Swift, 1927; Bosch, 1934; Richardson, 1935; Schell, 1935; Howe, 1936; Fleck, 1938; Dodge, 1940; Northrop, 1956; Mundie, 1957) As time passed, emphasis in publications was on research of administration and/or management course content and objectives as opposed to personal characteristics. (Dodge, 1937; Project 2 of the Professional Education Section, 1944; Editorial, 1944; Roser, 1952; Atkinson, 1953; Augustine, 1954; Schill, 1959; New Opportunity for Graduate Study in Dietetics, 1959; Miller, 1960; Donaldson, 1961; Donaldson, 1965; Katz, 1974)

The American Dietetic Association

. . . has officially encouraged hospital courses since 1925 and approved these since 1927. Administrative (non-hospital) courses have had the national Association's approval since 1931. . . (Dodge, p. 132, 1937)

The Women's Educational and Industrial Union's internship was the first administrative internship to be approved by the American Dietetic Association. (Dodge, 1937) In 1937, it was reported that

The American Dietetic Association, in meeting the ever increasing demand for administrators in commercial and educational food production units, is developing administrative student dietitian courses in carefully selected centers. (Dodge, p. 131, 1937)

In 1944, editorial reports described "the first administrative training course for dietitians in industry." (Editorial, p. 538, 1944) It was located in association with

four Eastman Kodak plants which had 14 cafeterias, served over 20,000 meals per day, and employed 14 dietitians.

(Editorial, 1944)

Toward Competency Based Education in Under-graduate and Postgraduate Programs

Throughout the numerous publications of The American Dietetic Association in the Journal, and by its members in their research theses and dissertations, it has been shown that there has been a continuing concern about the educational preparation and qualifications of dietetic students, educators, and practitioners. It would be pointless to attempt to compile the set of references that were related to competencies concomitant to dietetics; the set would almost be infinite. However, it would probably be beneficial to be aware that prior to the late 1960's there were some articles published which directly addressed competencies in dietetics. In 1931 an editorial claimed:

The Manual of Hospital Standardization and Hospital Standardization Report of the American College of Surgeons for the year 1930, under a detailed explanation of minimum standards for approved hospitals, states that every approved hospital requires a well organized dietary department under the supervision and direction of a competent graduate dietitian. With the increasing knowledge of the part diet plays in the deficiency diseases and in metabolism disorders, it has become imperative for hospitals to employ only dietitians who are graduates of accredited schools. Although the modern dietitian is expected to have a sound theoretical knowledge of food chemistry and scientific dieting, she can be regarded as fully competent only if she knows how to as-

sume, in addition, the administrative problems of the dietary department, such as food buying, storage, distribution and service, budget making, departmental accounting, as well as possessing a basic knowledge of planning and equipping the dietary department. She must also be an economist with a well balanced viewpoint regarding efficiency and economy. (Editorial, p. 42, 1931)

Dalrymple stated before the 46th Annual Meeting of The American Dietetic Association that

Teaching in terms of concept formation is not new, although the conscious emphasis on it is new to many people. We have always taught in terms of 'concepts,' except that we did it unconsciously and perhaps haphazardly. Thus, the conscious development of 'concepts' has been 'fuzzy,' and we have sometimes included irrelevant and time-wasting elements without a definite focus on the long-range result of our teaching. The reason for today's emphasis is to prompt clear, conscious, and directional thinking on the part of students as well as the teachers. This is a means of 'sifting,' from the whole realm of knowledge and understanding within any given area of study, the major significant learnings that focus on specific objectives - expected insights or behaviors or learners as a result of teaching. This helps to insure that the major learning remains incidental. (Dalrymple, p. 22, 1964)

Competency Based Education (CBE), also referred to as Performance Based Education (PBE), seems to have originated in teacher education. (Rinke, 1979; Houston, 1977) It's official beginning in dietetic educational programs was 1972. On July 1, 1972, The American Dietetic Association adopted the current standards for educational preparation of the professional dietitian. This guideline is the "Plan IV Minimum Academic Requirements for A.D.A. Membership." (Junkermier, 1982) This plan was based on the premise that

1. Members of the profession of dietetics must be well prepared in biological, social, and communication sciences and the applied sciences basic to the profession.
2. The need for specialization within the profession is urgent because of the rapid expansion of scientific knowledge, technological, social and economic change, and proliferation of employment opportunities for dietitians. However, in the immediate future there will continue to be a need for the generalist. (Department of Education Educators Packet, 1979)

There seems to be a dearth of published research pertaining to delineation of competency expectations for those in the field of dietetics. One of the earliest reports was about an instructional package which was a simulation model designed to assist dietitians and dietetic students in reaching competency related to computer assisted food systems management. (Hoover, 1974) The findings of this study indicated that there was interest in an educational model that could simulate complex computer applications. Findings from this study also show that there were gains in the cognitive domain and perceived competence as a result of utilizing the model in a two week workshop.

In 1974, Miller and Spears reported on a project that was conducted to measure the effectiveness of student-paced unit mastery and group study techniques in a course for administrative dietitians. (Miller, 1974) Effectiveness was assessed through the use of pre- and post-testing. Successful completion of computer transactions for each unit was considered to be competence at the level of appli-

cation.

The major conclusion from this research is that the self-pace unit mastery and group study technique is effective for teaching a course which is concept-oriented and technical. This method of instruction effectively met the needs of knowledge transfer. (Miller, p. 154, 1974)

Similarly in 1974, Roach and Wakefield reported on a study that compared teaching basic concepts and principles of quantity food purchasing by a self-instructional module as opposed to lecture methods. (Roach, 1974) Post-instructional test scores were not significantly different for the average achievement of students using the self-instructional methods as opposed to the group of students participating in the traditional type lecture group. Confidence ratings and enthusiasm ratings for performing responsibilities associated with food purchasing did not differ significantly for the two groups of students. The time scheduling flexibility of self-instruction was noted as an advantage in adapting the program to employed personnel.

Although significant differences were established only on attitudinal reactions to the unit, all differences favored the self-instruction group. Therefore, the self-instructional method appears to be an effective innovation. (Roach, p. 169, 1974)

Subsequent articles dealing with competency and dietetic students, educators, and/or practitioners followed. The Foodservice Systems Management Education Council (FSMEC), which was instrumental in the eventual formulation of The American Dietetic Association's Plan IV, published in 1975 in its proceedings of the eighth conference a re-

port on the state-of-the-art of competency based education. (Proceedings of the Eighth Biennial Conference of the Food-service Systems Management Education Council, 1979) Competence was noted as part of the dynamics of dietetics, along with image and ethics. (Hallahan, 1976) Entry-level competencies expected from competency based education were discussed. (Bell, 1976) Then in 1976, The American Dietetic Association published an article on the characteristics, objectives, and evaluation of competency based education vs. traditional education. (Hart, 1976)

Other works written on the topic of competencies and dietetic education have included the following:

"Developing behaviorally anchored scales for rating dietitian's performance" (Fruin, 1977)

"Competency-based education in a career mobility program in dietetics" (Howard, 1977)

"Practitioners identify competencies for entry-level generalist dietitians" (Loyd, 1977)

"Program of work accomplishments 1976-1977. III. Council on educational preparation (CEP)" (American Dietetic Association Reports, 1977)

"Assessing achievement for minimum academic competency. I. Instrument development." (Chambers, 1978)

"Assessing achievement for minimum academic competency. II. Validity and reliability." (Chambers, 1978)

"Report of the task force on competencies, council on educational preparation, The American Dietetic Association"

- tion" (American Dietetic Association Reports, 1978)
- "Continuing education: To be useful, a thing must be used." (Karreck, 1979)
- "Menu planning competencies in administrative dietetic practice. I. The methodology." (Morales, 1979)
- "Menu planning competencies in administrative dietetic practice. II. Practitioners' ratings of competencies." (Morales, 1979)
- "Self-instructional learning packages as a teaching/learning tool in dietetic education." (Hutton, 1979)
- "Dietitians' perceptions of administrative competencies gained during professional education." (Meeks, 1979)
- "Competency-based education." (Rinke, 1980)
- "Implementation and evaluation of a competency-based dietetic program." (Shanklin, 1980)
- "Development of a methodology to determine and validate competency statements for dietitians employed in foodservice management positions at different levels of practice." (Lafferty, 1981)
- "The entry-level generalist dietitian. II. Employers' perceptions of the adequacy of preparation for specific administrative competencies." (Rinke, 1982)
- "Practitioner competencies." (Meredith, 1982)
- "Professional experiences of recent graduates." (Linnenkohl, 1983)
- "Dietetic technicians' performance: Supervisory and self-assessments." (Simonis, 1983)

Writings about Competency Based Education in general flourished during the 1970's. It was reported that in 1971 there were 22 items in a bibliography on the subject and that in 1976 another author had identified more than 6,000 items. (Houston, 1977) Much of the writing dealt with the definition of competency including what was not part of it's components.

Some of the more outstanding discussions about competency and Competency Based Education include the following excerpts. Klingstedt wrote:

Competency-based education is based on the specification or definition of what constitutes competency in a given field. Usually a great deal of research is considered, when available, before competency levels are identified. The way in which the agreed-upon level of competency is communicated is through the use of specific, behavioral objectives for which criterion levels of performance have been established. Once the required behaviors have been specified, they are placed in a hierarchy leading from simple to complex, and then the instructional sequence is planned that will help the learner achieve the desired behaviors. When the learner is ready, a test or check of some sort is administered to determine if the required level of competency has been achieved. (Klingstedt, p. 10, 1972)

In the same article Klingstedt also emphasized that "In CBE, a major concern is to provide many alternate ways for the learner to accomplish the stated objectives. (Klingstedt, 1972) Gale and Pol reported on their effort to determine exactly what competency is. (Gale, 1975) For their project they surveyed "dictionaries and glossaries from the fields of medicine, engineering, law and language

usage. ." in English, Spanish, German, Italian, and French. They agreed with Klingstedt that the definition of competency is related to a particular profession or area of practice. They stated:

Competence, by definition, is tied to a position or role. The ligatures binding the two are abilities, knowledge, skills, judgment, attitudes and values required for successful functioning in the position or role. That is, possession of the critically required abilities, knowledge, judgment, skills, attitudes and values - and proficient use of the same - is what yields competence in an individual. (Gale, p. 20, 1975)

Their commentary continued by promulgating that it is

. . conceptually unsound to speak of competence as a plural term unless two or more different roles or positions are intended. It was interesting that none of the dictionaries consulted showed a plural form of the word 'competence.' Therefore, the use of the terms 'competences' or 'competencies' appears to be a prostitution of the original concept.

This is not unimportant semantic commentary, but an important conceptual problem in the competency based movement. Speaking of 'competencies' as sub-parts and pieces that go to make up a total competence is just as illogical as calling 'intelligencies' pieces of an intelligence. The use of a plural suggests more than one of the same thing, not pieces of a whole. (Gale, p. 20, 1975)

Whether correct or incorrect, many later authors continued to use a plural form of the term. Houston and Warner differentiated between the terms "competencies" and "behavioral objectives."

. . as these terms are typically used, competencies: (1) are logically derived from a role conception; (2) are broader in scope; (3) define programs rather than instructional unit outcomes; (4) require multiple assessments to accommodate

varied contexts, criteria and conditions; (5) emphasize performance and consequences of actions over cognitive outcomes (while behavioral objectives may relate equally well to any one of these three); and (6) are oriented typically toward professional or vocational roles. (Houston, p. 15, 1977)

Competencies in Allied Health Professions

Various allied health organizations have published specifications and refinements of established competence components. Even though the literature in this area is not directly pertinent to the purpose and objectives of this study, awareness of their efforts may heighten one's appreciation for progress made in this line of endeavor.

According to Seibert, the American Society for Medical Technology (ASMT) in 1976 published "Statements of Competence for Clinical Laboratory Personnel." (Seibert, 1979) It was noted in 1978 that a set of statements was refined to represent competencies which were appropriate for career-entry clinical laboratory scientists and technicians. Seibert's presentation offered a method for the establishment of conditions under which the behaviors specified in the competency statements are carried out in the "real world" of medical laboratory practice and the verification of standards of accuracy and speed in performance that represent competence at career entry. (Seibert, 1979)

The American Physical Therapy Association (APTA) has also, for the last several years, had as a major concern the concept of competency of its members. Davis and assoc-

iates report that in 1977, a document titled "Competencies in Physical Therapy: An Analysis of Practices" was published. (Davis, p. 1088, 1979) Members informally referred to this as the "competencies manual" or as the "Red Book." It was expected that the Red Book would be supplemented and revised regularly as coordinated by their Committee on Physical Therapy Competencies. The Red Book was, in actuality, revised in 1979. Their manual was planned in such a manner so that it would serve as the core compilation of the analysis of the practice of physical therapy. Furthermore, specialists in various sections within the American Physical Therapy Association were identifying competencies which they believed to be unique to their specialized area of practice. These authors also stressed the necessity of the collection of competency analyses in the future due to the possible implications concomitant to licensure, education, clinical education, planning of departments, use of assistants, research, self-evaluation, and faculty and staff evaluation.

Professional Standards

It may be observed that in many different ways throughout the history of The American Dietetic Association its constituency has been consistently aware of the need for establishing, attaining, and maintaining acceptable standards. Predominant indicators of this being a factual notation are in references pertaining to curriculum guidelines

with educational matters discussed previously and professional registration, continuing education, Professional Standards Review Organization (PSRO), licensure, and certification.

Mention of standards can be found in the first volume of the Journal of the American Dietetic Association. In a presidential address delivered before The American Dietetic Association in 1925 Wheeler stated:

Another aim of the Association is to determine and to maintain standards. There is nothing static about the standards of a profession as new as ours. (Wheeler, p. 98, 1925)

Later she added, "But we need standards of accomplishment as well as those of preparation." (Wheeler, p. 100, 1925) Morgan mentioned in 1926 about what is now called the "dietetic internships." She wrote:

At present three to six month courses are offered by numerous hospitals to student dietitians without standardization, oversight, or grading in any way. The whole matter is in the state of confusion. . . (Morgan, p. 177, 1926)

A presidential address by Smith in 1927 contained the following:

It would seem that the time is at hand to increase the responsibilities of the various sections. I believe it should be the ambition of The American Dietetic Association to set standards for dietitians. Let us answer for ourselves the embarrassing question 'What is a dietitian?' To do this registration, state or national, may be necessary. The amount of work involved in this is appalling and can only be accomplished by organized effort, extending over a long period of time. Is the Section on Education ready to consider this work? (Smith, p. 146, 1927)

It was recognized again in 1929 that nationwide standards should be established with the consideration of registration. We read that there was concern about the ". . . need for some disciplinary measure to protect the public against food quacks and faddists. . ." (Boller, p. 177, 1929) The Executive Committee did discuss the problem and felt that standards should be uniform nationwide, not established state by state. Resulting from this ". . . it was thought advisable to make a study of the possibilities of national registration." (Boller, p. 177, 1929)

High standards at times were accepted justification for not having a registration examination.

. . . emphasis on the maintenance of high membership qualifications and thus the control of professional standards, attempts to offset the fact that there are no stateboard examinations or required state registrations for dietitians. (Association Progress, p. 83, 1936)

It has been shown that not having a registration qualifying examination did sometimes cause confusion. In 1960, the following letter from the Director of the Joint Commission on Accreditation of Hospitals was published.

To the Editor:

The statement of the Joint Commission is not as it should be. We have always taken for granted and understood at this office that when we erroneously said 'American Dietetic Association registered,' we meant American Dietetic Association membership. When we republish, we will use that term.

I am sorry if it has caused misunderstanding and confusion. The Joint Commission, as well as the medical and hospital professions, recognizes membership in The American Dietetic

Association in lieu of registration or certification. - Kenneth B. Babcock, M. D., Director, Joint Commission on Accreditation of Hospitals, Chicago. (Letters to the Editor, p. 62, 1960)

In the years which followed, many concerns were expressed, either directly or indirectly, relating to the concept of standards. (Beatley, 1937; Heyd, 1938; Bateson, 1939; Marble, 1939; Terrell, 1941; Godfrey, 1941; Editorial, 1944; Zumwalt, 1949; Coover, 1951; Todhunter, 1957; Mones, 1958; Flanagan, 1959; Lundy, 1960; Laboskey, 1960; Ferguson, 1968; Henderson, 1974) Most articles published on this topic were opinions and observations rather than research and statistics. What seems to have been happening was that over time, members of The American Dietetic Association were encouraged to see the advantages of and need for standardizing various entities within the profession and instigating professional registration.

One of the outgrowths of being encouraged to mature professionally was the concept of "continuing education." In 1957, it was reported that starting during the previous two years as well as continuing that year, the Education Section of The American Dietetic Association was sponsoring "a project on the 'Continuing Education of the Dietitian.'" (Continuing Education of the Dietitian, p. 46, 1957) In the same year, 1957, the position of "Continuing Education Services Director" was instituted. (Refshauge, 1957)

In January, Bessie Brooks West assumed this position, which was established to develop additional services for the membership and specifically to give assistance through group confer-

ences, workshops, institutes, or such other means as the membership desires. (Refshauge, p. 1133, 1957)

Objectives of this new staff position were as follows:

- (a) To develop additional services for members and to implement further objectives of the Association, specifically by giving help by such means as workshops, group conferences, and institutes.
 - (b) To expand and coordinate the educational functions of the Headquarters office as they relate to the internships, the colleges and universities, and the individual members.
 - (c) To publicize and utilize the information obtained from section and committee studies and reports for the improvement of the services of the members.
 - (d) To stimulate and promote continuing education of all members and graduate study among qualified members.
 - (e) To develop the talents and resources of the members through helping them to expand educational skills.
 - (f) To serve as consultant in the preparation of educational material.
 - (g) To assist in a continuous evaluation of the educational program of the Association.
- (Association Section, p. 162, 1958)

For about a year, West filled that position and her activities did not go unnoticed. (Kirk, 1959)

In the same article that the work of West was noted, the divisions and purpose of continuing education were delineated.

The purpose of the continuing education program may be described under three headings: graduate study, adult education, and communication. In all three areas, the main purpose is to apply the best techniques of problem-solving which psychology and education can supply. (Kirk, p. 66, 1959)

Subsequent works published dealing with these three areas of continuing education flourished between 1957-1974.

(Kreitlow, 1957; Warde, 1958; Hall, 1958; Smith, 1959; Johnson, 1960; Wagner, 1964; Patterson, 1964; Nair, 1964; Robinson, 1965; Butterworth, 1966; Donaldson, 1968; Comm. on Goals of Education for Dietetics, Dietetic Internship Council, 1969; Ross, 1970; American Dietetic Association Reports, 1974)

A landmark article on continuing education was authored by Hunscher in 1963. In the presentation delivered at the 45th annual meeting of The American Dietetic Association in 1962, we were reminded about the multitude of areas where and times when obsolescence may be a challenge. The publication concluded with the following:

A philosophy of lifetime learning urgently needs to be instilled and vigorously maintained if the individual and the profession are to maintain excellence, as we must. Only the 'prepared mind' can comprehend and steer his course in the fast-moving stream comprised of the combination of human and technical circumstances unique to our times. The 'prepared mind' through lifetime education will enable dietitians to make rightful contributions to 'the revolution of rising expectation.' (Hunscher, p. 119, 1963)

The Association paid close attention to Hunscher's advise. History saw the advent of linking Continuing Education (C.E.) hours to maintaining a professional registration status. As was mentioned previously, the concept of evaluation or professional registration is not new. In 1938, it was reported that some states required civil service examinations for the appointment of dietitians to state institutions. (Current Comment, 1938)

Evaluation, Registration, Licensure and Certification

The concept of professional evaluation leading to the recognition of competence can be traced through history. In addition to the ideas previously discussed on this topic, we can note concomitant discussions.

In 1951, Dressel recognized that "evaluation is a term not yet thoroughly understood in all educational circles." (Dressel, p. 859, 1951) He continued by discussing characteristics of, steps in, obstacles to, and types of evaluation. By 1952, The American Dietetic Association had

retained the services of the Personnel Research Institute of Western Reserve University to assist in the development of a new system for rating dietetic interns. (Education Section, p. 834, 1952)

The objective of this project was to discriminate between the 'poorer' or 'better' interns. During the next year, 1953, it was reported that

Nutritionists and dietitians, along with other professional people, can expect written tests to play an increasingly significant part in their careers. It becomes, therefore, not only a responsibility, but a matter of self-interest for professional groups to see to it that these examinations offer examinees a fair opportunity to demonstrate their competency. The Professional Examination Service provides an effective channel through which a profession can help to improve the quality of these examinations by participating in their construction and review. Beyond this, the Professional Examination Service encourages professional people to become acquainted with its program and to contribute to its efforts through informed criticism and active support. (Jones, p. 686, 1953)

Definitions of evaluation as opposed to measurement followed. Ricks claimed in 1962

evaluation is a process or act of measuring quality, while measurement is an act or process of measuring quantity. Fundamental to the concept of evaluation, then, is the need for establishing a set of objectives and standards against which measurement can be made. Evaluation is designed to foster the achievement of an organization as well as to provide information which can be used to define and modify its purposes. Implied in this is the fact that evaluation is a total process of administration. It is a process of teaching, it is a process of learning, all of which must be continuous.

There is no beginning or end to the process of evaluation. It is an action that permeates an organization throughout all phases and stages of its growth and operations. It must be conceived as a continuous process since, if there is to be survival of an organization, there must be evaluation. (Ricks, pp. 187-188, 1962)

Similarly Sabrosky stated in 1964 that

Evaluation is often used synonymously with 'measurement' and 'appraisal.' Measurement does not go as far as evaluation. Measurement determines the size or numbers of quantity of something; evaluation goes further, determining whether anything of a certain size or quantity is of worth or value. (Sabrosky, pp. 31-32, 1964)

Hart pointed out in the 1966 presidential report

Licensing or registration of dietitians has been a topic for discussion almost from the beginning of the Association. Recent enactment of social legislation at both state and federal levels has focused the issue professionalism and its impact on all health-related agencies. This year, a committee was appointed to review the pros and cons of licensure, registration, and certification and the implications these would have to the total Association membership. The report of the Committee to Study Licensure, Registration, and Certification has been pre-

sented to the House of Delegates for study.
(Hart, p. 488, 1966)

The inevitable then transpired.

In the heaviest voting in the history of the Association, members overwhelmingly passed an amendment to the constitution of The American Dietetic Association at a special meeting of members on February 13, 1969, authorizing a program of voluntary registration of members. The proposal passed by a vote of 12,596 to 4,494, more than the necessary two-thirds majority of those voting.

The amendment incorporates continuing education requirements which must be met every five years for a member's registration to remain in effect.

Present members of the Association may become registered through a 'grandfather clause' in the amendment and will receive applications for registration with their dues notices on June 1, 1969. The application must be returned by August 31, 1969, if a member wishes to become an 'R.D.' (Registered Dietitian) without taking an examination. (Registration of Dietitians Passes, p. 301, 1969)

It was subsequently reported that at the time of completion of the first year of registration for dietitians, 19,566 members had become registered through the grandfather clause and 56 others by completing specified requirements. (Fischer, 1970) This was viewed as solid evidence of interest by members in continuing education. Bogle (1974) made an appraisal of the first five years of registration and attempted to predict possible future developments.

The concepts of administering standardized tests to dietetic students to determine eligibility for internships (Chambers, 1975) and/or periodic re-registration (Lafferty,

1981; Commission on Dietetic Registration, 1983) have been proposed as possible means of assuring competence. The processes which seems more likely to be nationally adopted are certification or licensure.

Lundy (1960) surmized that he was

. . . sure that some time in the future each state will create a licensing board for dietitians and that higher standards of education will be in effect for dietitians than those existing now. Such a sequence of progress is a natural development for any profession, whether it be the medical, dental, legal, or any other field. (p. 354)

Indeed

On September 1, (1983) landmark legislation went into effect, allowing all dietitians the option to become licensed in the state of Texas. (A.D.A. Courier, p. 1, 1983)

Summary

Dietetic education evolved from a century of searching, modifying and refining, and re-searching for the educational preparation of dietitians. Assurance of competence in practice, congruent with societal trends and needs along with changes in technological advances has been the objective throughout. A.D.A. educators have developed outstanding course prototypes for the undergraduate and post-baccalaureate curricula.

The review of literature encompassed key events reported in the Journal of The American Dietetic Association, and from other sources, from 1925 to the present. It was considered important to present a thorough historical narra-

tive for a comprehensive perspective of how the concept of Plan IV competencies became accepted as the minimum academic requirements for the baccalaureate program in dietetics in 1972.

The implementation and evaluation of the Plan IV competencies were left to the imagination and creativity of program representatives and directors. Although some innovative strategies were developed and competency-delineation studies abounded in the 1970's, limited information is available to the dietetic educators on how to implement and evaluate competency attainment.

This study was undertaken to analyze Plan IV program's implementation and evaluation of the eight foodservice systems management competencies. Six of these competencies are required for all program emphasis, while the additional two are for the programs with management emphasis.

In addition to the literature included here, three A.D.A. role delineation studies, and the final report of the A.D.A. Task Force on Education, September 1983 should be reviewed.

CHAPTER III

RESEARCH METHODS AND PROCEDURES

The purpose of this research was to discover how the foodservice management competencies in the Plan IV academic requirements of The American Dietetic Association are implemented and how their attainment is evaluated in the dietetics curricula of the traditional Plan IV approved programs, and the Coordinated Undergraduate Programs in the United States.. There are seven specific objectives in this study. These seven objectives may be categorized into four main groups. The first group of objectives relates to determining Foodservice Management courses used to teach the competencies delineated by The American Dietetic Association, the percentage proportion of time in each course spent on each competency, and how competency attainment by students is evaluated. The second group of objectives ascertains information relating to Foodservice Management courses and the faculty/staff who are responsible for conveying the competencies. The next group of objectives deal with general information regarding the individual educational institutions. The final objective is to make recommendations for further research concomitant to foodservice systems management education. Results from this study could

perhaps serve as a base for reference as to what constitutes the foodservice systems education background of the professional, university-trained dietetic practitioner. The research design, sample, planning and development, instrumentation, data collection and analysis used in this research are included in this chapter.

Research Design

The type of research design used in this study was the descriptive status quo survey. (Wiersma, 1980; Wolpert, 1981) A survey research design format lends itself in general to the careful examination of situations where elaboration of this logical model is possible.

Descriptive research tells us what is by utilizing descriptions, recordings, analyses, and interpretations of existing conditions through involving some type of comparison or contrast. (Best, 1981) The conceptual framework of research variables in this study is illustrated in Figure 1.

Sample

The American Dietetic Association's Directory of Dietetic Programs for 1983 was the source of the sample used. The directory included the names of the 257 traditional Plan IV representatives and the 67 Coordinated Undergraduate Program directors as well as the addresses of the educational institutions. All 324 program representatives

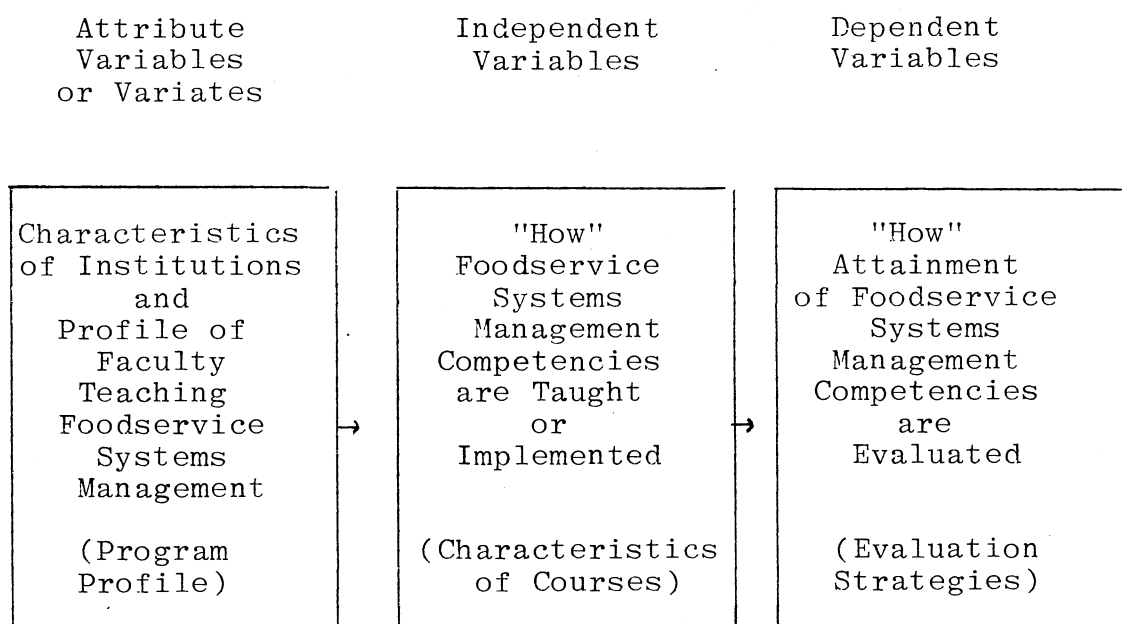


Figure 1. Conceptual Framework of Research Variables

and directors listed in the directory were used as the sample. The information collected from this survey can be generalized only to this group.

Data Collection

Planning and Development

The researcher planned and developed this project during the academic year 1982-1983. Formation of the instrument occurred during the summer semester of 1983 and data collection was completed fall semester of 1983. During this same time frame, appropriate data analysis techniques needed for examining the research were selected.

Instrumentation

The research tool was a self-administered questionnaire (Appendix A). The research instrument consisted of open ended and closed form (multiple choice) questions. A chart that needed to be completed was also included in the research instrument. Respondents were asked to provide further comments when their response indicated "other" and to explain their answers to particular selected questions. In constructing the research instrument, questionnaires from several related studies were used to obtain a concise yet comprehensive set of questions designed to elicit pertinent data for the study. Of these sources, the more recently published materials were more closely analyzed to

reflect the current state-of-the-art practices concomitant to foodservice systems management educational program components.

The questionnaire had three sections. Section one dealt with demographics of how the individual educational institutions meet The American Dietetic Association's academic Plan IV minimum competencies in foodservice systems management courses. This section consisted of a chart that needed to be completed. Section two ascertained additional information concerning the courses listed in section one and their faculty. This section was subdivided into two parts. It was also designed in the form of charts. Section three dealt with general information about the academic programs. This final section was designed mostly as a fill-in-the-blank form with spaces provided for further elaboration as is appropriate.

Content validity, clarity, and format of the research instrument and cover letter(s) were examined by a group of graduate faculty of the Food, Nutrition and Institutional Administration Department, the Hotel and Restaurant Administration Department and the Statistics Department at Oklahoma State University. The final draft of the complete research tool was printed on colored paper. An introductory cover letter explaining the purpose of the survey, the importance of prompt responses and the expression of thanks in advance for their cooperation accompanied the questionnaire. Return postage was provided. The instrument itself

was designed in order that it could be refolded, stapled and returned to the researcher. A second mailing was performed to encourage participation in this research.

Survey Procedures

The introductory cover letter and questionnaire was mailed on July 21, 1983 to each of the program representatives and directors given in The American Dietetic Association's Directory of Dietetic Programs as persons involved with the traditional Plan IV programs or Coordinated Undergraduate Programs. It was requested of participants that they return their completed questionnaires prior to August 4, 1983. On August 5, 1983, a second mailing was sent to the nonrespondents. Again, the participants were urged to complete and return the questionnaires as soon as possible.

Data Analysis

Raw data collected were analyzed. Demographic, educational, personal and institutional variables were translated into means, percentages and frequencies thereby bringing forth meaningful and useful information. It was determined that for this study, testing of hypotheses was not appropriate.

CHAPTER IV

RESULTS AND DISCUSSION

The purpose of this research was to discover how the foodservice management competencies in the Plan IV academic requirements of The American Dietetic Association are implemented and how their attainment is evaluated in the dietetics curricula of the traditional Plan IV approved programs and the Coordinated Undergraduate Programs (CUP) in the United States. A cover letter and four-page questionnaire covering implementation and evaluation of attainment of foodservice management competencies in the Plan IV academic requirements delineated by the American Dietetic Association, course and faculty information and general information pertaining to the individual educational institutions was developed to determine these characteristics. The population studied was comprised of all program representatives and directors listed in The American Dietetic Association's Directory of Dietetic Programs for 1983.

Percentage of Response to Survey Questionnaire

From a total 324 survey questionnaires mailed to prospective participants, 76 were returned giving the researcher

a 23.46 total response percentage. Some respondents returned incomplete surveys, hence 60 surveys (18.52%) comprised the total pool of usable questionnaires. Of these, a large majority of responses were from the traditional Plan IV programs. Surveys returned were from about one-fourth of the traditional programs and approximately one-fifth of the CUP institutions. However, when the researcher put aside the uncompleted forms, the usable pool of surveys was found to be about one-sixth of the total from traditional programs and less than 1/50th of the total from CUP institutions. (Table 1)

A majority of institutions which participated in this research were programs with general emphasis only. Of the responding traditional Plan IV programs (N=54) 28 had general emphasis only, 7 had general and management emphasis, 7 additional institutions had all four areas of emphasis (general, management, clinical, community) followed by three programs which had general, management and community emphasis. The remaining traditional program responses came from a fairly even distribution among program(s) emphasis(es). Of the responding CUP institutions (N=6) three had general emphasis only, one had clinical emphasis only, one had community emphasis only and the final responding institution had management and clinical emphasis. For both Plan IV program types, every institution except one (with no response to that question) indicated that they did provide education in some area(s) of emphasis in dietetics leading to a baccalaureate

TABLE 1
PERCENTAGE OF RESPONSE TO SURVEY QUESTIONNAIRE

Plan IV Program	<u>Mailed</u> N	N	<u>Returned</u> % of Program	% of Total	N	<u>Usable</u> % of Program	% of Total
Traditional	257	64	24.90	19.75	54	21.01	16.67
Coordinated Undergraduate Programs	67	12	17.91	3.70	6	8.96	1.85
Total	324	76		23.45	60		18.52

degree. Fewer institutions indicated that they granted graduate degrees. Responses indicated that degrees were offered on the masters level in 37 instances in the traditional programs and in four instances at the CUP institutions. Thirteen traditional programs responded that they offered doctorate degrees while none of the CUP institutions indicated that they offered this degree.

Data concerning student enrollment for the academic year 1982-1983 was ascertained. Responses revealed that on the average, traditional programs had 78.52 undergraduate majors and 35.49 graduate majors, while CUP institutions, had approximately two-thirds (51.33) and less than one-half (15.50) as many students working toward the respective degree levels. The number of students graduating at the bachelors level expected to enter graduate school in the fall of 1983 was, on the average, almost six (5.89) from the traditional programs and about four (3.67) from CUP institutions.

Since completion of an internship is not required of CUP students as necessary toward American Dietetic Association registration eligibility, information was requested only from traditional Plan IV programs concerning the total number of dietetic student graduates from the academic year 1982-1983 who sought, and the total number who received internship appointments. Of the institutions responding to this portion of the survey, 200 graduates were reported as receiving an internship appointment out of the 268 students. Nearly three-fourths (74.63%) of the students who sought internship

appointments did, in fact, receive internship appointments.

Implementation and Evaluation of Foodservice
Management Competencies in the
Dietetic Programs

This study ascertained the titles of courses where foodservice systems management competencies are taught. For each of these courses, data were sought as to what percentage proportion of time is spent on that competency. Results revealed a wide variety in number of courses and course title or types, as well as a wide range in percent proportion of time, spent on the competencies. The number of courses reported to cover the different competencies ranged from one to five in the traditional Plan IV programs and from one to four in the Co-ordinated Undergraduate Programs. Because there is no standardization of specific foodservice course titles and/or their contents nationwide, arbitrary categorization of courses had to be performed. A presentation of comprehensive course titles encompassing similar or related titles were used to summarize results. The comprehensive course titles used were the following:

Comprehensive Course Titles

Foodservice Systems Management (FSSM) encompasses:

Foodservice Systems Management

Foodservice Systems I

Introduction to Foodservice Systems

Food Systems Management

Food Administration

Food Management

Institution(al) Food Service

Institution(al) Food Management

Management of Foodservice

Management of Foodservice Facilities

Management of Dietary Systems

Advanced Foodservice Systems Management encompasses:

Foodservice Systems Management II, III

Foodservice Administration (if stated as a higher level course than FSSM)

Quantity Food Production Management encompasses:

Quantity Food Production Management

Quantity Food Production

Quantity Food Preparation

Quantity Production

Quantity Preparation and Service

Food Production

Commercial Food Preparation

Quantity Food

Quantity Cookery

Institution Organization and Management encompasses:

Institutional Organization and Management

Organization and Management of Foodservices

Institution Administration

Institution Management

Institutional Organization and Administration

Institutional Management and Organization

Field Experience encompasses:

Field Experience

Clinical Experience

Internship

Practicum

Field Work

Foodservice Field Experience

Institutional Experience

A summary of the courses utilized and percentage proportion of time spent in each course for implementation of foodservice systems management competencies for traditional Plan IV programs is shown in Table 2 and for Coordinated Undergraduate Programs is shown in Table 3. Course titles in Table 2 with (B) indicate that the courses were taught in the Department, School or College of Business. Predominant results revealed that most often, in traditional Plan IV programs, either one or two courses were utilized per competency, while for Coordinated Undergraduate Programs, two or three courses were utilized per competency.

Diversity in the types of courses and their titles varied more in the traditional Plan IV programs than in the Coordinated Undergraduate Programs. Another finding concern-

TABLE 2

IMPLEMENTATION OF FOODSERVICE SYSTEMS MANAGEMENT COMPETENCIES
IN TRADITIONAL PLAN IV PROGRAMS (N=54)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Titles of Course(s) Where Competency is Taught	Proportion of Time Spent in Each Course
A. Recognizes the organizational framework necessary for defining & accomplishing goals of the enterprise.	25	1	Foodservice Systems Management (N=12) Institution Organization & Management (N=6) Advanced Foodservice Systems Management Management & Organizational Behavior Quantity Food Production Management Institutional Purchasing & Food Cost Control Undefined (N=3)	2-100 No response or incomplete response (N=3)
	22	2	Foodservice Systems Management (N=16) Institutional Organization & Management (N=8) + (N=2, B) Advanced Foodservice Systems Management (N=5) Quantity Food Production Man-	5-70 No response or incomplete response (N=5)

TABLE 2 (Continued)

Foodservice Systems Management Competencies	Number of Institu- tions	Number of Courses	Titles of Course(s) Where Competency is Taught	Proportion of Time Spent in Each Course
			agement (N=3) Fundamentals of Management (N=2) Field Experience (N=2) Management in Dietetics Meal Management Personnel Management Managerial Behavior (B) Organizational Theory and Be- havior (B) Managing Organizational Be- havior	(N=5)
	6	3	Institutional Organization and Management (N=4) Principles of Management (N=2) + (N=1, B) Foodservice Systems Management (N=2) Field Experience (N=2) Introduction to Business (B) Marketing (B) Personnel Management Financial Management Cost Control Management in Diet Threapy	5-75 No res- ponse or incom- plete response (N=2)

TABLE 2 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Titles of Course(s) Where Competency is Taught	Proportion of Time Spent in Each Course
			Undefined	
	1	no response		
B. Relates the effectiveness of a specific enterprise to the realization of goals by subunits or departments	23	1	Foodservice Systems Management (N=14) Institutional Organization and Management (N=4) + (N=1, B) Quantity Food Production and Management (N=2) Institutional Purchasing and Food Cost Control Advanced Foodservice Systems Management	1-100 No response or incomplete response (N=3)
	23	2	Foodservice Systems Management (N=16) Institutional Organization and Management (N=6) Quantity Food Production Management (N=6) Management and Organizational Behavior or Organizational Theory and Behavior (N=4, B) Management (N=4)	5-60 No response or incomplete response (N=5)

TABLE 2 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Titles of Course(s) Where Competency is Taught	Proportion of Time Spent in Each Course
			Advanced Foodservice Management (N=3) Field Experience (N=2) Dietetics in Health Care Dietary Management of Nutrition Programs Personnel Management Meal Management Quantity Food Equipment	
	7	3	Foodservice Systems Management (N=6) Personnel Administration (N=3, B) Institutional Organization and Management (N=2) Principles of Management (N=2, B) Field Experience (N=2) Introduction to Business (B) Quantity Food Production Management Management in Dietetics Management in Diet Therapy Financial Management	10-50 No response or incomplete response (N=2)

TABLE 2 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Titles of Course(s) Where Competency is Taught	Proportion of Time Spent in Each Course
			Cost Control	
	1	no response		
C. Comprehends management's responsibility for leadership and the importance of leadership in the achievement of the objectives in food service systems.	23	1	Foodservice Systems Management (N=11) Institutional Organization and Management (N=4) + (N=1, B) Quantity Food Production Management (N=4) Advanced Foodservice Systems Management (N=2) Institutional Purchasing and Food Cost Control	1-100 No response or incomplete response (N=3)
	21	2	Foodservice Systems Management (N=16) Quantity Food Production Management (N=16) Institutional Organization and Management (N=5) Management Process (N=3) Personnel Management (N=3) Field Experience (N=3)	3-75 No response or incomplete response (N=5)

TABLE 2 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Titles of Course(s) Where Competency is Taught	Proportion of Time Spent in Each Course
			Managerial Behavior (B) Financial Management Management in Dietetics Dietary Management and Nutrition Programs Dietetics in Health Care Facility Advanced Foodservice Systems Management	
	5	3	Institutional Organization and Management (N=5) Principles of Management (N=4) Field Experience (N=2) Introduction to Business (B) Cost Control Management in Diet Therapy Quantity Food Production Management	5-20 No response or incomplete response (N=2)
	4	1	Foodservice Systems Management Advanced Foodservice Systems Management Senior Seminar Field Experience	5-10

TABLE 2 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Titles of Course(s) Where Competency is Taught	Proportion of Time Spent in Each Course
	1	No response		
D. Applies the processes of planning, organizing, directing, evaluating, and controlling to the management of the functions and operations of foodservice systems.	26	1	Foodservice Systems Management (N=12) Quantity Food Production Management (N=6) Institution Organization and Management (N=3) Field Experience (N=2) Advanced Foodservice Systems Management (N=1) Undefined (N=1)	1-50 No response or incomplete response (N=1)
	16	2	Foodservice Systems Management (N=9) Quantity Food Production Management (N=8) Institution Organization and Management (N=5)(B-1) Advanced Foodservice Systems Management (N=3) Management in Dietetics Management in Diet Therapy Applied Dietary Management of	5-100 No response or incomplete response (N=5)

TABLE 2 (Continued)

Foodservice Systems Management Competencies	Number of Institu- tions	Number of Courses	Titles of Course(s) Where Competency is Taught	Proportion of Time Spent in Each Course
			Nutrition Programs Institutional Purchasing and Food Cost Control Cost Control Meal Management Field Experience	
	8	3	Quantity Food Production Man- agement (N=6) Institutional Organization and Management (N=3) Equipment Planning and Layout (N=3) Field Experience (N=2) Quantity Food Production and Equipment Quantity Purchasing Introduction to Business (B) Marketing (B) Personnel Economics and Management of Family Food Undefined (N=4)	5-10 No res- ponse or incom- plete response (N=1)
	3	4	Quantity Food Production Manage- ment (N=3)	

TABLE 2 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Titles of Course(s) Where Competency is Taught	Proportion of Time Spent in Each Course
			Institutional Organization and Management (N=3) Institutional Food Purchasing (N=2) Field Experience Design and Layout Personnel Management Financial Management	5-50 No response or incomplete response (N=1)
	1	No response		
E. Recognizes the significance of the fact that a food service system is a unified, complex organization performing highly dependent and specialized functions.	22	1	Foodservice Systems Management (N=5) Institutional Organization and Management (N=3) Quantity Food Production Management (N=3) Undefined (N=1)	2-50 No response or incomplete response (N=4)
	24	2	Foodservice Systems Management (N=18) Quantity Food Production Management (N=10)	1-100 No response or incom-

TABLE 2 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Titles of Course(s) Where Competency is Taught	Proportion of Time Spent in Each Course
			Institutional Organization and Management (N=4) Equipment and Planning or Equipment and Layout (N=4) Field Experience (N=3) Advanced Foodservice Systems Management (N=3) Purchasing; Purchasing and Food Cost Control (N=2) Cost Control Personnel Management Management in Diet Therapy Undefined	plete response (N=4)
	3	3	Field Experience (N=3) Institutional Organization and Management Quantity Food Production Management (N=2) Quantity Food Purchasing (N=2) Quantity Food Equipment Management in Dietetics Foodservice Systems Management	5-60 No response or incomplete response (N=1)
	2	4	Foodservice Systems Management	5-30

TABLE 2 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Titles of Course(s) Where Competency is Taught	Proportion of Time Spent in Each Course
			Advanced Foodservice Systems Management Financial Management Personnel Management Quantity Food Production Management Design and Layout Senior Seminar Field Experience	
	3	No response		
F. Understands the technical operations (menu planning, purchasing, facilities, finance) involved in the production, distribution, and service of high quality food in food service systems with varying organizational structures and objectives.	12	1	Foodservice Systems Management (N=8) Quantity Food Production Management (N=2) Quantity Food Production Service and Purchasing Institutional Management and Marketing	8-100 No response or incomplete response (N=1)

TABLE 2 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Titles of Course(s) Where Competency is Taught	Proportion of Time Spent in Each Course
	19	2	Foodservice Systems Management (N=14) Quantity Food Production Management (N=9) Quantity Purchasing and Financial Management (N=4) Institutional Organization and Management (N=4) Institutional Equipment or Quantity Food and Equipment (N=2) Management of Dietary Systems or Health Care Facility (N=2) Institutional Food Economics Meal Organization Advanced Foodservice Systems Management	5-100 No response or incomplete response (N=3)
	11	3	Advanced Foodservice Systems Management (N=8) Quantity Food Production Management (N=5) Foodservice Systems Management (N=4) Purchasing (N=4)	2-90 No response or incomplete response (N=2)

TABLE 2 (Continued)

Foodservice Systems Management Competencies	Number of Institu- tions	Number of Courses	Titles of Course(s) Where Competency is Taught	Proportion of Time Spent in Each Course
			Field Experience (N=3) Meal Management or Meal Organization (N=2) Quantity Menu Planning (N=2) Management Management in Diet Therapy Institutional Organization and Management Cost Control Procurement and Utilization of Resources	
	7	4	Quantity Food Production Manage- ment (N=6) Foodservice Layout and Equipment (N=5) Foodservice Systems Management (N=3) Advanced Foodservice Systems Man- agement (N=3) Institutional Organization and Management (N=2) Management in Dietetics Personnel Management Cost Control	5-60 No res- ponse or incom- plete response (N=4)

TABLE 2 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Titles of Course(s) Where Competency is Taught	Proportion of Time Spent in Each Course
			Menu Planning Field Experience Undefined (N=3)	
	4	5	Quantity Food Production Management (N=3) Foodservice Systems Management (N=3) Marketing (B) Accounting (B) Meal Management Equipment Layout and Design Quantity Food Purchasing Institutional Organization and Management Personnel Management Financial Management Field Experience Undefined (N=5)	5-90
	1	No response		
G. Applies principles and practices of management of personnel	24	1	Foodservice Systems Management (N=11) Quantity Food Production Manage-	1-100

TABLE 2 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Titles of Course(s) Where Competency is Taught	Proportion of Time Spent in Each Course
in the procurement, development, maintenance, and utilization of an effective and satisfied working force in food service systems.*			ment (N=5) Institutional Organization and Management (N=3) Advanced Foodservice Service Management Personnel Management Purchasing and Cost Control Field Experience	
	18	2	Foodservice Systems Management (N=11) Institutional Organization and Management (N=7) Quantity Food Production Management (N=5) Management and Organizational Behavior (B) Managerial Behavior (B) Advanced Foodservice Systems Management Dietetics in Health Care Facilities Dietary Management in Nutrition Programs Management in Dietetics	5-80 No response or incomplete response (N=2)

TABLE 2 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Titles of Course(s) Where Competency is Taught	Proportion of Time Spent in Each Course
			Human Resource Management Personnel Management Field Experience Undefined (N=4)	
	2	3	Foodservice Systems Management (N=2) Advanced Foodservice Systems Management Quantity Food Production Management Equipment and Layout	5-100 No response or incomplete response (N=1)
	4	4	Quantity Food Production Management (N=3) Institutional Organization and Management (N=3) Field Experience (N=2) Introduction to Business (B) Food Purchasing Institutional Equipment Sanitation and Safety Cost Control Management in Diet Therapy Personnel Administration (B)	5-75 No response or incomplete response (N=1)

TABLE 2 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Titles of Course(s) Where Competency is Taught	Proportion of Time Spent in Each Course
			Undefined	
	5	Not applicable to program		
	1	No response		
H. Comprehends reciprocal relationships between management of food service systems and financial planning, evaluating, and controlling.*	24	1	Foodservice Systems Management (N=14) Advanced Foodservice Systems Management (N=2) Institutional Organization and Management (N=2) Dietary Management of Nutrition Programs Purchasing Marketing for Foodservice Systems Quantity Purchasing and Financial Control Quantity Purchasing and Cost Control Financial Management	3-50 No response or incomplete response (N=2)

TABLE 2 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Titles of Course(s) Where Competency is Taught	Proportion of Time Spent in Each Course
	16	2	Foodservice Systems Management (N=11) Quantity Food Production Management (N=4) Field Experience (N=4) Institutional Organization and Management (N=3) Accounting (N=2) Dietary Management in Health Care Facilities Management in Diet Therapy Purchasing Cost Control Advanced Foodservice Systems Management Undefined (N=3)	5-75 No response or incomplete response (N=4)
	5	3	Foodservice Systems Management (N=4) Quantity Food Production Management (N=2) Advanced Foodservice Systems Management Institutional Organization and Management	5-100 No response or incomplete response (N=2)

TABLE 2 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Titles of Course(s) Where Competency is Taught	Proportion of Time Spent in Each Course
			Introduction to Business (B) Management in Medical Dietetics Equipment and Layout Field Experience Undefined (N=3)	
	2	4	Foodservice Systems Management (N=2) Advanced Foodservice Systems Management Field Experience Institutional Organization and Management Marketing Accounting Computer Science	10-40
	6	Not applicable to program		
	1	No response		

*These two competencies are included under programs with management concentration or emphasis only but many respondents provided information.

TABLE 3

IMPLEMENTATION OF FOODSERVICE SYSTEMS MANAGEMENT COMPETENCIES IN
COORDINATED UNDERGRADUATE PROGRAMS (N=6)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Predominant Titles of Course(s) Where Competencies are Taught	Percentage Proportion of Time Spent on Each Course on the Competency
A. Recognizes the organizational framework necessary for defining and accomplishing goals of the enterprise.	3	2	Foodservice Systems Management Advanced Foodservice Systems Management Administrative Dietetics Management	1-20
	1	3	Management in Medical Dietetics Management of Medical Departments	5-10
	2	4	Business Management Institutional Organization and Management Quantity Food Production Management Community Nutrition Management Undefined	2-25

TABLE 3 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Predominant Titles of Course(s) Where Competencies are Taught	Percentage Proportion of Time Spent on Each Course on the Competency
B. Relates the effectiveness of a specific enterprise to the realization of goals by subunits or departments.	1	2	Foodservice Systems Management Dietetic Service in Community Institutions	2
	5	3	Quantity Food Production Management Management in Medical Dietetics Advanced Foodservice Systems Management Management of Hospital Departments Financial Management	2-50

TABLE 3 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Predominant Titles of Course(s) Where Competencies are Taught	Percentage Proportion of Time Spent on Each Course on the Competency
C. Comprehends management's responsibility for leadership and the importance of leadership in the achievement of the objectives in foodservice systems.	1	1	Foodservice Systems Management	5
	1	2	Quantity Food Production Management Institutional Organization and Management	5-10
	3	3	Administrative Dietetics Quantity Food Production Management Advanced Foodservice Management Financial Management Undefined	10-80

TABLE 3 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Predominant Titles of Course(s) Where Competencies are Taught	Percentage Proportion of Time Spent on Each Course on the Competency
D. Applies the processes of planning, organizing, directing, evaluating, and controlling to the management of the functions and operations of foodservice systems.	1	1	Foodservice Systems Management	8
	1	2	Quantity Food Production Management Institutional Organization and Management	10
	4	3	Administrative Dietetics Advanced Foodservice Systems Management Financial Management Management in Medical Dietetics Undefined	10-80

TABLE 3 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Predominant Titles of Course(s) Where Competencies are Taught	Percentage Proportion of Time Spent on Each Course on the Competency
E. Recognizes the significance of the fact that a foodservice system is a unified, complex organization performing highly dependent and specialized functions.	2	1	Foodservice Systems Management Quantity Food Production Management	2-10
	2	2	Quantity Food Production Management Institution Organization and Management Foodservice Systems Management	10
	2	3	Management in Medical Dietetics Undefined	2-80

TABLE 3 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Predominant Titles of Course(s) Where Competencies are Taught	Percentage Proportion of Time Spent on Each Course on the Competency
F. Understands the technical operations (menu planning, purchasing, facilities, finance) involved in the production, distribution, and service of high quality food in food service systems with varying organizational structures and objectives.	2	2	Foodservice Systems Management Dietetic Service in Community Nutritions Quantity Food Production Management Foodservice Organization and Management	5-100
	3	3	Management in Medical Dietetics Purchasing Quantity Food Production Management Institution Organization and Management Undefined	10-100
	1	4	Foodservice Systems Management	No response

TABLE 3 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Predominant Titles of Course(s) Where Competencies are Taught	Percentage Proportion of Time Spent on Each Course on the Competency
G. Applies principles and practices of management of personnel in the procurement, development, maintenance, and utilization of an effective and satisfied working force in food service systems.*	1	1	Summer Practicum	100
	2	2	Quantity Food Production Management Institution Organization and Management Foodservice Systems Management Dietetic Service in Community Institutions	5-20
	3	3	Management in Medical Dietetics Foodservice Systems Management Quantity Food Production Management Undefined	2-75

TABLE 3 (Continued)

Foodservice Systems Management Competencies	Number of Institutions	Number of Courses	Predominant Titles of Course(s) Where Competencies are Taught	Percentage Proportion of Time Spent on Each Course on the Competency
H. Comprehends reciprocal relationships between management of foodservice systems and financial planning, evaluating and controlling.*	3	2	Management in Medical Dietetics Foodservice Systems Management Dietetic Service in Community Institutions	3-5
	3	3	Financial Management Administrative Dietetics Advanced Foodservice Systems Management Business Management Quantity Food Production Management Institution Organization and Management Undefined	10-40

*These two competencies are included under programs with management concentration or emphasis only but many respondents provided information.

ing course titles was that there were some course(s) and/or their titles which were utilized in CUP institutions that were not utilized in traditional programs. For example, for competency 'A', traditional programs predominantly offered one course to meet that competency and for that one course there were seven main course title categories. When looking at competency 'A' for CUP institutions, it was found that programs most often offered two courses to meet that competency and for those two courses there were three main course title groupings. While examining predominant titles of courses, for example for competency 'B' by itself, it was discovered that the course titles of "Dietetic Service in Community Institutions," "Management in Medical Dietetics" and "Management of Hospital Departments" appeared in CUP institution's responses but were not utilized in traditional programs. The difference in the course title category diversity between the traditional programs and the Coordinated Undergraduate Programs was probably attributable to the philosophical base difference between the two program types. Courses offered in traditional programs were (and are) presented with the expectation that bachelor degree graduates would receive some form of post graduate education and/or training prior to becoming registration eligible. Concomitantly, courses offered in CUP institutions were (and are) presented with the acknowledgement that bachelor degree recipients should have attained entry-level competence. It should be noted that from both Plan IV program types, respon-

dents commonly reported an overlap of a course being used to meet more than one competency.

When considering the overall ranges in percentage proportion of time spent in each course on the competencies, responses indicated that traditional Plan IV programs tended to vary more by generally having a wider range than did the Coordinated Undergraduate Programs. The broadness or closeness of the ranges reported however, were similar for both types of programs. The questionnaire also sought information concerning how each competency attained by students was evaluated. For both types of programs, evaluation by means of written examination only was a common response, being listed as a reply for each competency, but not necessarily as a reply from every institution. Written examinations used in conjunction with other forms of evaluation were easily the most predominant strategy used. Entities considered as other forms of evaluation in part included performance in the following written as well as oral skill areas: reports, projects, field trips, practical applications, discussion of assignments, drawing organizational charts, case studies, simulations, workbooks, student and/or peer evaluations, observation of clinical performance, role playing, problem solving, menus, pre- and post-clinical conference, etc. The diversity of these other forms of evaluation varied, depending on the major concept of the competency. Summaries of competency attainment evaluation strategies are shown for traditional Plan IV programs in Table 4 and for Coordinated

TABLE 4
EVALUATION OF ATTAINMENT OF FOODSERVICE SYSTEMS
MANAGEMENT COMPETENCIES IN TRADITIONAL
PLAN IV PROGRAMS (N=54)

Foodservice Systems Man- agement Competencies	Number of Institu- tions	Evaluation Strategies
A. Recognizes the or- ganizational frame- work necessary for defining & accom- plishing goals of the enterprise.	13	Written examination only.
	29	Written examination plus one or more of the fol- lowing: -written reports/lab re- ports -projects -field trips -practical applications -discussion of assign- ments from other insti- tutions -drawings of organiza- tional charts -case studies -simulations -workbook -student and/or peer evaluations -observation of clinical performance -role playing -problem solving -menu -pre- and post-clinical conference
	7	One or more of the follow- ing: -debates or open discus- sions -analysis of case studies -evaluation of organiza- tional charts -performance of tasks -organizational projects -laboratory assignments -in-basket exercise

TABLE 4 (Continued)

Foodservice Systems Man- agement Competencies	Number of Institu- tions	Strategies
	5	No strategies given
B. Relates the ef- fectiveness of a specific en- terprise to the realization of goals by sub units or de- partments	12	Written examination only.
	28	Written examination plus one or more of the fol- lowing: -discussion -term paper/research paper -laboratory reports -field trips -assignments in school food service and hospitals -log of clinical ex- periences -projects -observation of perform- ance -workbooks -case studies -computer projects -MBO -role playing -simulations -pre- and post-clinical conferences
	10	One or more of the fol- lowing: -performance evaluation -evaluation of lab as- signments or term projects -organizational charts -sample department ob- jectives, actions and costs -simulations -designs and uses of survey questionnaires -discussion with managers -in-basket exercises

TABLE 4 (Continued)

Foodservice Systems Man- agement Competencies	Number of Institu- tions	Strategies
	4	No strategies given
C. Comprehends man- agement's re- sponsibility for leadership and the importance of leadership in the achievement of objectives in foodservice systems.	9	Written examinations only.
	3	Written examinations plus one or more of the fol- lowing: -oral examination -discussion -analysis of work sta- tions as recorded in log -field experience and oral presentations -work sheets -journal -projects -case studies -term papers -laboratory reports -planning and execution of quantity food lab- oratory -critical incident -assignments in school food service and hos- pitals -performance evaluation -simulation -role play -pre- and post-clinical conferences -observation of hands-on experience -in-basket exercises
	8	One or more of the fol- lowing: -discussions and obser- vations -analysis of case studies -development of case studies

TABLE 4 (Continued)

Foodservice Systems Man- agement Competencies	Number of Institu- tions	Strategies
		-questionnaire test -projects -laboratory assignments
	4	No strategies given
D. Applies the proc- esses of plan- ning, organiz- ing, directing, evaluating, and controlling to the management of the functions and operations of foodservice systems.	4	Written examinations only
	32	Written examinations plus one or more of the fol- lowing: -practical tests -oral examinations -projects -costing -standardization of recipes -term papers -laboratory projects -field trips -case studies -budget preparation -worksheets -observation of perform- ance -discussion of simula- tions -peer evaluation -evaluation of catered meal (menu, specs., layout and design of foodservice) -reports of dining units assignments -in-basket exercises -school foodservice and hospital assignments -evaluation of preceptor -plan facility using com- petencies A-H -operating a small rest- aurant -pre- and post-clinical conference

TABLE 4 (Continued)

Foodservice Systems Man- agement Competencies	Number of Institu- tions	Strategies
	13	One or more of the fol- lowing: -special projects -observation of perform- ance -discussions -performance as manager for one week -preceptor's evaluation -reports of 2-week ob- servations -independent internship -ability to assist clini- cal site supervisor -student log
	5	No strategies given
E. Recognizes the significance of the fact that a food service system is a unified, com- plex organi- zation perform- ing highly de- pendent and specialized functions.	6	Written examination only.
	33	Written examination plus one or more of the fol- lowing: -oral examination -oral presentations -self evaluation -laboratory evaluation by supervisor -performance evaluation -open discussion -readings -analysis of case studies -term paper -projects -field trips -worksheets/journals -rotations of assign- ments -assignments in school foodservice and hospitals -plans for hypothetical institutional kitchen -organization charts

TABLE 4 (Continued)

Foodservice Systems Man- agement Competencies	Number of Institu- tions	Strategies
		<ul style="list-style-type: none"> -site reports -operating a small rest- aurant -pre- and post-clinical conference
	9	One or more of the fol- lowing: <ul style="list-style-type: none"> -simulation -case studies -written analysis of in- basket -performance evaluation -assignments -discussions -observations -projects -systems design project -observation of perform- ance of different roles
	6	No strategies given
F. Understands the technical operations (menu planning, purchasing, facilities, finance) involved in the production, distribution, and service of high quality food in food service systems with varying organizational structures and objectives.	4	Written examination only.
	39	Written examination plus one or more of the fol- lowing: <ul style="list-style-type: none"> -menu planning assign- ment involving equip- ment, production and service -standardization of recipes -workshops -writing specifications -floor plans -laboratory reports -term paper -projects -work sampling project -worksheets -bids -specification quiz -case studies

TABLE 4 (Continued)

Foodservice Systems Man- agement Competencies	Number of Institu- tions	Strategies
		<ul style="list-style-type: none"> -homework -observations -operating a small rest- aurant -simulations -in-basket techniques -pre-and post-clinical conference
	9	<p>One or more of the fol- lowing:</p> <ul style="list-style-type: none"> -peer review and by teacher after tours -menu planning -labor project -work sampling -plan menus and purchase for a week -taste panel -cost comparison -conference operations at student union, resident halls and school food service -laboratory notebooks -written reports -practice modules under supervisor -prepare "special events"
	2	No strategies given
G. Applies prin- ciples and practices of management of personnel in the procurement, de- velopment, main- tenance, and utilization of an effective and satisfied working force in food service sys-	3	Written examination only.
	33	<p>Written examination plus one or more of the fol- lowing:</p> <ul style="list-style-type: none"> -self evaluation -evaluation by foodserv- ice supervisor -oral examination -student log -worksheets -lesson plan -projects

TABLE 4 (Continued)

Foodservice Systems Man- agement Competencies	Number of Institu- tions	Strategies
tems.		-field trips -application of theories into practice -operating a small rest- aurant -pre- and post-clinical conference
	10	One or more of the fol- lowing: -analysis of case studies -open discussion -debates -supervising the food- service worker -role playing -financial analysis -presentations -quality of production efforts -interviews observed -evaluation of self as a supervisor -job descriptions -specifications -in-basket exercises -hands-on experience -evaluations from other facilities -independent internship -manager's reports
	8	No strategies given
H. Comprehends reciprocal re- lationships be- tween manage- ment of food service systems and financial planning, eval- uating, and controlling.	7	Written examinations only.
	34	Written examinations plus one or more of the fol- lowing: -assignments -budgets planned, imple- mented and evaluated -special menus -term paper -project

TABLE 4 (Continued)

Foodservice Systems Man- agement Competencies	Number of Institu- tions	Strategies
		<ul style="list-style-type: none"> -observation project -field trip -worksheets -in-basket exercises -discussion -observed behaviors -role play -assignments from various institutions -student log -case studies -operating a small restaurant -pre- and post-clinical conference
	6	<p>One or more of the following:</p> <ul style="list-style-type: none"> -evaluation of organization chart and systems questionnaire -prepares budget for new addition to food service -oral presentations -computer applications, i.e. controlling -class discussion -worksheets -manager's reports -workbooks -observations
	7	No strategies given

Undergraduate Programs in Table 5. For summarization purposes, the 'other' oral evaluation strategies were listed first followed by the written evaluation strategies.

Average Number of Foodservice Systems Management
Faculty and Full-Time Equivalents Employed
In Plan IV Programs

The number of faculty listed by respondents as being responsible for teaching portions of foodservice systems management competencies was similar for both the traditional academic programs and the Coordinated Undergraduate Programs. Fifty-two traditional academic program respondents reported a range of from one to six faculty and staff teaching foodservice systems management. In contrast, CUP institutions claimed to have a range of from two to seven foodservice systems management faculty and staff. (Table 6)

Ascertained from this research was also data concerning the total number of full-time equivalent (FTE) faculty and staff, in relation to the number of individuals employed, responsible for teaching portions of foodservice systems management competencies. The average reported number of FTE's was greater than the average number of faculty and staff employed in the traditional programs. In contrast, the average FTE's were reported as fewer than the average number of faculty and staff employed by CUP institutions. (Table 6)

From survey respondents, it was learned that on the average

TABLE 5

EVALUATION OF ATTAINMENT OF FOODSERVICE SYSTEMS MANAGEMENT
COMPETENCIES IN COORDINATED UNDERGRADUATE PROGRAMS (N=6)

Foodservice Systems Management Compe- tencies	Number of Institu-	Evaluation Strategies
A. Recognizes the organizational framework nec- essary for de- fining and ac- complishing goals of the en- terprise.	1	Written examination only.
	5	Written examination plus one or more of the fol- lowing: -oral recitation -weekly discussion -assignments -projects -end of semester evalua- tions -observations -management project -nursing home project -practicum -summer practicum evalua- tion
B. Relates the ef- fectiveness of a specific en- terprise to the realization of goals by sub- units or depart- ments.	1	Written examination only.
	5	Written examination plus one or more of the fol- lowing: -same list as in 'A' -oral presentation -staff evaluation
C. Comprehends man- agement's res- ponsibility for leadership and the importance of leadership in the achievement of the objectives in foodservice systems.	1	Written examination only.
	5	Written examination plus one or more of the fol- lowing: -same list as in 'A'

TABLE 5 (Continued)

Foodservice Systems Management Compe- tencies	Number of Institu- tions N=6	Evaluation Strategies
D. Applies the proc- essing of plan- ing, organizing, evaluating, and controlling to the management of the functions and operations of foodservice sys- tems.	1	Written examination only.
	5	Written examination plus one or more of the fol- lowing: -same list as in 'A' -oral presentation -simulation exercise -staff evaluation
E. Recognizes the significance of the fact that a food service system is a unified, complex organization per- forming highly dependent and specialized functions.	1	Written examination only.
	5	Written examination plus one or more of the fol- lowing: -same list as in 'A'
F. Understands the technical opera- tions (menu plan- ning, purchasing, facilities, fi- nance) involved in the production, distribution, and service of high quality food in foodservice sys- tems with varying organizational structures and ob- jectives.	1	Written examination only.
	5	Written examination plus one or more of the fol- lowing: -same list as in 'A'

TABLE 5 (Continued)

Foodservice Systems Management Compe- tencies	Number of Institu- tions N=6	Evaluation Strategies
G. Applies princi- ples and practi- ces of management of personnel in the procurement, development, maintenance, and utilization of an effective and satisfied working force in food- service systems.	1	Written examination only.
	5	Written examination plus one or more of the fol- lowing: -same list as in 'A' -oral presentations -simulated interviewing -employee relations ex- ercises -summer practicum
H. Comprehends re- ciprocal rela- tionships between management of foodservice sys- tems and finan- cial planning, evaluating, and controlling.	1	Written examination only.
	5	Written examination plus one or more of the fol- lowing: -same list as in 'A' -oral presentations -practicum test

TABLE 6
 AVERAGE NUMBER OF FOODSERVICE SYSTEMS MANAGEMENT
 FACULTY AND FULL-TIME EQUIVALENTS EMPLOYED
 IV PLAN IV PROGRAMS

Plan VI Program	Number of Faculty			Full-Time Equivalent Average
	High N	Low N	Average N	
Traditional*	6	1	2.44	4.26
Coordinated Undergraduate Programs**	7	2	4.00	1.30

*N=52 responses for number of faculty and 44 responses for FTE.

**N=6 responses for number of faculty and 6 responses for FTE.

in traditional programs the FTE's per institution for graduate teaching assistants equaled 1.53, lecturers equaled 6.76, adjunct equaled 5.25 and "other" specified positions equaled 1.32. For each of these FTE categories, the reported averages were lower in CUP institutions: 1.30 overall FTE's, 1.00 graduate teaching assistant, 274 adjunct and zero for "others".

Rank and Position Titles of Foodservice
Systems Management Faculty
and Staff

The rank of faculty involved in teaching foodservice systems management competencies ranged from lecturer to full professor. Predominant ranks in descending order were Assistant Professor, Instructor (being almost identical in number) followed by Associate Professor. (Table 7) It was anticipated that a large number of adjunct faculty would be included and/or reported as being part of the Coordinated Undergraduate Program's faculty and staff. This was not indicated by respondents. It was unclear as to what is considered faculty rank. For example, at some institutions the designation of "Lecturer" is given to adjunct faculty and/or graduate assistants.

The position title column in the survey questionnaire was completed in most instances in the same way as the faculty rank column. In only 13 instances from the traditional pro-

TABLE 7
RANK OF FACULTY AND STAFF TEACHING
FOODSERVICE SYSTEMS MANAGEMENT
COURSES AND LABORATORIES

Rank	Number in Traditional Programs	Number in Coordinated Undergraduate Programs
Assistant Professor	35	5
Instructor	34*	4*
Associate Professor	17	3
Professor	15	2
Adjunct Faculty	9	-
Graduate Assistant	7	1
Lecturer	6	5
No Rank Reported	6	4
Total	N = 129	N = 24

*Four were listed in traditional programs and one under Coordinated Programs as "Clinical Instructors."

grams and eight instances from the Coordinated Undergraduate Programs were position titles indicated correctly. The representative titles are shown in Table 8.

Highest Degree Level Attained and Registration
Status of Foodservice Systems
Management Faculty

In both the traditional Plan IV academic programs and the Coordinated Undergraduate Programs, approximately half of the faculty reported had attained a Master of Science as the highest degree. The second most prevalent degree was that of doctorate closely followed by the Bachelor of Science degree. (Table 9) Therefore, for both types of programs, prevalence of degree level attainment was ordinally identical. It is important to note that various degree designation comprise the total reported highest degree attainment level. For example, responses for the bachelors level included degrees from B.S. and Ed.S. Responses for the masters level included degrees from M.S., M.A., M.Ed., M.B.A., M.P.H., and "Masters". Responses for the doctorate level included degrees from Ph.D., Ed.D., and J.D.

Contrary to what was expected, only 69 percent of the traditional program's and approximately 83 percent of the Coordinated Undergraduate Program's faculty and staff were registered dietitians (R.D.). (Table 10) The researcher surmized that this finding is due to the fact that some of

TABLE 8

POSITION TITLES OF FACULTY AND STAFF TEACHING
FOODSERVICE SYSTEMS MANAGEMENT COURSES
AND LABORATORIES

Position Title	Number in Tradi- tional Programs	Position Title	Number in Coordinat- ed Under- graduate Programs
Director	6	Director	7
Program Direc- tor (1)		Assistant Direc- tor Dietary De- partment (3)	
Foodservice Di- rector (1)		Director, CUP (1)	
University Food- service Direc- tor (1)		Director University Foodservice (1)	
Hospital Food- service Di- rector (1)		Director (Unspeci- fied) (2)	
Dietetic Pro- gram Direc- tor (2)		Coordinator	1
Coordinator	3		
Clinical Site Coordinator (1)			
Restaurant Man- agement Pro- fessional Co- ordinator (1)			
Coordinator (Un- specified) (1)			
Administrative Pro- fessional	1		
Foodservice Man- ager	1		
Faculty Assistant	1		
Laboratory Assist- ant	1		

TABLE 9
HIGHEST DEGREE LEVEL ATTAINED BY FOODSERVICE
SYSTEMS MANAGEMENT FACULTY

Plan IV Program	<u>Degree Level</u>					
	Bachelors/Percent*		Masters/Percent*		Doctorate/Percent*	
Traditional**	13	10.08	76	58.91	37	28.68
Coordinated Undergraduate Programs***	3	12.50	16	66.67	5	20.83

*Percent derived from within that program type.

**N=129, including 3 for which degree level was not reported.

***N=24.

TABLE 10
AMERICAN DIETETIC ASSOCIATION REGISTRATION
STATUS OF FACULTY

Plan IV Program Faculty	Hold R. D. Status	<u>Registration Status</u>		
		Percent	Non-R.D. Status	Percent
Traditional (N=129*)	89	68.99	37	28.68
Coordinated Undergraduate Program (N=24)	20	83.33	4	16.67

*Includes three (2.33%) faculty members for which registration status was not indicated.

the students clinical or laboratory experiences are off-campus where faculty and staff (managers and/or operators) are not necessarily R.D.s. (See later discussion section on where laboratories are located.) In addition, some management dietitians reported as being responsible for conveying foodservice systems management competencies may not need R.D. status in their employment setting.

Experience of Faculty and Staff
In Teaching and Administrative
Foodservice

Respondents were asked to supply data about the calendar years of experience (rather than full-time equivalents) for the individual faculty and staff members listed as being responsible for teaching foodservice systems management competencies. The three areas in which experience data was requested were post-secondary teaching, teaching foodservice management was different only by one-half year, with the traditional Plan IV academic program again having faculty with more experience in this area. The average number of years of experience in administrative foodservice was greater by about two and one-half years for the faculty and staff of the Coordinated Undergraduate Programs.

TABLE 11
EXPERIENCE OF FACULTY AND STAFF IN TEACHING
AND ADMINISTRATIVE FOODSERVICE

Experience Type:	<u>Traditional Plan IV Program Faculty (N=129)*</u>			<u>Coordinated Undergraduate Pro- gram Faculty (N=24)</u>		
	<u>Year Range</u> High Low	<u>Average Number</u> of Years		<u>Year Range</u> High Low	<u>Average Number</u> of Years	
Post - Secondary Teaching	35 0	7.96		13 1	6.47	
Teaching Foodservice Management	30 .25	6.90		20 0	6.35	
Administrative Food- service	30 0	6.85		25 0	9.43	

*No response = 7 = 5.43%.

Number, Academic Level and Frequency

Distribution of Courses

Respondents were asked to share additional information about the courses delineated in the first section of the questionnaire used to teach foodservice systems management competencies. In response to this portion of the questionnaire, a range of from one to seven courses were listed. The wide range of courses given may be attributed to the fact that some institutions had (and listed) courses "above and beyond" Plan IV academic requirements. Most of the traditional Plan IV academic programs offered either two or three courses in foodservice systems management competencies while two of the six Coordinated Undergraduate Programs offered four courses (Table 12). For both types of programs, courses in foodservice systems management were predominantly in the Junior to Senior levels (Table 13). This finding seemed logical since courses encompassing the various managerial aspects required background information. Necessary background information included mathematics, accounting, economics, psychology, sociology and possibly others. These were then synthesized by the student for integration with concepts put forth in upper division academic levels in foodservice systems management courses. For example, a Quantity Food Production course and/or its laboratory may require the utilization of basic technical skill, human relations, economics, microbiology, basic management and other course

TABLE 12
NUMBER OF FOODSERVICE SYSTEMS MANAGEMENT
COURSES OFFERED

Number of Institutions Having. . .	Traditional (N=52) <u>Number</u>	Percent of Total	CUP (N=6) <u>Number</u>	Percent of Total
1 Course	6	11.54	1	16.67
2 Courses	13	25.00	0	0
3 Courses	14	26.92	1	16.67
4 Courses	7	13.46	2	33.33
5 Courses*	8	15.38	0	0
6 Courses*	3	5.77	1	16.67
7 Courses*	1	1.92	1	16.67
TOTAL	<u>52</u>		<u>6</u>	

*Some institutions have more courses "above and beyond" Plan IV academic requirements.

TABLE 13
LEVEL OF COURSES IN FOODSERVICE
SYSTEMS MANAGEMENT

Level of Course	<u>PLAN IV PROGRAMS</u>			
	<u>Traditional*</u>		<u>CUP**</u>	
	Number	Percent of Total	Number	Percent of Total
Freshman	1	.60	0	0
Freshman/ Sophomore	2	1.20	0	0
Sophomore	8	4.79	1	4.00
Sophomore/ Junior	7	4.19	1	4.00
Junior	56	33.53	16	64.00
Junior/ Senior	25	14.97	0	0
Senior	61	36.53	7	28.00
Other Combina- tion Levels (Including Graduate)	7	4.19	0	0

*N = 167 courses.

**N = 25 courses.

prerequisites.

Results also indicated that for both types of academic programs, as the academic level increased the length of time spent in laboratories also increased (Figure 2). At the same time, the average number of CUP lecture hours per week gradually and continually decreased and the average number of traditional Plan IV lecture hours per week seemed to increase during the lower division academic level then remain about the same during the upper division academic levels. Again, these findings may be a reflection of the philosophical base of each type of program.

Field Experience(s) of Students in Plan IV Programs

The number of hours of field experience required of the students in a school term for particular course level(s) was also surveyed (Table 14). Respondents did not always indicate whether they were on the semester or quarter system. Thus it is impossible to make comparisons on time spent in field experiences, as mandatory requirements or simply as encouraged experience, play an important role in dietetics education.

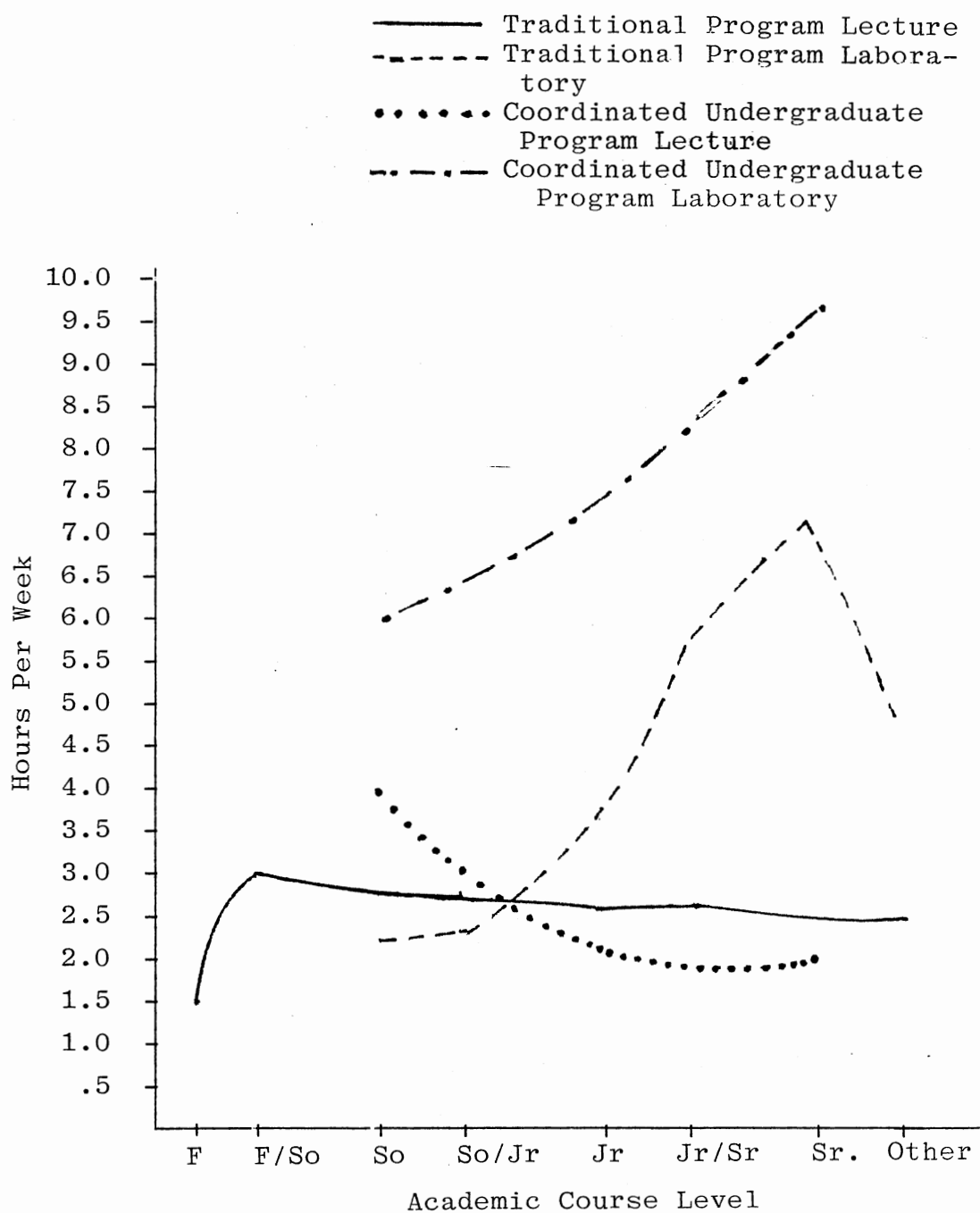


Figure 2. Average Number of Lecture and Laboratory Hours in Foodservice Systems Management Courses.

TABLE 14
FIELD EXPERIENCES OF STUDENTS IN PLAN IV PROGRAMS

Student Academic Level	<u>Traditional Plan IV Programs</u>				<u>Coordinated Undergraduate Programs</u>			
	Number of Courses	<u>Range of Hours</u>			Number of Courses	<u>Range of Hours</u>		
		High	Low	Average		High	Low	Average
Freshman/Sophomore	1	6	6	6	0			
Sophomore	2	90	16	53	0			
Sophomore/Junior	2	45	15	30	0			
Junior	21	144	1	39.67	11	320	3	78.50
Junior/Senior	6	360	2	119.10	0			
Senior	24	34	4		4	90	8	43.50
Other Level Combinations	5	12	4	6.80	0			
Total	61			254.57	15			122.00

Laboratory Locations and Extra

Laboratory Charges

Laboratory location(s) and facility or facilities type(s) may be a reflection of the area(s) of specialization in dietetics offered by the educational institutions. Access to and/or availability of such facilities may also be factors in determining which places are utilized as foodservice systems management laboratories. From this research it was determined that in both types of programs, the laboratories were usually located on-campus. Traditional Plan IV programs reported laboratories on-campus 47 times and off-campus 35 times while CUP institutions reported laboratories on-campus in 12 instances and off-campus in 7 instances. Laboratory facilities indicated were primarily hospitals, dormitories/resident halls and school foodservice programs (Table 15). None of the CUP institutions indicated that they assessed laboratory fees above the tuition charges. Only seven traditional programs responded to the laboratory fee assessment portion of the survey. Their responses may be found in Appendix C.

Textbooks Utilized

Because space provided on the survey questionnaire was inadequate for complete citation of references used in the foodservice systems management courses, responses were usually

TABLE 15

TYPES OF LABORATORY FACILITIES WHERE FOODSERVICE
SYSTEMS MANAGEMENT COURSES ARE TAUGHT

Types of Facilities	Number of Times Facilities Were Mentioned	
	Traditional Plan IV Program	Coordinated Undergraduate Program
Hospitals	30	16
Dorm/Resi- dence Halls	20	2
School Lunch	16	2
Long-Term Care	11	3
Cafeterias	9	-
Restaurants	7	-
Own Food Lab	6	2
Field Trips	4	-
Student Union	3	-
Child Care Centers	-	1
Diabetes Association	1	-
Heart Assoc- iation	1	-
Health Founda- tion	1	-
WIC Programs	1	-
Foodservice Organizations	1	-
"Simulation"	1	-
"Any Food Service"	1	-
Local Business	1	-
Field Experience	1	-

incomplete. When a transcription was performed of each textbook used, a limited number of sources frequently reappeared. It was not apparent to the researcher which texts were used alone or in combination with other sources and/or were used for more than one course. In addition to textbooks, several institutions responded that they assigned readings from journals and/or utilized other sources. It was rarely indicated by respondents that students were required to use the institution's own handbook or manual. A listing categorized by topic of the most commonly mentioned texts follows.

Quantity Food Production Management

Knight, J. B., and Kotschevar, L. H.: Quantity Food Production, Planning, and Management. Boston: CBI Pub. Co., 1979.

Kotschevar, L. H.: Standards Principles and Techniques in Quantity Food Production. Boston: CBI Pub. Co., 1974.

Terrell, M. E.: Professional Food Preparation. New York: John Wiley & Sons, 1979.

West, B. B., Shugart, G. S., and Wilson, M. F.: Food For Fifty. New York: John Wiley & Sons, 1979.

West, B. B., Wood, L., Harger, V., and Shugart, G.: Food Service in Institutions. New York: John Wiley & Sons, 1977.

General Management

Hitchcock, M. J.: Foodservice Systems Administration.

New York: Macmillian Pub. Co., 1980.

Keiper, J. R.: Principles and Practice of Management
in the Hospitality Industry. Boston: CBI Pub.
Co., 1979.

Stokes, J. W.: How to Manage a Restaurant: Or Insti-
tutional Food Service. Dubuque, Iowa: W. C.
Brown Co., 1982.

Purchasing

Kotschevar, L. H.: Quantity Food Purchasing. New York:
John Wiley & Sons, 1975.

Warfel, M. C., and Waskey, F. H.: The Professional Food
Buyer. Berkeley, California: McCutchan Pub. Corp.
1979.

Equipment

Avery, A. C.: A Modern Guide To Foodservice Equipment.
Boston: CBI Pub. Co., 1980.

Kotschevar, L. H., and Terrell, M. E.: Food Service
Planning: Layout and Equipment. New York: John
Wiley & Sons, 1977.

Faculty Degree Attainment and R.D. Status
Concomitant to Teaching Lecture
and/or Laboratories

This research determined whether a congruency existed

between academic level of lecture and/or laboratory and the highest degree attained and/or R.D. status of the faculty and staff involved. Predominant results indicated what generally might be expected. Findings show that while most faculty have attained the masters degree, a slightly greater number of faculty with doctoral degrees hold responsibilities associated with academically upper-division students. Also, for both program types, R.D. and non-R.D. status for faculty and staff in lower-division courses was about equal. However, as the academic course level increased, the proportion of registered personnel also increased. (Table 16)

Sequence of Foodservice Systems Management Courses

Survey participants were asked to state or illustrate the foodservice systems course sequence used at their institution. Traditional programs were about equally divided when considering whether management process courses were sequenced prior to or after quantity food production management courses. CUP institutions predominantly sequenced quantity food production management courses early in the program followed by management function courses. For the traditional programs where quantity food production management was late in the course sequence, preceeding courses were usually "Purchasing", "Equipment and Layout" and/or "Foodservice Management". Menu planning was rarely mentioned

TABLE 16

DEGREE ATTAINED AND R.D. STATUS OF FACULTY IN BOTH PROGRAM TYPES
TEACHING LECTURE AND/OR LABORATORIES AT THE DIFFERENT LEVELS
OF FOODSERVICE SYSTEMS MANAGEMENT COURSES

Course Level	Traditional Plan IV Programs					Coordinated Undergraduate Programs				
	N = 167 Courses	Lecture Faculty	R.D.?	Laboratory Faculty	R.D.?	N = 25 Courses	Lecture Faculty	R.D.	Laboratory Faculty	R.D.?
Freshman	1	1M**	1 yes 0 no			0				
Freshman/Sophomore	2	1D 1M	1 yes 1 no	2M 1B	2 yes 1 no	0				
Sophomore	8	3D 6M 1B	4 yes 6 no	3M 1B	2 yes 2 no	1	1D	0 yes 1 no	1D	0 yes 1 no
Sophomore/Junior	7	4D 2M 2B	4 yes 3 no 1*	2D 1M 1B	3 yes 0 no 1*	1	1D	1 yes 0 no	no lab	
Junior	56	21D 40M 4B	46 yes 19 no	11D 22M 12B	28 yes 17 no	16	5D 18M 2B	23 yes 2 no	3D 15M 1B	17 yes 2 no
Junior/Senior	25	5D 17M 2B	22 yes 2 no	2D 5M 1B	6 yes 2 no	0				
Senior	61	22D 37M 2B	47 yes 14 no	16D 23M 6B	35 yes 9 no 1*	7	2D 9M 2B	13 yes 0 no	2D 5M	7 yes 0 no
Other Combinations Level (Including Graduate)	7	5D 1M 1B	5 yes 2 no	4D 1B	4 yes 1 no	0				

*Not indicated

**D = Doctorate level; M = Masters level; B = Bachelors level

as a course by itself. Instead, menu planning concepts were integrated into other courses. Two institutions responded that all courses were taken together as a block.

"Dress Code" for Foodservice Systems
Management Laboratories

The survey questionnaire provided space for respondents to delineate separately for females and males, the "dress code" requirements practiced at their institution for food-service systems management laboratories. Responses revealed no differing distinguishing characteristic(s) between the two types of Plan IV programs. Most survey participants indicated that in general, "dress code" requirements were the same for females and males. A large majority stated that they expected students to wear a uniform and/or lab coat (usually of white material), hair-restraints, and shoes which were sturdy and closed-toed. One institution prohibited the wearing of lab coats due to the perceived hazard around equipment. Four responses indicated that females were not permitted to include as part of their attire fingernail polish, jewelry and/or excessive make-up. For males, one response indicated that dark trousers and a white lab coat were required and another institution prohibited beards and long side-burns. Two respondents indicated jeans were not allowed. Finally, three survey participants stated that the "dress code" was dictated by facilities where the students

have laboratories.

Course Credits

Data concerning course credit(s) were compiled from the survey questionnaire. Responses were transcribed on the specific topics of transfer course credit acceptance for foodservice systems management courses, course credit waiver for students with foodservice management experience and work experience requirement for dietetics majors. For transfer course credit acceptance from junior college, approved dietetic technician programs and non-approved Plan IV programs, traditional programs for each instance indicated that they more often did (than did not) accept course credits in lieu of their own requirements. CUP institutions were about equally divided on acceptance of transfer course credits.

(Table 17) Waiver of course credits for students with foodservice management experience was uncommon. Traditional program participants (N=54, including five no responses to this question) mentioned that in 43 instances and CUP institution responses (N=6, including one no response to this question) stated in three instances that course credits were not waived. Work experience requirements for majors in foodservice management were also uncommon. Seven traditional programs stated that work experience was required, of which two institutions granted credits ranging from one to 22 hours. Two CUP institutions claimed to require work experi-

TABLE 17
ACCEPTANCE OF COURSE CREDITS FROM OTHER INSTITUTIONS

Plan IV Program	Foodservice Systems Management Courses From		
	Junior Colleges	Approved Dietetic Technician Programs	Non-Approved Plan IV Programs
Traditional	35 Yes	28 Yes	24 Yes
(N=54)	12 No	15 Yes	16 Yes
	7 *	11 *	14 *
Coordinated			
Undergraduate	3 Yes	3 Yes	2 Yes
Programs	2 No	2 No	3 No
(N=6)			

* Not indicated

ence, of which both granted from one to six course credit hours.

CHAPTER V

SUMMARY, RECOMMENDATIONS AND IMPLICATIONS

The overall objective of this research was to explore how the foodservice systems management competencies of the ADA Plan IV minimum academic requirements are implemented and evaluated in the traditional programs and the Coordinated Undergraduate Programs in dietetics. The review of literature yielded a few studies about the implementation and evaluation of educational competencies. The knowledge base about competency-based education in general is expanding rapidly, however information concerning the students' attainment of competence in the practice of dietetics is lacking. This study was conducted to gain a better understanding of how a section of the Plan IV academic requirements is currently being used in educational programs and how it is evaluated. This study did not attempt to assess the program quality or to compare the traditional program with CUP.

A survey questionnaire was mailed to all Plan IV program representatives and CUP directors listed in the 1983 ADA Directory of Dietetic Programs. Data from a total of 54 traditional programs and 6 CUPs were analyzed.

Results showed that a wide range of time is spent in numerous foodservice systems management courses. The evaluation of competency attainment is performed through a variety of methods covering written examinations, oral discussions, term papers, case studies, simulations and others. The number of faculty, ranks and number of FTE's varied from program to program as well as the number of lecture and laboratory hours. These were also affected by program philosophy as well as location of laboratories or clinical facilities.

Recommendations

In another or a similar study, space for respondent's replies would be increased and certain portions of the questionnaire might be repeated for more thorough answers to some questions. It is also recommended that a time during the school year other than summer months be used. More specific information about the type of time plan followed i.e. semester or quarter would be useful.

The length of the questionnaire might be decreased by use of more check lists or closed answer type questions, in turn eliciting more response. A study involving a few stratified, randomly selected schools using a case study format or telephone inquiry method would be helpful for comparison to this study. If a similar format is followed, a redesign of the questionnaire is recommended.

The researcher recommends a comparison of these results with the Plan IV program documents in the ADA Headquarter's

office for congruence between the planned experiences and those being provided.

Implications

It is apparent from the research results that there is a need for standardization of course titles, course content, teaching and evaluation strategies to ensure foodservice systems management competency attainment. Other competencies included in the ADA Plan IV minimum academic requirements and promotion of creativity and individuality in the programs could still be maintained. What are the best strategies of competency implementation? Of competency evaluation? How do these strategies vary by situation? By financial status? Without losing program identity and credibility? These are the types of questions which guided the inquiry and yet many of them remain unanswered.

How will educators manage the transistion from use of the Essentials and Plan IV minimum academic requirements to the Standards of Education to be developed by ADA? Mechanisms to assure that competence is acquired and maintained relevant to practice, be it entry-level or specialty-level will have to be established.

A SELECTED BIBLIOGRAPHY

Academic requirements for active membership in the American Dietetic Association and entrance to courses for student dietitians approved by the executive board. J. Am. Dietet. A. 20:230, 1944.

A lesson in orthography. J. Am. Dietet. A. 5:218, 1929.

American Dietetic Association: Directory of Dietetic Programs 1983. Chicago: American Dietetic Association, 1982.

American Dietetic Association Courier: Texas dietetians first to be licensed. The American Dietetic Association, 22:1, 1983.

American Dietetic Association Reports: Position paper on recommended salaries and employment practices for members of The American Dietetic Association. J. Am. Dietet. A. 78:62, 1981.

American Dietetic Association Reports: Program of work accomplishments 1976-1977.

American Dietetic Association Reports: Report of the task force on competencies, council on educational preparation, The American Dietetic Association. J. Am. Dietet. A. 73:281, 1978.

American Dietetic Association Reports: The American Dietetic Association position papers on continuing education. J. Am. Dietet. A. 64:289, 1974.

Armstrong, M. R.: Establishing training programs abroad. J. Am. Dietet. A. 35:453, 1959.

Association Progress: Condensed report of committee on survey of quantity cookery courses. J. Am. Dietet. A. 10:513, 1935.

Association Progress: Members speak before hospital association. J. Am. Dietet. A. 12:81, 1936.

Association Progress: Standards for membership. J. Am. Dietet. A. 10:66, 1934.

- Association Section: Continuing education - 1957-58. J. Am. Dietet. A. 34:162, 1958.
- Atkinson, A. B.: Development of administrative abilities. J. Am. Dietet. A. 29:144, 1953.
- Augustine, G. M., McKinley, M. M., and Galster, M. D.: Developing criteria for institution management curricula. 30:458, 1954.
- Bateson, F. E.: The significance of an ultimate aim in a professional education program. J. Am. Dietet. A. 15:471, 1939.
- Bay, M. S.: Teaching food preparation. Individual-laboratory vs. modified-demonstration method. J. Am. Dietet. A. 29:774, 1953.
- Beatley, B.: The college and vocational preparation. J. Am. Dietet. A. 13:254, 1937.
- Bell, C. G.: Role vs. entry-level competencies in competency-based education. J. Am. Dietet. A. 69:133, 1976.
- Best, J. W.: Research in Education. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1981.
- Bloetjes, M. K.: Duties and education of Danish hospital dietitians. J. Am. Dietet. A. 32:1073, 1956.
- Blood, A. F., Dye, M. West, B. B., Bryan, M. G., and Koehne, M.: Colleges, student dietitians, and approved training courses. J. Am. Dietet. A. 18:98, 1942.
- Blood, A. F., Dye, M. West, B. B., Bryan, M. G., and Koehne, M.: What colleges supply student dietitians for training courses approved by the A.D.A. J. Am. Dietet. A. 14:800, 1938.
- Bogle, M. L.: Registration - the sine qua non of a competent dietitian. J. Am. Dietet. A. 64:616, 1974.
- Boller, A. E.: President's address. J. Am. Dietet. A. 5:175, 1929.
- Bosche, J. W. V.: Personnel procedure within the dietary department. J. Am. Dietet. A. 10:123, 1934.
- Bosley, B., and Huenemann, R. L.: What can we learn from Latin America? I. Nutritional problems and educational programs in Latin America. J. Am. Dietet. A. 53:99, 1968.

- Bosley, B., and Huenemann, R. L.: What can we learn from Latin America? II. Preparing nutritionists-dietitians for integrated health services. J. Am. Dietet. A. 53: 104, 1968.
- Bowes, A. P.: Annual reports 1938-1939 and proceedings Los Angeles meeting. Community education section. J. Am. Dietet. A. 15:756, 1939.
- Bryan, M. G.: American Dietetic Association section activities for 1931. J. Am. Dietet. A. 6:347, 1931.
- Bryan, M. G.: Association reports. J. Am. Dietet. A. 7:288, 1931.
- Bryan, M. G.: Progress in approved courses for student dietitians. J. Am. Dietet. A. 9:377, 1934.
- Butterworth, T. H.: Learning-principles, practices, and peanuts. J. Am. Dietet. A. 49:15, 1966.
- Byerly, M. G.: A chapter in the history of dietetics. J. Am. Dietet. A. 2:166, 1926.
- Chambers, M. J.: Development of an instrument to assess achievement of minimum academic competencies established by the American Dietetic Association. Doctoral dissertation, The Ohio State University, 1975.
- Chambers, M. J.: Professional dietetic education in the U. S. J. Am. Dietet. A. 72:596, 1978.
- Chambers, M. J., and Hubbard, R. M.: Assessing achievement for minimum academic competency. I. Instrument development. J. Am. Dietet. A. 73:27, 1978.
- Chambers, M. J., and Hubbard, R. M.: Assessing achievement for minimum academic competency. II. Validity and reliability. J. Am. Dietet. A. 73:31, 1978.
- Cloud, H. H.: Dietetic traineeships. IV. Role of the Alabama Dietetic Association in developing dietetic traineeships. J. Am. Dietet. A. 64:517, 1974.
- Comm. on Dietetic Registration: Continuing competency assurance. The American Dietetic Association, 1983.
- Comm. of Goals of Education for Dietetics, Dietetic Internship Council: Goals of the lifetime education of the dietitian. J. Am. Dietet. A. 54:91, 1969.
- Continuing education of the dietitian. J. Am. Dietet. A. 33:46, 1957.

- Coon, B. I.: Current educational problems. J. Am. Dietet. A. 31:1227, 1955.
- Coover, L. S.: The professional growth of the dietetic intern. J. Am. Dietet. A. 27:119, 1951.
- Copher, M. H.: The administration of a hospital dietary department. J. Am. Dietet. A. 1:60, 1925.
- Current Comment: Dietetics abroad. J. Am. Dietet. A. 9:236, 1933.
- Current Comment: Dietitian training in Hungary. J. Am. Dietet. A. 6:347, 1931.
- Current Comment: Educational requirements for dietitians. J. Am. Dietet. A. 19:627, 1943.
- Current Comment: How to interest college students in nutrition. J. Am. Dietet. A. 10:493, 1935.
- Current Comment: Meetings of heads of Home Economics departments and approved training courses for student dietitians. J. Am. Dietet. A. 14:41, 1938.
- Current Comment: Section activities of interest to educational groups. J. Am. Dietet. A. 9:219, 1933.
- Dalrymple, J. I.: Teaching for concept development. J. Am. Dietet. A. 45:22, 1964.
- Davis, C. M., Anderson, M. J., and Jagger, D.: Competency: The what, why, and how of it. Physical Therapy, 59:1088, Sept. 1979.
- Department of Education Educators Packet: Historical background. The American Dietetic Association. Revised-July, 1979.
- Dictionary of Occupational Titles, Supplement 1,: Definition of a dietitian. J. Am. Dietet. A. 31:718, 1955.
- Dictionary of Occupational Titles, Supplement 1, Second edition: The terms "Dietitian" and "Nutritionist". J. Am. Dietet. A. 35:118, 1959.
- Dietitian Evaluation System Project, Professional Education Section. J. Am. Dietet. A. 28:834, 1952.
- Dietitians and nutritionists defined. J. Am. Dietet. A. 37:147, 1960.
- Dietitians in the Veterans Administration. J. Am. Dietet.

A. 22:474, 1946.

Dodge, Q. O.: Institution management and professional success. J. Am. Dietet. A. 16:291, 1940.

Dodge, Q. O.: Where administrators come from. J. Am. Dietet. A. 13:130, 1937.

Domitilla, M.: The examination of student nurses in dietetics. J. Am. Dietet. A. 2:209, 1927.

Donaldson, B.: Extending educational opportunities for dietitians. J. Am. Dietet. A. 53:329, 1968.

Donaldson, B.: Research in food administration. J. Am. Dietet. A. 38:444, 1961.

Donaldson, B.: The future in food administration. J. Am. Dietet. A. 46:357, 1965.

Dressler, P. L.: Place of evaluation in a professional training program. J. Am. Dietet. A. 27:859, 1951.

Editorial: Breakfast meeting of heads of Home Economics departments and directors of approved courses. J. Am. Dietet. A. 15:801, 1939.

Editorial: Courses for dietitian internes. J. Am. Dietet. A. 9:216, 1933.

Editorial: Historical notes on the development of educational and training standards for dietitians. J. Am. Dietet. A. 20:538, 1944.

Editorial: The long view of professional education. J. Am. Dietet. A. 18:308, 1942.

Editorial: Training and qualifications of dietitians. J. Am. Dietet. A. 22:325, 1946.

Editorial: Training courses for dietitians in industry and other fields. J. Am. Dietet. A. 20:538, 1944.

Editorial: What the American College of Surgeons thinks of the dietary department. J. Am. Dietet. A. 7:42, 1931.

Eppright, E. S.: Teaching experiences in a college in Iraq. J. Am. Dietet. A. 35:449, 1959.

Fallgatter, F. A.: Trends in Home Economics education. J. Am. Dietet. A. 27:645, 1951.

- Feeney, E. L.: Annual reports 1938-1939 and proceedings
Los Angeles meeting. Professional education section.
J. Am. Dietet. A. 15:756, 1939.
- Feeney, E. L.: News Notes. J. Am. Dietet. A. 6:269, 1930.
- Ferguson, C. M.: Professions, professionals, and motivation. J. Am. Dietet. A. 53:197, 1968.
- Fingerhood, B.: The dietitian, the hospital and the administrator. J. Am. Dietet. A. 14:194, 1938.
- Fischer, F. E.: President's report to members. J. Am. Dietet. A. 57:411, 1970.
- Flanagan, J. J.: The philosophy of education. J. Am. Dietet. A. 35:962, 1959.
- Fleck, H. C.: A questionnaire for the would-be dietitian. J. Am. Dietet. A. 14:815, 1938.
- Fruin, M. F., and Campbell, J. P.: Developing behaviorally anchored scales for rating dietitians's performance. J. Am. Dietet. A. 71:111, 1977.
- Gale, L. E., and Pol, G.: Competence: A definition and conceptual scheme. Educational Technology, 15:19, June, 1975.
- Gilson, H. E.: Some historical notes on the development of diet therapy. J. Am. Dietet. A. 23:761, 1947.
- Gleiser, F. W.: The college and university training of the dietitian. J. Am. Dietet. A. 15:558, 1939.
- Godfrey, G.: Problems in the college training of the dietitian. J. Am. Dietet. A. 17:639, 1941.
- Hallahan, I. A.: The dynamics of dietetics. J. Am. Dietet. A. 68:115, 1976.
- Hall, G. E.: Learning effective instruction methods. J. Am. Dietet. A. 34:919, 1979.
- Hall, G. E.: Professional education section. Chairman's summary. J. Am. Dietet. A. 16:1016, 1940.
- Harrington, M. M.: Methods in determining effectiveness of clinical teaching. J. Am. Dietet. A. 8:164, 1932.
- Hart, K. M.: President's report to members. J. Am. Dietet. A. 49:487, 1966.

- Hart, M.: Competency-based education. J. Am. Dietet. A. 69:616, 1976.
- Hart, M. E.: Dietetic traineeships. I. Planning and philosophy of new programs. J. Am. Dietet. A. 64:511, 1974.
- Henderson, V. M.: Programs to combat nutritional quackery. J. Am. Dietet. A. 64:372, 1974.
- Heyd, C. G.: The value of standards. J. Am. Dietet. A. 14:25, 1938.
- Hoover, J. W., and Moore, A. N.: Dietetic Com-Pak. J. Am. Dietet. A. 64:500, 1974.
- Hopkins, B.: Latin America's new school of nutrition and dietetics. J. Am. Dietet. A. 40:15, 1962.
- Horton, L. E.: The boys in the club. J. Am. Dietet. A. 81:17, 1982.
- Houle, C. O.: The dietitian as a teacher of adults. J. Am. Dietet. A. 24:837, 1948.
- Houston, W. R., and Warner, A. R.: The competency-based movement: Origins and future. Educational Technology, 17:14, June, 1977.
- Howard, V. A., and Schiller, R.: Competency-based education in a career mobility program in dietetics. J. Am. Dietet. A. 71:428, 1977.
- Howe, F. W.: Educational trends in the field of dietetics. J. Am. Dietet. A. 12:248, 1936.
- Huddleson, M. P.: A new profession is born. J. Am. Dietet. A. 23:573, 1947.
- Hunscher, H. A.: Continuing education: An antidote to obsolescence. J. Am. Dietet. A. 43:115, 1963.
- Hutton, C. W., and Davidson, S. H.: Self-instructional learning packages as a teaching/learning tool in dietetic education. J. Am. Dietet. A. 75:678, 1979.
- Ishkanian, I. A., Turnlund, J. R., and Tannous, R. I.: Hospital dietetics and foodservice in developing countries. II. Lebanon. J. Am. Dietet. A. 83:315, 1983.
- Johnson, D.: Changing role of the dietitian. J. Am. Dietet. A. 36:593, 1960.

- Johnson, D.: The dietitian - a translator of nutritional information. J. Am. Dietet. A. 64:608, 1974.
- Johnson, K. M.: Evolving standards of training for the dietitian. J. Am. Dietet. A. 25:504, 1949.
- Jones, M., and Leany, C.: The professional examination service. J. Am. Dietet. A. 29:685, 1953.
- Junkermier, P. A., and Wenberg, B. G.: Implications of A.D.A. Plan IV for active membership.
- Karkeck, J. M.: Continuing education: To be useful, a thing must be used. J. Am. Dietet. A. 74:566, 1979.
- Katz, R. L.: Skills of an effective administrator. Harvard Business Review. 52:90, Sept.-Oct., 1974.
- Kirk, R. B.: Continuing education. J. Am. Dietet. A. 35:66, 1959.
- Klingstedt, J. L.: Philosophical basis for competency-based education. Educational Technology, 12:10, Nov., 1972.
- Kreitlow, B. W.: Teaching adults democratically. J. Am. Dietet. A. 33:788, 1957.
- Laboskey, D. P.: College students' attitudes toward the professions. J. Am. Dietet. A. 37:13, 1960.
- Lafferty, L. J.: Development of a methodology to determine and validate competency statements for dietitians employed in foodservice management positions at different levels of practice. Doctoral Dissertation, University of Missouri-Columbia, 1981.
- Larsson, E.: Counterparts of A.D.A. in other countries. J. Am. Dietet. A. 49:103, 1966.
- Letters to the Editor: What about "Registered" dietitians? J. Am. Dietet. A. 36:62, 1960.
- Lewis, R. C.: Hospitality education at the crossroads. The Cornell H.R.A. Quarterly, August 1982.
- Linnenkohl, S. C., and Roach, F.: Professional experiences of recent graduates. J. Am. Dietet. A. 82:264, 1983.
- Lipscomb, M.: Early days of hospital dietetics. J. Am. Dietet. A. 49:103, 1966.
- Loyd, M. S., and Vaden, A. G.: Practitioners identify

- competencies for entry-level generalist dietitians. J. Am. Dietet. A. 71:510, 1977.
- Lundy, J. S.: Training for the profession of dietetics. J. Am. Dietet. A. 36:352, 1960.
- Mackinnon, C. F.: Observations on the education of dietitians and nutritionists in Latin America. J. Am. Dietet. A. 49:42, 1966.
- Marble, B. B., and McDonald, G.: Forward or backward? J. Am. Dietet. A. 15:569, 1939.
- Marshall, M. E.: The value of field trips. J. Am. Dietet. A. 12:381, 1936.
- Meeks, D. K., and Zallen, E. M.: Dietitians perceptions of administrative competencies gained during professional education. Proceedings of the Tenth Biennial Conference of The Foodservice Systems Management Education Council, p. 146, 1979.
- Membership Requirements Committee: New academic requirements for A.D.A. membership. J. Am. Dietet. A. 31:1152, 1955.
- Meredith, S. R., Lucas, M. J., Dickey, J. A., and Carey, M.: Practitioner competencies. J. Am. Dietet. A. 81:168, 1982.
- Miller, G. A.: Academic preparation for food service management. I. Evaluation of curricula. J. Am. Dietet. A. 37:21, 1960.
- Miller, G. A.: Academic preparation for food service management. II. Recent graduates evaluate their education. J. Am. Dietet. A. 37:27, 1960.
- Miller, G. A.: Academic preparation for food service management. III. Employers assess collegiate programs. J. Am. Dietet. A. 37:121, 1960.
- Miller, G. A.: Academic preparation for food service management. IV. Views of educators and conclusions. J. Am. Dietet. A. 37:124, 1960.
- Miller, J. B., and Spears, M. C.: Mastery learning and group study in a dietetics curriculum. J. Am. Dietet. A. 65:151, 1974.
- Mitchell, H. S.: The college course in diet and disease. J. Am. Dietet. A. 15:284, 1939.

- Mitchell, K.: President's address. J. Am. Dietet. A. 12:293, 1936.
- Mones, L.: Characteristics of a profession. J. Am. Dietet. A. 34:241, 1958.
- Morales, Jr., R., Spears, M. C., and Vaden, A. G.: Menu planning competencies in administrative dietetic practice. I. The methodology. J. Am. Dietet. A. 74:642, 1979.
- More definitions of dietitians. J. Am. Dietet. A. 37:347, 1960.
- Morgan, A. F.: College education and the food specialist. J. Am. Dietet. A. 1:174, 1926.
- Morrill, W. P.: Training hospital dietitians. J. Am. Dietet. A. 16:240, 1940.
- Mundie, P. J.: Qualities of successful leadership. J. Am. Dietet. A. 33:685, 1957.
- Nair, J. H.: Maturing professionally, J. Am. Dietet. A. 45:123, 1964.
- New opportunity for graduate study in dietetics. J. Am. Dietet. A. 35:560, 1959.
- New requirements for A.D.A. membership. J. Am. Dietet. A. 35:253, 1959.
- News Notes: General association news. J. Am. Dietet. A. 12:179, 1936.
- News Notes: The American Dietetic Association, inspection of courses. J. Am. Dietet. A. 15:52, 1939.
- Northrop, M. W.: Development of the administrative dietitian. J. Am. Dietet. A. 32:548, 1956.
- Norton, R. E.: Perceptions of competencies gained during the administrative dietetic internships. Master's thesis, Oklahoma State University, 1980.
- Official spelling and definition of the term "Dietitian". J. Am. Dietet. A. 6:350, 1931.
- Ohlson, M. A.: Education of dietitians in various countries. J. Am. Dietet. A. 28:943, 1952.
- Patterson, I.: Dietetic education - some current issues. J. Am. Dietet. A. 45:19, 1964.

- Perkinson, H. J.: "Since Socrates: Studies in the history of Western educational thought." Longman, Inc., New York, 1980.
- Porter, T.: Educational opportunities for the dietitian. J. Am. Dietet. A. 23:876, 1947.
- Proceedings of the Eighth Biennial Conference of The Food-service Systems Management Education Council, 1975.
- Project 1 of the Professional Education Section.: A study of the needs and responsibilities of the student dietitian. J. Am. Dietet. A. 20:533, 1944.
- Project 2 of the Professional Education Section.: The content and objectives of college courses: Institution management. J. Am. Dietet. A. 20:315, 1944.
- Random House Dictionary of the English Language. (Unabridged edition) New York: Random House, Inc., p. 529, 1971.
- Regshauge, L. M.: President's report to members. J. Am. Dietet. A. 33:1133, 1957.
- Registration of Dietitians Passes. J. Am. Dietet. A. 54:301, 1969.
- Richardson, L.: Administrators wanted. J. Am. Dietet. A. 10:459, 1935.
- Ricks, V. E.: Evaluation in times such as these. J. Am. Dietet. A. 41:187, 1962.
- Rinke, W. J.: Competency-based education. J. Am. Dietet. A. 76:247, 1980.
- Rinke, W. J.: The entry-level generalist dietitian: Employers' perceptions of the adequacy of educational preparation in administration provided in dietetic education programs. University of Wisconsin, Madison, 1979.
- Rinke, W. J.: The entry-level generalist dietitian. II. Employers' perceptions of the adequacy of preparation for specific administrative competencies. J. Am. Dietet. A. 80:139, 1982.
- Roach, F. R., and Wakefield, L.: Evaluating a self-instructional model in quantity food purchasing. J. Am. Dietet. A. 65:166, 1974.
- Robinson, W. F.: Educating the dietetic intern. J. Am.

- Dietet. A. 45:26, 1964.
- Robinson, W. F.: The dietetic internship. J. Am. Dietet. A. 39:18, 1961.
- Robinson, W. F.: Your role in the continuing development of dietetics. J. Am. Dietet. A. 47:89, 1965.
- Rorer, S. T.: Early dietetics. J. Am. Dietet. A. 10:289, 1934.
- Roser, F. B.: Practical personnel management. J. Am. Dietet. A. 28:35, 1952.
- Ross, M. L.: The long view. J. Am. Dietet. A. 56:295, 1970.
- Sabrosky, L. K.: Evaluation in the educational process. J. Am. Dietet. A. 44:31, 1964.
- Schell, E. H.: The dietitian as an administrator. J. Am. Dietet. A. 10:464, 1935.
- Schill, J. H.: Who should head the food service department? J. Am. Dietet. A. 35:1068, 1959.
- Schiller, R.: Dietetic traineeship. II. Exploring the feasibility and planning traineeships in Michigan. J. Am. Dietet. A. 64:512, 1974.
- Schroeder, W. P.: Learning-by-doing through teaching. J. Am. Dietet. A. 37:577, 1960.
- Scott, G. L., and Robbins, S. T.: Dietetic traineeships. III. A dietetic traineeship by consortium effort, J. Am. Dietet. A. 64:515, 1974.
- Seibert, M. L.: Establishing criteria for competency-based education. Am. J. Med. Tech., 45:368, 1979.
- Shanklin, C. W., and Beach, B. L.: Implementation and evaluation of a competency-based dietetic program. J. Am. Dietet. A. 77:450, 1980.
- Shircliffe, A.: American schools of cookery. J. Am. Dietet. A. 23:776, 1947.
- Simonis, P. L., Spears, M. C., and Vaden, A. G.: Dietetic technicians' performance: Supervisory and self-assessments. J. Am. Dietet. A. 82:271, 1983.
- Small Kansas colleges offer degree in dietetics. J. Am. Dietet. A. 28:1053, 1952.

- Smith, F. H.: President's address. J. Am. Dietet. A. 3:145, 1927.
- Smith, J. M.: A profession grows. J. Am. Dietet. A. 35:1065, 1959.
- Swift, E. J.: The psychology of personnel management. J. Am. Dietet. A. 3:159, 1927.
- Taba, H., Beilfuss, B. F., Ludwig, C., and Pearson, E. L.: A pattern for planning curriculum. 26:435, 1950.
- Terrell, M. E.: The training of administrative dietitians. J. Am. Dietet. A. 17:885, 1941.
- Thoma, K. M.: Report of the section on education. J. Am. Dietet. A. 4:174, 1928.
- Todhunter, E. N.: A toast to the dietetic profession. J. Am. Dietet. A. 39:337, 1961.
- Todhunter, E. N.: Our profession moves ahead. J. Am. Dietet. A. 33:681, 1957.
- Todhunter, E. N.: The term "Dietitian". J. Am. Dietet. A. 34:618, 1958.
- Tracy, A. M.: President's address. J. Am. Dietet. A. 15:725, 1939.
- Turnland, J. R., and Tannous, R. I.: Hospital dietetics and foodservice in developing countries. I. The middle east. J. Am. Dietet. A. 83:311, 1983.
- Turnland, J. R., Siddequa, A., and Tannous, R. I.: Hospital dietetics and foodservice in developing countries. III. Bangladesh. J. Am. Dietet. A. 83:318, 1983.
- U. S. Department of Labor (Bureau of Labor Statistics): Occupational Outlook Handbook. Bulletin 2200, April 1982.
- U. S. Department of Labor (Employment and Training Administration): Dictionary of Occupational Titles. Fourth Edition, 1977.
- Wagner, F. E.: Some principles of adult education. J. Am. Dietet. A. 44:34, 1964.
- Walsh, H. E.: Report of the executive board: 1948-49. J. Am. Dietet. A. 25:1005, 1949.
- Warde, M.: Continuing education in administration in San

- Francisco. J. Am. Dietet. A. 34:732, 1958.
- Webber, S. E.: A descriptive analysis of quantity food production and administration laboratory experiences for food and nutrition majors. Master's thesis; University of Maine, Orono, 1972.
- Webster's Third New International Dictionary (Unabridged edition) G. & C. Merriam Co., Pub.; Springfield, MA, p. 846, 1976.
- Weigley, E. S.: College teaching practices in diet therapy. J. Am. Dietet. A. 48:311, 1966.
- Wenberg, B. G.: Report of a dietetic traineeship conference in Michigan. J. Am. Dietet. A. 63:549, 1973.
- West, B. B.: Design for progress. J. Am. Dietet. A. 22:1059, 1946.
- Wheeler, R.: Presidential address. J. Am. Dietet. A. 1:97, 1925.
- Who are nutritionists? J. Am. Dietet. A. 37:461, 1960.
- Wiersma, W.: Research Methods in Education. Ithaca, Illinois: F. E. Peacock Publishers, Inc., 1980.
- Wolpert, E. M.: Understanding Research in Education. Dubuque, Iowa: Kendall/Hunt Publishing Company, 1981.
- Wood, L.: Student training in a cooperative residence hall. J. Am. Dietet. A. 16:792, 1940.
- Wuellner, C. M.: Comparison of attained knowledge concerning management and foodservice systems among three groups of students. Master's thesis; Oklahoma State University, 1982.
- Zumwalt, J.: The goals of educating for a professional career. J. Am. Dietet. A. 25:871, 1949.

APPENDIXES

APPENDIX A

RESEARCH INSTRUMENT

Section I. Implementation and Evaluation of Attainment of Food Service Management Competencies in the Plan IV Academic Requirements, The American Dietetic Association.

Direction: Listed on the first column are the 8 Food Service Competencies included in the Plan IV Academic requirements. Please read each competency and complete the three columns as they pertain to the competency.

Food Service Management Competencies	Title of Courses(s) Where Competencies are Taught.	What percentage Proportion of Time in Each Course is Spent on the Competency	How do you evaluate competency attainment? Please explain.
A. Recognizes the organizational framework necessary for defining & accomplishing goals of the enterprise.			
B. Relates the effectiveness of a specific enterprise to the realization of goals by subunits or departments.			
C. Comprehends management's responsibility for leadership and the importance of leadership in the achievement of the objectives in food service systems.			
D. Applies the processes of planning, organizing, directing, evaluating, & controlling to the management of the functions & operations of foodservice-systems.			
E. Recognizes the significance of the fact that a food service system is a unified, complex organization performing highly dependent and specialized functions.			
F. Understands the technical operations (menu planning, purchasing, facilities, finance) involved in the production, distribution, and service of high quality food in food service systems with varying organizational structures and objectives.			
G. Applies principles and practices of management of personnel in the procurement, development, maintenance, and utilization of an effective and satisfied working force in food service systems.			
H. Comprehends reciprocal relationships between management of food service systems and financial planning, evaluating, and controlling.			

[illegible]

Section III. General Information

Directions: Please check, circle, or fill in answers as appropriate to your educational institution for the following questions:

1. Program

- a. Area(s) of emphasis
 ___ 1. General
 ___ 2. Management
 ___ 3. Clinical
 ___ 4. Community
- b. Baccalaureate degree(s) offered ___ YES ___ NO
- c. Graduate degree(s) offered
 Masters ___ YES ___ NO
 Doctorate ___ YES ___ NO

2. Student Enrollment (Academic Year 1982-1983)

- a. Total number of undergraduate majors _____
- b. Total number of graduate majors _____
- c. Total number of B.S. graduates who will enter graduate school in the Fall of 1983 _____
- d. Total number of B.S. graduates who have accepted employment in foodservice management positions _____

3. For Non-CUPs only (Academic Year 1982-1983)

- a. Total number of graduates who sought internship appointments _____
- b. Total number of graduates who received internship appointments _____

4. Foodservice Management

Faculty/Staff for the Academic Year 1982-1983 (2 semesters or 3 quarters)

For questions 4a & 4b, please compute total number of full-time equivalents (FTE), not the number of individuals employed.

1 FTE/sm.or = 15 credits, undergraduate, lower division
 qtr or 12 credits, undergraduate, upper division
 or 8 credits, graduate

- a. Total FTE's of faculty teaching foodservice management for 1982-1983: _____
- b. Total FTE's for "other" staff involved with food service management courses. c. Briefly describe the major responsibilities (e.g., supervises lab only, grades papers, lectures, etc.) of each staff member listed in 4.b.

FTE's

____ Graduate Teaching Assistant(s) _____

____ Lecturer(s) _____

____ Adjunct (no remuneration from university) Faculty _____

____ "other" (specify position) _____

5. State or illustrate the Foodservice Management Course Sequence in your program (e.g. Purchasing→Quantity Foods→Equipment/Layout→Advanced Foodservice Systems Management).

6. More fully describe the Facility or Facilities where the Quantity Food Production Management Laboratory is taught:

7. Describe "dress code" for foodservice management laboratory courses in your program:

For females:

For males:

8. Course Credits

a. Do you accept credits in foodservice management courses taken from:

Junior colleges _____ YES _____ NO

Approved Dietetic

Technician programs _____ YES _____ NO

Non-approved Plan IV programs _____ YES _____ NO

Other (specify) _____

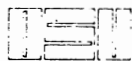
b. Are course credits waived for students with foodservice management experience? _____ YES _____ NO.
If yes, which courses and what type of experience are accepted? _____

c. Do you require work experience in foodservice management for your majors? _____ YES _____ NO. If yes, do you award credits for it? _____ YES _____ NO. How many credit hours? _____.

NOTE: If you are interested in receiving a copy of the results, please provide your name & address.

APPENDIX B

CORRESPONDENCE



Oklahoma State University

Department of Food, Nutrition and Institution Administration

STILLWATER, OKLAHOMA 74068
405/624-5000

Dear Colleague:

We are conducting a survey concerning the implementation and evaluation of foodservice management competencies in the Plan IV academic requirements of The American Dietetic Association, and request your valuable assistance in this endeavor. Your participation in this study will provide other educators, dietetic practitioners and employers insight into what foodservice management competencies graduates of the traditional Plan IV institutions as well as coordinated undergraduate programs have attained upon completion of Plan IV requirements.

The information you convey to us will be held in strict confidence. At no time will you or the facilities you serve be identified in the research report. The code number on your questionnaire is merely to assist the researchers in tabulating data and to follow-up responses. Results of this study will be presented at the Foodservice Management Systems Educational Council session at ADA annual meeting in Anaheim, hence, we solicit your prompt reply.

Please fold, staple and return the completed questionnaire at your earliest convenience or no later than August 4, 1983. We appreciate very much your professional interest and participation.

Sincerely,

Dorothea C. Jeske
Dorothea C. Jeske, R.D.
Graduate Student

Lea L. Ebro
Lea L. Ebro, Ph.D., R.D.
Associate Professor



Oklahoma State University

Department of Food, Nutrition and Institution Administration

STILLWATER, OKLAHOMA 74078
405/624-5039

August 16, 1983

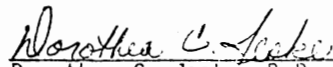
Dear Colleague:


During the latter part of July we mailed a survey questionnaire (buff-colored paper) concerning foodservice management competency education practices. We greatly appreciate the responses (about 10%) which we have received to date. However, in order for the study to be beneficial to you and to other educators in our field, we need valuable input from those who have not yet responded. It is not too late to respond to the survey. If you have not completed the questionnaire, please do so at your earliest convenience.

Current plans are to report data compiled from responses at ADA in Anaheim. We will however include all responses in the research report or thesis which will be completed late fall.

Thank you very much for your contribution to our research.
May we hear from you soon?

Sincerely,


Dorothea C. Jeske, R.D.


Lea L. Ebro, Ph.D., R.D.

APPENDIX C

LABORATORY FEE ASSESSMENT

IN

TRADITIONAL PLAN IV UNDERGRADUATE PROGRAMS

Responses to Laboratory Fees Assessed by Traditional
Undergraduate Programs

1. Meal Management - \$25.00
2. Institutional Organization & Administration - \$10.00
3. "Not allowed under state law"
4. "Must provide transportation"
5. Quantity Food Production, Service and Purchasing -
\$7.00 for liability insurance
6. Quantity Food Production Management - \$10.00
7. Meal Management & Marketing - \$45.00

VITA 1

Dorothea Clara Jeske
Candidate for the Degree of
Master of Science

Thesis: ANALYSIS OF THE FOODSERVICE SYSTEMS MANAGEMENT COMPONENT OF THE AMERICAN DIETETIC ASSOCIATION PLAN IV ACADEMIC PROGRAMS

Major Field: Food, Nutrition and Institution Administration

Biographical:

Personal Data: Born in Fayetteville, Arkansas, July 27, 1957, the daughter of Bertha C. and Robert L. Jeske.

Education: Graduated from Fayetteville High School, Fayetteville, Arkansas in May 1975; received Bachelor of Science degree in Food and Nutrition from the University of Arkansas in May, 1979; completed requirements for the Master of Science degree in Food, Nutrition and Institution Administration from Oklahoma State University in December, 1983.

Professional Experience: Completed dietetic traineeship at Wichita General Hospital in Wichita Falls, Texas, in January, 1981; successful completion of the American Dietetic Association registration exam, Spring, 1981; Graduate Teaching Assistant in the Hotel and Restaurant Administration Department, Oklahoma State University, 1981-1983.

Professional Organizations: American Dietetic Association; Oklahoma Dietetic Association; Foodservice Systems Management Education Council; Phi Upsilon Omicron