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Development of Financial Management Competencies for Entry-Level Dietitians: A Survey of Dietetic Educators

Melinda Anderson

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To the Graduate Council:

I am submitting herewith a thesis written by Melinda Anderson entitled "Development of Financial Management Competencies for Entry-Level Dietitians: A Survey of Dietetic Educators." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Food Science and Technology.

Jeannie Sneed, Major Professor

We have read this thesis and recommend its acceptance:

Jean D. Skinner, Betty Ruth Carruth

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

To the Graduate Council:

I am submitting herewith a thesis written by Melinda Anderson entitled "Development of Financial Management Competencies for Entry-Level Dietitians: A Survey of Dietetic Educators". I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Food Systems Administration.

Jeannie Sneed

Jeannie Sneed, Major Professor

We have read this thesis
and recommend its acceptance:

John D. Skinner

Boyd R. Carwith

Accepted for the Council:

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Vice Provost
and Dean of The Graduate School

DEVELOPMENT OF FINANCIAL MANAGEMENT COMPETENCIES
FOR ENTRY-LEVEL DIETITIANS:
A SURVEY OF DIETETIC EDUCATORS

A Thesis
Presented for the
Master of Science
Degree
The University of Tennessee, Knoxville

Melinda Anderson

December 1990

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ABSTRACT

The purpose of this study was to identify the financial management competencies needed by the entry-level dietitian and to determine how well current Plan IV/V Programs are preparing students in this area. The study determined the importance of financial management competencies to the effective performance of the entry-level dietitian's job as perceived by Plan IV/V, Approved Preprofessional Practice Program (AP4), and Dietetic Internship (DI) educators. To identify academic preparation related to these competencies, the study determined a) extent to which Plan IV/V programs were preparing students in these competencies as perceived by the directors, and b) perceptions which were held by AP4/DI directors related to the adequacy of students' preparation in financial management competencies. A two-part survey was developed that included importance and adequacy of preparation scales for 50 financial management competencies and program characteristic questions. Survey instruments were mailed to the entire population of Plan IV/V (no.=242), AP4 (no.=73), and DI (no.=96) directors. Questionnaires were returned from 195 Plan IV/V, AP4, and DI educators for a combined response rate of 47.4%.

The reliability for the instruments using Cronbach's alpha was 0.97 for the importance scale and 0.98 for the adequacy of preparation scale. Students' t-tests were used

to test the research hypotheses at a significance level of $p < 0.05$. Three factors were obtained from the factor analysis of 50 financial management competencies from Cochrane's (1990) study of foodservice directors:

Budgeting, financial Analysis, and Cash Flow Management (Factor 1); Financial Knowledge (Factor 2); and Cost Control (Factor 3). These factors were used in this study to compare perceptions of Plan IV/V and AP4/DI educators in regard to importance and adequacy of preparation in financial management competencies.

Importance ratings of financial management competencies for entry-level dietitians were not different for Plan IV/V and AP4/DI educators. Perceptions of adequacy of preparation of students differed for Plan IV/V and AP4/DI educators; Plan IV/V educators rated adequacy higher than did AP4/DI educators for two factors: financial knowledge and cost control.

This study provided information about dietetic educators' perceived importance of financial management competencies to an entry-level dietitian's job and perceptions of students' adequacy of preparation in these competencies. The results may be used to update current dietetic curricula to include the competencies rated most important by educators as well as those competencies rated most important by foodservice directors.

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CHAPTER I

Introduction

The profession of dietetics has moved into a new era with increased emphasis on cost containment in health care. Dietitians working in the realm of health care are faced with new challenges. Owen and Rinke (1986) stated that health care management must focus not only on health outcomes, but economic outcomes as well. As the costs of health care rise, dietitians will be called upon to provide high quality food and nutrition services within the constraints of limited financial resources.

Diagnosis related groups (DRGs) had a significant impact on health care management. DRGs were developed by the federal government as a means of providing hospitals with a fixed reimbursement for each discharge (Balinsky & Starkman, 1987). DRGs are divided into 467 categories of diagnoses with a fixed rate for each category (Schuster, 1983). Because the hospital is receiving a fixed rate for a certain service, any expense incurred by the hospital above that rate is the hospital's loss. Hospitals will be forced to cut costs and increase productivity to achieve the cost containment demanded by DRGs (Haschke, 1983a). This increased emphasis on cost containment requires dietitians to justify the value of their services by documenting cost

and effectiveness (Haschke, 1983a).

In light of these cost containment pressures, dietetic educators need to determine if the entry-level dietitian is adequately prepared in the area of financial management. Fruin (1983) reported that dietitians' undergraduate training has focused primarily on the principles and practices of nutrition, with less training in the area of management. Hoover (1983) stated financial expertise is needed to be cost effective; dietitians need to know the terminology, concepts, and methods of financial management in order to implement financial strategies. According to Haschke (1983b) it is important that dietitians "become well informed about finance and payment mechanisms for nutrition services".

An evaluation of the coordinated undergraduate program at Kansas State University revealed that graduates who were administrative dietitians rated the program's effectiveness "in enabling the graduate to function within financial constraints" relatively low. Respondents recommended that graduate curricula include training in financial management (Roach et al., 1978).

Yates et al. (1987) found that health care administrators rated financial competencies as more important than did dietetic educators. Thus, Yates et al. concluded that dietetic curricula were not training students

in financial competencies at the level required by health care administrators.

Thus, undergraduate dietetic curricula need to be revised to increase knowledge of and training in financial management skills. Not only will these skills be required of dietitians in health care, but in other career areas as well. The Study Commission on Dietetics (1984) reported that there will be new opportunities for dietitians in the business world. Similarly, Kirk et al. (1989) reported that the "trend" of hiring dietitians to work in business and industry positions "was gaining momentum". Hart (1976) urged dietetic educators "to lay aside their fears and continue to develop competencies". Dietetic educators should work closely with practitioners to establish competencies that will "prepare a student to function as a competent dietitian in the real world" (Hart, 1976).

Purpose of the Study

Current changes in the health care environment such as DRGs and cost containment as well as new opportunities for dietitians in business and industry warrant a revision of dietetic curricula to include development of more sophisticated financial management skills. The purpose of this study was to identify the financial management competencies needed by the entry-level dietitian and to

determine how well current Plan IV/V Programs are preparing students in this area. The study focused on the knowledge component of competencies. The study determined the importance of financial management competencies to the effective performance of the entry-level dietitian's job as perceived by Plan IV/V directors and AP4/Dietetic Internship directors. To identify academic preparation related to these competencies, the study determined a) extent to which Plan IV/V programs were preparing students in these competencies as perceived by the directors, and b) perceptions which were held by AP4/Internship directors related to the adequacy of students' preparation in financial management competencies.

Hypotheses

The following research hypotheses were tested:

1. There is no significant difference between perceptions of Plan IV/V directors and AP4/DI directors on importance of financial management competencies to the job performed by entry-level dietitians.

2. There is no significant difference between perceptions of Plan IV/V directors and AP4/DI directors regarding adequacy of preparation of dietetic students in financial management competencies at the end of their Plan IV/V program (and at the beginning of their dietetic

practice program).

3. There is no significant difference between perceptions of AP4 directors and DI directors on importance of financial management competencies to the job performed by entry-level dietitians.

4. There is no significant difference between perceptions of AP4 directors and DI directors regarding adequacy of preparation of dietetic students in financial management competencies at the beginning of their practice programs.

Definition of Terms

Definitions of terms are presented to clarify the concepts and phrases inherent to the understanding of this study.

Financial management competency - a statement of the minimum financial management knowledge, based on the American Dietetic Association's knowledge and performance requirements, that an dietitian must possess to perform effectively at entry-level.

Entry-level competency - "competencies which the individual should be able to perform independently, as well as those which require guidance from a specialist, at least

in the first position or job" (Bell, 1976).

Entry-level position - "in each level of practice, position requiring the minimum level of training/experience; operationally defined as position which can be filled by a person with three years or less experience" (Baird and Sylvester, 1983).

Knowledge statements - "specific statements describing what personnel must know in order to assume successfully their specific responsibilities" (Baird and Sylvester, 1983).

Levels of practice - "the hierarchy of dietetic technician, dietitian within each area of practice" (Baird and Sylvester, 1983).

Role delineation - "a process for determining the minimum basic level of major and specific responsibilities that must be performed by personnel in a given generic position" (Baird and Sylvester, 1983).

Plan IV - "the competency-based program approved by the COE Division of Education Accreditation/Approval as meeting the academic requirements for registration eligibility and

membership" (ADA Directory of Dietetic Programs, 1990).

Plan V - "the program approved by the COE Division of Education Accreditation/Approval as meeting academic requirements; the academic program in a regionally accredited college or university culminating in a minimum of a baccalaureate degree. The Plan V program is approved under the Standards of Education and by 1993 all dietetic undergraduate programs will be phased into the Standards" (ADA Directory of Dietetic Programs, 1990).

Dietetic Internship program - "a formalized post-baccalaureate education program in dietetics accredited by the COE Division of Education Accreditation/Approval. The curriculum is designed to provide didactic and supervised clinical experiences to meet the qualifications for practice in the profession of dietetics" (ADA Directory of Dietetic Programs, 1990).

Approved Pre-Professional Practice Program - "a program in dietetics with supervised pre-professional experience approved by the COE Division of Education Accreditation/Approval" (ADA Directory of Dietetic Programs, 1990).

Administrative dietitian - "a member of the management team; affects the nutritional care of groups through the management of foodservice systems that provide optimal nutrition and quality food" (Arkwright et al., 1974).

Foodservice systems management - "a process concerned with the accomplishment of foodservice objectives by integrating resources within the total system and by working with and through individuals and groups" (Baird and Sylvester, 1983).

Budget - an organized plan of operation for a specific period of time that describes income, expenses and the overall financial position of the organization at the end of the specified period (Keiser, 1989).

CHAPTER II

Review of Literature

The education of dietetic professionals has long been a concern of the American Dietetic Association (Fitz et al., 1983). The American Dietetic Association (ADA) Philosophy Statement declares that "education is a dynamic and complex process that translates the theoretical and ideal into actual application and practice" (ADA Accreditation/Approval Manual, 1987). Dietetic education should be developed to meet not only the needs of students, but the current and future needs of society as well. Programs in dietetic education must "provide opportunities, including real life experiences, for students to acquire the necessary knowledge, skills, and abilities for the anticipated level and area of dietetic practice" (ADA Accreditation/Approval Manual, 1987). Graduates of dietetic education programs should be able to improve the quality of food and nutrition for all people within their community. To accomplish this goal, the ADA has developed Knowledge Requirements that are used to structure curricula in undergraduate Plan V programs. In addition, Performance Requirements have been established that provide a structure for developing the curricula of Dietetic Internships (DI) and Approved Preprofessional Practice Programs (AP4). The Knowledge and

Performance Requirements are based on the knowledge, skills, and abilities necessary for entry-level practice.

The purpose of this literature review is to provide an historical framework of the development of dietetic education, a summary of competency-based education studies related to administrative competencies, and a discussion of the financial skills required of the effective health care administrator.

History of Dietetic Education

The American Dietetic Association was organized in 1917. Six years later in 1923, the Education Section of the Association began to develop plans for courses for dietetic students. Minimum specifications for courses for dietetic students were developed in 1924. In 1927, the "Outline for Standard Course for Student Dietitians in Hospitals" was approved and required students to have a baccalaureate degree (emphasis Food and Nutrition), and to train for at least six months in a hospital under the supervision of a dietitian (Hart, 1974).

Development of Academic Standards

In 1947, Plan I was established and included the academic standards for entering internships. Plan II was developed in 1955 and included four subject matter areas as

well as a range of recommended semester credit hours. Three years later, in 1958, Plan III was begun and included required areas of learning with a designation of core subjects and concentrations. Plan IV was implemented in 1971. The Plan IV curricula included a list of Minimum Academic Requirements that allowed flexibility without the constraints of a specific list of courses. All undergraduate programs in dietetics were to be revised by 1980 to include Plan IV curricula. In 1987, The ADA approved the Plan V program as Knowledge Requirements for Dietitians under the Standards of Education. The Standards of Education were developed as "the minimum criteria to be met by all dietetic education programs" and provided the basic document for program evaluation (ADA Approval/Accreditation Manual, 1987). All undergraduate programs in dietetics are to be phased into the Standards by 1993 (ADA Directory of Dietetic Programs, 1990).

Dietetic Programs

In the process of changing academic standards, the need arose for a different type of dietetic education program. In 1962, the Coordinated Undergraduate Program (CUP) was established. This program combines didactic and clinical experiences with a four-year college curriculum (Hart, 1974). The CUP Program continues today as an accredited

Coordinated Program (CP) and may be either at the undergraduate or graduate level. The Dietetic Internship was established in 1927 and is an accredited post-baccalaureate program that combines didactic and supervised clinical experiences. The Approved Preprofessional Practice Program was established in 1988 as an alternate means of obtaining the practice component needed for registration eligibility. All three programs require a minimum of 900 hours of clinical experience (Commission on Dietetic Registration, 1986).

Competency Development

In 1974 the American Dietetic Association appointed a committee to develop a glossary of titles and definitions to clarify the education and responsibilities of dietitians. The committee listed titles for dietitians such as administrative, clinical, consultant, community, and research and provided a list of responsibilities for each position. A glossary was established to include all terms associated with dietetics and dietetic education (ADA Reports, 1974).

Uniform competencies for dietetic education are required for consistent, competent practice. The Administrative Committee of the Council on Educational Preparation (CEP) commissioned a task force in 1978 to

develop uniform competencies. As a prerequisite to developing these competencies, the task force identified certain definitions and recommendations that needed to be clarified before competencies could be developed. As a result, the Task Force did not develop competencies but established a basis for studying competency-based education. (Report of the Task Force, 1978).

Competency-based education (CBE) is an approach to curriculum development that focuses on "the needs and accomplishments of the student" (Hart, 1976). The CBE movement began in the 1920s and was first applied to teacher education; it later spread to other professions and was endorsed by ADA in 1972 (Rinke, 1980). The competencies must be stated in behavioral objectives that are both measurable and observable. The learning objectives are classified as either cognitive, performance, consequence, affective, or exploratory (Hart, 1976). In his review of CBE literature, Rinke (1980) concludes that CBE "appears to be a useful approach for the basic, repetitive, and observable skills."

Competency-Based Education Studies

Bell (1976) defined an entry-level competency as one that the individual "should be able to perform independently, as well as those which require guidance from

a specialist, at least in the first position or job."

Competencies for entry-level dietitians have been identified through several research studies. The following paragraphs will summarize the findings of those studies as they relate to the development of financial management competencies.

Loyd and Vaden (1977) conducted a study to determine the skills necessary for effective entry-level practice based on the perceptions of hospital dietitians. Two survey instruments were developed; one for administrative competencies and one for clinical competencies. The competencies were compiled from a review of literature. Of the forty-seven administrative competencies listed on the survey, sixteen were rated as "essential" for entry-level practice. The essential competency related to financial management was "plans menus which conform to budget and/or cost requirements, equipment, time, and personnel availability". The hospital dietitians rated "maintains accurate and appropriate records for personnel management, fiscal control, and reporting purposes" as desirable but not essential for entry-level practice.

A study conducted by Rinke et al. (1982) compared employers' opinions of the adequacy of preparation in administration of dietetic students from each of the four educational programs - dietetic internship, coordinated undergraduate program, traineeship, and advanced degree. A

questionnaire was sent to the foodservice directors of all short-term hospitals in the United States having 450 or more beds. Results from the study revealed that employers perceive internship graduates to be most adequately prepared and advanced degree graduates to be least adequately prepared. Employers assigned practical preparation a greater value in administrative dietetics as compared to theoretical preparation.

In the same study, Rinke et al. obtained information about employers' perceptions of the adequacy of preparation of entry-level dietitians in 69 specific administrative competencies. Respondents rated all but six of the 69 competencies as essential for entry-level practice. Employers' rated the adequacy of preparation of entry-level dietitians in these competencies as very low for all dietetic education programs. Employers perceived entry-level dietitians as being better prepared for technical skills and less prepared for human and conceptual skills regardless of the educational program.

A study was conducted to obtain the perceptions of college- and university-based and internship-based dietetic educators on the competencies that were essential to both coordinated undergraduate programs (CUP) and traditional undergraduate dietetic (TDP) programs. A list of 70 competencies was developed from a review of literature and

ADA publications. The results of the study revealed that all of the competencies were rated as either "essential" or "desirable but not essential" for the CUP and TDP programs. More competency statements were rated as essential for the CUP program than the TDP program. The competency related to financial management, "develop budget which meets the needs of and conforms to the financial constraints of the department" was rated as more essential by internship directors than by college/university participants (Holmes, 1982).

Seal et al. (1983) conducted a study to clarify the competencies for bachelor's degree level and master's degree level in foodservice systems management. A questionnaire that listed competencies for entry-level dietitians was sent to educators in foodservice systems management and administrators of dietetic services with an advanced degree. The responses were divided into three classifications: competencies for which 50% or more of respondents indicated a master's degree was required, competencies for which 50% or more indicated a baccalaureate degree was required, and competencies for which fewer than 50% were in agreement about level of education. Results of the study defined nine master's level competencies, forty-four bachelor's level competencies, and twelve competencies in the no agreement classification. In regard to financial management

competencies, "financial analysis" was found to be required at the master's level, and "maintains records" at the bachelor degree level. "Plans budget and uses balance sheet and income statement" fell under the no agreement category.

Baird and Slyvester (1983) conducted a Role Delineation and Verification study for entry-level positions in foodservice systems management. Entry-level competencies in financial management were "knows procedures for cost-benefit analysis, utilizes data (financial) to manage area of responsibility in foodservice system, and knows management functions in foodservice systems".

Snyder et al. (1985) conducted a study to compare career-entry administrative competencies with skills required in practice. The study did not define career-entry. A survey instrument containing 59 administrative competencies was sent to 138 administrative dietitians in Nebraska. A statistically significant difference was found to exist between the two competency levels for each major category of administrative skills. Dietitians perceived themselves as being competent in only three of the 59 competencies at career entry. Competencies related to financial management had a lower mean score at career-entry compared to skills required for professional practice. The authors concluded that entry-level dietitians may not be totally prepared to assume administrative positions at

career-entry and lack a solid base upon which to build administrative skills.

A study by Yates et al. (1987) compiled information on the competencies required of foodservice managers/directors in health care operations. Competencies in financial, technical, personnel management, nutrition services, production, and marketing were represented. Two separate questionnaires were sent to a random sample of health care administrators and dietetic educators in the United States. A comparison of the results revealed a significant difference between health care administrators' scores and dietetic educators' scores for financial competencies. Health care administrators indicated that foodservice directors/managers should be proficient in financial competencies and rated these as more important than technical, personnel management, nutrition services, production, and marketing competencies. Dietetic educators rated nutrition services, technical, and production competencies as more important than financial competencies, and as having more emphasis in dietetic education programs.

In a similar study, Moffitt (1987) found that administrative directors of clinical nutrition managers rated financial management responsibilities significantly higher than did the clinical nutrition managers. The clinical nutrition managers participating in this study were

part of the Clinical Nutrition Management Practice Group of the American Dietetic Association.

A role delineation study for dietetic practitioners conducted by ADA in 1989 surveyed entry-level dietetic technicians, entry-level dietitians, and beyond-entry-level dietitians. A list of job functions and responsibilities was developed from previous role delineation studies and drafted into a Dietetic Practice Inventory, the survey instrument. Managing financial resources was included in the categories of job activities. The results of the study revealed that beyond-entry-level dietitians were more involved in managing financial resources than entry-level dietitians (Kane et al., 1990). One question on the survey asked respondents to indicate whether they were responsible for preparing budgets and the total of these budgets. The results showed that beyond-entry-level dietitians had more involvement in preparing budgets than entry-level dietitians; however, 14.3% of the 2,481 entry-level dietitians surveyed did have responsibility for preparing budgets (Kane et al., 1990).

Dowling et al. (1990) surveyed hospital administrators, food and nutrition department directors, and management dietetic educators to compare perceptions regarding the skills and credentials required of a food and nutrition department director. Results of the survey indicated that

credentials needed for nutrition and food department directors were: "registered dietitian status, at least a bachelor's degree in food and nutrition, and work experience in foodservice systems management". Respondents ranked 14 skill categories in order of importance and financial skills were ranked third in importance by all three groups of respondents.

Need For Financial Management Education

Egan and Kaufman (1985) reported on the cost pressures being exerted on the U.S. health care system as related to nutrition services. Medical care costs have increased sharply over the last several years and nutrition services have not been clearly recognized as a fee for service. The funding of nutrition services potentially comes from private sector resources, third-party payments, business/industry support, individual customers' fees for service, and government revenues. The authors suggested that one of the issues relevant to future potential funding of nutrition services is "more relevant professional education" including financial management skills.

Lafferty (1981) conducted research to "develop a methodology to determine and validate competency statements for dietitians employed in foodservice management positions at different levels of practice". Based on results of the

study, she recommended that formal education as well as continuing education emphasize management theories pertaining to financial management as well as other managerial areas.

Brown and Hoover (1988) conducted a content analysis of management science articles appearing in the Journal of the American Dietetic Association. In summarizing the benefits of management science to dietetics, the authors suggested that dietetic educators have a "unique role in enhancing both undergraduate and graduate programs, through curriculum design, to assure that current and future practitioners are acquainted with quantitative management science techniques". Furthermore, the authors recommended that dietetic students have foundational coursework in mathematics to enable them to use the analytical methods associated with management science.

Hoover (1983) recommended that dietitians develop "more sophistication in several managerial areas: marketing, systems design, operations management, and financial management" in order to demonstrate the level of managerial expertise required in present and future job opportunities. In order to attain successful performance outcomes, dietitians "must become more cost-conscious and effective in resource management." Hoover suggested curriculum enhancement and continuing education as two strategies to

improve dietitians' managerial effectiveness.

Developing Financial, Human, and Conceptual Skills

Types of Skills

Katz (1974) defined a skill as "an ability which can be developed, not necessarily inborn, and which is manifested in performance, not merely in potential". Katz believes that successful administration is based on three skills: technical, human, and conceptual. Technical skills are those that involve methods or techniques and imply an understanding of a specific kind of activity. Human skills are those skills that enable one to work effectively with people. Conceptual skill is the ability to recognize the interrelatedness of various functions of an organization. Research in the field of dietetics (Loyd and Vaden, 1977) found that the administrative competencies essential for entry-level practice were generally technical in nature. In order for entry-level dietitians to become effective administrators, they need proficiency not only in technical skills, but in human and conceptual skills as well.

Mariampolski et al. (1980) developed a list of essential competencies for the entry-level restaurant manager. The data were based on a questionnaire sent to officers and past presidents of the National Restaurant Association. The competency rated as "essential" that

pertained to financial management was "realizes that profit is an important goal". The respondents rated "maintains accurate and appropriate records for personnel management, fiscal control, and reporting purposes" as "desirable" for the entry-level restaurant manager. Most of the competencies rated as "essential" or "desirable" were technical or human; conceptual skills were not considered to be as important at entry-level.

Research-Based Studies

Fruin (1983) conducted a study to determine the perceptions undergraduate students had as to the importance of management skills in dietetic practice. The study was conducted with undergraduate dietetic majors in the St. Paul, Minnesota area. Similar data were obtained from groups of practitioners and educators in Minnesota. Both undergraduates and practitioners tended to perceive management tasks as less important than clinical tasks in dietetic practice. Administrative practitioners, however, rated management tasks as much more important than did clinical practitioners. Dietetic educators perceived management tasks to be equally as important as clinical tasks. The author suggested that "attitudes about the importance of management and the acquiring of management skills must change".

Palacio et al. (1985) compiled data on "dimensions of managerial work in hospital dietetic services". The survey instrument contained 80 statements related to managerial activities in hospital dietetic departments. Respondents rated "developing capital expenditure proposals and preparing budgets" as activities related to upper management. Based on results from this study, the authors concluded that greater competency in management will be required for advancement to higher-level positions. The authors recommended that human and conceptual skills be strengthened and advance-degree programs be designed to emphasize management.

Brown and Fruin (1989) conducted a study of the management activities of community dietitians. Respondents were asked to define their level of management responsibility as "lower, mid, or upper level". The levels were defined as: "lower level - planning and organizing day-to-day duties, mid level - linkage between lower and upper levels of management, upper level - long-term planning and directing of program". Lower-level management dietitians rated technical skills as most important to performance, mid-level dietitians rated human and conceptual skills as most important, and upper-level dietitians rated conceptual skills as most important to performance.

The Year 2000

A study was conducted in which over 1,100 experts in health care financial management summarized the skills that will be required of the health care financial manager in the year 2000. Results show that the future financial manager will need to know more about "capital financing, financial impact analysis, cost-benefit analysis, and strategic planning". A graduate degree and successful work experience in health care financial management will be essential for the financial manager in the year 2000. Respondents believe competition between health care providers will "significantly increase" by the year 2000. (The year 2000, 1986).

Summary

Although entry-level dietitians may not be directly involved in financial impact analysis, an understanding of this concept will be required as health care continues to focus on cost-containment. Dietitians need a strong foundation in financial management skills to be able to function competently in present and future positions. Entry-level dietitians must attain this foundation through dietetic education; the addition of specific financial management competencies to undergraduate and graduate dietetic curricula is crucial to the development of

competent, successful professionals.

Research studies have developed many competencies related to dietetic education. Vaden (1978) identified essential administrative and clinical competencies for entry-level generalist dietitians. Holmes (1982) identified essential competencies for general, community, and clinical nutrition as well as foodservice management. Rinke et al. (1982) determined the adequacy of preparation of entry-level generalist dietitians in specific administrative competencies. Snyder et al. (1985) compared career-entry administrative competencies with skills required in practice. Yates et al. (1987) determined competencies of foodservice directors as perceived by health care administrators.

No study to date, however, has developed a comprehensive list of either knowledge or performance competencies in financial management that an entry-level dietitian should know. The purpose of this study was to identify those competencies and their importance as perceived by Plan IV/V, AP4, and DI directors. Undergraduate and practice program directors' perceptions of students' adequacy of preparation in regard to these financial management competencies was also determined.

CHAPTER III

Methods

Sample

Program directors from 242 approved Plan IV/V programs, 96 accredited dietetic internship (DI) programs, and 73 approved pre-professional practice programs (AP4) listed in the Directory of Dietetic Programs (ADA, 1990) were surveyed. Thus, the total population of program directors for all dietetic programs in the United States were included in the study.

Since this study involved human subjects, approval from the University of Tennessee Human Subjects Review Committee was obtained prior to data collection (Appendix A).

Instruments

Stage I - Development of Financial Management Competencies

A listing of financial management competencies was developed based on the Role Delineation and Verification for Entry-Level Positions in Foodservice Systems Management (Baird & Slyvester, 1983), American Dietetic Association publications (ADA Accreditation/Approval Manual, 1989; Position Paper, 1975; ADA Registration exam, 1989), and various research studies (D'Costa & Schreck, 1983; Ecklund

et al., 1989; Holmes, 1982; Katz, 1974; Linnenkohl & Roach, 1983; Lipscomb & Donaldson, 1964; Loyd & Vaden, 1977; Mariampolski et al., 1980; Palacio et al., 1985; Rinke et al., 1982; Roach et al., 1978; Sanford et al., 1973; Seal et al., 1983; Synder et al., 1985; The year 2000, 1986; Vaden, 1978; Yates et al., 1987; and Zallen, 1979).

To review the financial management competencies, seven hospital foodservice directors and one university faculty member were selected for an expert panel based on their expertise in the area of hospital dietetics. The hospital foodservice directors held membership in the American Society of Hospital Food Service Administrators (ASHFSA) and represented seven different states. Their names and addresses were obtained from the 1989-90 ASHFSA member directory (American Society of Hospital Food Service Administrators Member Directory, 1989-90). Each panel member was contacted by telephone to determine if he/she would be willing to participate as a panel member to develop financial management competencies for dietitians. All agreed to participate and the list of financial management competencies, along with a cover letter (Appendix B) and self-addressed postage-paid return envelope, were mailed. A modified Delphi technique was used in which panelists were asked to review the list of competencies and add, delete, or modify the list based on their experience in dietetics. All

eight panelists returned questionnaires and revisions of the financial management competencies were made based on responses from the expert panel.

The financial management competencies were compared to determine similarity among the eight responses. All additions and comments regarding the clarity of wording were incorporated into the final list. Added competencies included:

- a) know reimbursement policies
- b) know depreciation methods and their applications
- c) use mission statement, goals, objectives, and plans
in developing budgets
- d) monitor variance reports (budget to actual) and
design a plan for corrective action
- e) develop financial ratios related to profits,
investments, and assets
- f) determine cost effectiveness of make vs. buy
decisions
- g) calculate contribution margin
- h) determine appropriate use of part-time and over-
time labor
- i) calculate turnover and absenteeism costs

Deleted competencies related to:

- a) develop guidelines for salary scales and merit raises
- b) analyze investments
- c) complete variance analysis

The wording of several competencies was changed to emphasize the knowledge component of the competency. For example, apply accounting and bookkeeping principles was changed to know basic accounting and financial management. Also, prepare financial reports was changed to know how to prepare financial reports. Conduct break-even analysis was modified to calculate and use break-even analysis information. Complete insurance, tax, and other personnel-related forms was revised to know insurance, tax, and other personnel-related requirements. The competency prepares budgets was modified to include types of budgets (e.g., operating budget, cash budget, and pro forma balance sheet).

Stage II - Plan IV/V Instrument Development

One survey instrument was developed for Plan IV/V program directors (Appendix C) and included the list of financial management competencies developed in Stage I. Respondents were asked to indicate how important each competency was to the effective performance of the entry-level dietitian's job using the scale 0-not important, 1-of

little importance, 2-some importance, 3-important, and 4-very important. Respondents also were asked to indicate on a scale of 0-totally inadequate, 1-inadequate, 2-somewhat inadequate, 3-adequate, and 4-very adequate the perceived adequacy of students' preparation in these competencies when they graduated from the Plan IV/V program.

Questions to determine program characteristics were included on the questionnaire. Respondents were asked to specify whether their program was Plan IV or Plan V and, if a Plan IV program, its emphasis e.g., general, management, clinical, or community. Respondents were asked to indicate courses in which financial management was taught and course numbers for courses required for Plan IV/V programs in which financial management concepts were taught. Information on course numbers was used to determine if financial management concepts were taught in lower-level or upper-level classes. Respondents were asked to indicate, on a list of textbooks provided, which were currently used for foodservice management courses that included financial management. Other items on the questionnaire included: "what would you consider your area of specialization, and, are you the Plan IV/V director for your school". Respondents could indicate if they wished to receive a summary of the results.

Stage III - Pilot Testing

The questionnaire was pilot tested with ten randomly selected Plan IV/V directors. The questionnaire was mailed with a cover letter (Appendix D) and a self-addressed, postage-paid return envelope, and participants were asked to provide feedback about the clarity of instructions and items. Only one questionnaire was returned and did not include any revisions or suggestions. Thus, the survey instrument was revised according to the comments and suggestions of the graduate student's committee members.

These revisions included the following:

- a) the four-point scale originally planned for the adequacy of preparation section was changed to a five-point scale to add clarity
- b) a definition of entry-level dietitian was added to the questionnaire to emphasize the research focus on entry-level practice
- c) the statement "If you are not involved in teaching financial management to students, and feel that another faculty member could more easily respond to this questionnaire, please pass this letter and questionnaire on to the appropriate person" was added to the questionnaire for those directors who may not be directly involved in teaching financial management. (See Appendix E for the revised Plan

IV/V survey instrument)

Stage IV - DI/AP4 Instrument Development

A second survey instrument was developed for DI/AP4 directors based on previously described revisions of the Plan IV/V questionnaire. The questionnaire contained the list of financial management competencies and the same scales as the Plan IV/V questionnaire, but respondents were asked to indicate their perceptions regarding students' preparation in these competencies at the beginning of the DI or AP4 program. In addition, respondents were asked to indicate their perceptions regarding the importance of these competencies.

In order to determine program characteristics, respondents were asked to indicate whether their program was a dietetic internship or approved preprofessional practice program, and, if a dietetic internship, whether the emphasis was general, management, clinical, or community. In addition, respondents specified areas of specialization (e.g., general, management, clinical, community, or other), as well as their role in the program (e.g., program director, foodservice management faculty, or nutrition faculty). From a list of textbooks provided, respondents indicated which were currently used for foodservice management courses that included financial management

concepts. Respondents were asked to write-in the learning experiences/rotations in their program that involved financial management concepts. Respondents were asked to indicate if they would like to receive a summary of the results.

Data Collection

The two questionnaires were color coded (blue for Plan IV/V, and green for DI/DP4) to distinguish between the types of dietetic education programs. Questionnaires were mailed with cover letters (Appendix G) and self-addressed, postage-paid return envelopes to facilitate response rate. The questionnaires were numbered for follow-up purposes, and a follow-up post card was sent to program directors who had not responded within two weeks after the initial mailing.

Data Analysis

The Statistical Analysis System (SAS, 1987) was used for all data analysis procedures. The internal consistency of the 50 financial competency items was determined using Cronbach's alpha (Cronbach, 1951). The total scale reliability coefficient and item-total reliability statistics were calculated.

Frequencies, means, and standard deviations were calculated for each of the 50 financial management

competencies for both importance to job at entry-level and adequacy of students' preparation as rated by Plan IV/V and DI/AP4 directors. For each demographic item, frequency of responses was determined for descriptive purposes. .

Factor analysis was not done on the financial management competencies in this study due to the small sample size. However, Cochrane (1990) used these same 50 competencies in her survey of hospital foodservice directors. Factor analysis from Cochrane's (1990) survey resulted in three factors for entry-level dietitians; competencies in those factors are shown in Table 1.

Table 1. Competencies in the Three Financial Management Factors Identified in Cochrane's (1990) Study of Foodservice Directors (no.=485)

Item No.	Competency
<u>Factor 1 Budgeting, Financial Analysis, and Cash Flow Management</u>	
28.	Analyze financial impact of operational decisions.
29.	Analyze cost/benefits of programs and courses of action.
30.	Develop financial ratios related to profits, investments, and assets.
31.	Assess financial status based on approved budget.
32.	Assess financial status based on profit and loss statement.
33.	Analyze cash flow.
34.	Make decisions based on the balance sheet and income statement.
35.	Identify sources of funds and solicit funds for new projects.
36.	Authorize expenditures.
37.	Establish financial objectives of department.
38.	Establish and implement fees for service.
39.	Develop plan for collection of fees and accounts.
40.	Calculate and use break-even analysis information.
41.	Determine cost effectiveness of make vs. buy decisions.
42.	Develop plans to generate revenue.
43.	Know process for internal/external audits.
44.	Calculate contribution margin.
45.	Determine labor hour requirements in relation to volume and budget per unit of service.
46.	Recommend wage and salary adjustments for employees.
47.	Determine appropriate use of part-time and over-time labor.
48.	Estimate personnel costs for a facility for budget and planning purposes.
49.	Know insurance, tax, and other personnel-related requirements.

Table 1 (Continued)

Item No.	Competency
50.	Calculate turnover and absenteeism costs.

Factor 2 Financial Knowledge

2. Define basic financial terms.
3. Know purpose of financial reports.
4. Know financial goals of the operation (profit, break even, subsidized).
5. Know basic accounting and financial management principles.
6. Know how to prepare financial reports.
7. Use computer to generate financial information, budgets, reports.
8. Know depreciation methods and their application.
9. Use mission statement, goals, objectives, and plans in developing budgets.
10. Know appropriate application of different budgeting systems.
11. Collect appropriate information for budget planning.
12. Project units of service, cost, and revenue as basis for budgeting.
13. Justify budget requirements, including purchasing of new equipment and renovation.
14. Prepare budgets (operating budget, cash budget, and pro forma balance sheet).
15. Prepare capital budgets.
16. Use budget to establish cost control system.
17. Justify requests (using methods such as return on investment, time value of money, payback period, profitability index) for external or internal funding (i.e. Capital budgets, research proposals).
18. Monitor variance reports (budget to actual) and design a plan for corrective action.

Factor 3 Cost Control

19. Determine food, labor, and operating cost per unit of service.
20. Develop and cost standardized recipes.

Table 1 (Continued)

Item No.	Competency
21.	Develop and modify menus in relation to cost.
22.	Price menu items in accordance with established pricing strategies.
23.	Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.
24.	Utilize precost and precontrol systems for forecasting.
25.	Write purchase specifications and orders.
26.	Supervise cafeteria cash activities and reporting.
27.	Monitor procedures for billing, cash handling, and handling of non-cash income.

These three factors were used in this study to compare the perceptions of Plan IV/V educators to the perceptions of AP4/DI educators in regard to importance and adequacy of preparation. For each factor, a mean of the importance ratings for all competencies included in the factor was calculated.

Students' t-tests were used to test the research hypotheses. A probability level of 0.05 was used for all tests of significance. In addition, competencies in each factor that were rated as very low in importance by foodservice directors (Cochrane, 1990) were omitted. For factor 1, items 30, 33-36, 40, 43, and 50 were omitted. For factor 2, items 8, 10, 14, and 17 were omitted. No items were omitted for factor 3. Hypotheses were tested again with these new factors.

Students' t-test comparisons for importance and adequacy of preparation ratings for Plan IV/V educators and Practice Program (AP4 and DI) educators were done for the eight competencies that 50% or more of the foodservice directors rated as important or very important. Those items were:

2. define basic financial terms
3. Know purpose of financial reports
4. know financial goals of the operation (profit, break even, subsidized)

20. develop and cost standardized recipes
21. develop and modify menus in relation to cost
22. price menu items in accordance with established pricing strategies
23. maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures
42. develop plans to generate revenue

CHAPTER IV

Results and Discussion

The purpose of this study was to identify the financial management competencies needed by the entry-level dietitian and to determine how well current Plan IV/V programs are preparing students in this area. The study determined the importance of financial management competencies to the effective performance of the entry-level dietitian's job as perceived by Plan IV/V, AP4, and DI educators. To identify academic preparation related to these competencies, the study determined a) extent to which Plan IV/V programs were preparing students in these competencies as perceived by the directors, and b) perceptions which were held by AP4/DI directors related to the adequacy of students' preparation in financial management competencies.

Sample

A survey instrument was mailed to the entire population of Plan IV/V (no.=242), AP4 (no.=73), and DI directors (no.=96). Questionnaires were returned from 195 Plan IV/V, AP4, and DI educators for an overall response rate of 47.4%. Responses were analyzed for 191 useable questionnaires; four were returned blank. Plan IV/V, AP4, and DI respondents' characteristics are summarized in Table 2.

Table 2. Characteristics of Respondents and Programs

Program No. Mailed	Response Rate	Program Emphasis	Respondent's Position	Respondent's Specialization
Plan IV/V no.=242	38.8% no.=94	General ^a no.=41 Clinical no.=3	Director no.=47 Not Director no.=47	Management no.=44 General no.=40 Clinical no.=7 Other no.=2 Community no.=1
AP4 no.=73	54.8% no.=40 ^b		Director no.=24 Mgmt.Faculty no.=12	Management no.=12 General no.=11 Community no.=6 Other no.=4 Clinical no.=3
DI no.=96	63.5% no.=61	General no.=56 Clinical no.=5	Director no.=52 Mgmt. Faculty no.=8 Nut. Faculty no.=1	General no.=27 Clinical no.=14 Management no.=11 Other no.=4 Community no.=2

^a Plan IV programs only

^b 4 questionnaires were returned blank

Reliability of Research Instrument

The Cronbach's alpha coefficient for the importance scale was 0.97 and for the adequacy of preparation scale 0.98. Item total analyses showed that the alpha coefficient would not increase significantly for either scale if any item were omitted. Cronbach's alpha coefficients at this level are indicative of high internal consistency of the research instrument.

Importance of Financial Management Competencies

Plan IV/V, AP4, and DI educators' mean perceived importance ratings of the 50 financial management competencies are summarized in Table 3. Standard deviations for mean scores of AP4 respondents were generally smaller indicating more agreement among respondents.

Table 4 summarizes the 10 most important financial management competencies as rated by Plan IV/V, AP4, and DI respondents. Data show that the 10 competencies rated as most important are very similar for all three groups of respondents. In contrast, competencies 28, 29, and 42 were rated most important by only AP4 respondents, and competencies 47 and 41 were rated most important by only DI respondents.

Table 3. Mean Importance Ratings* of Financial Management Competencies for Entry-Level Dietitians for Directors of Dietetic Plan IV/V, DI, and AP4 Programs

Competency	Plan IV/V (no.=94)	DI (no.=61)	AP4 (no.=36)
1. Know reimbursement policies (such as DRGs, medicare, medicaid, private insurance.	2.6±0.9 ^b	2.9±0.8	3.0±0.9
2. Define basic financial terms.	3.3±0.7	3.1±0.7	3.1±0.6
3. Know purpose of financial reports.	3.4±0.7	3.1±0.8	3.2±0.6
4. Know financial goals of the operation (profit, break even, subsidized).	3.4±0.7	3.0±0.9	3.3±0.9
5. Know basic accounting and financial management principles.	3.2±0.8	3.0±0.8	2.9±0.7
6. Know how to prepare financial reports.	2.7±1.0	2.4±1.0	2.6±0.9
7. Use computer to generate financial information, budgets, reports.	3.0±0.9	2.5±1.0	2.5±0.9
8. Know depreciation methods and their application.	2.2±0.9	1.7±0.9	1.9±0.8
9. Use mission statement, goals, objectives, and plans in developing budgets.	3.1±0.8	2.9±0.9	3.0±0.8
10. Know appropriate application of different budgeting systems.	2.5±0.8	2.3±0.9	2.3±0.8
11. Collect appropriate information for budget planning.	3.3±0.6	3.0±0.7	3.0±0.7
12. Project units of service, cost, and revenue as basis for budgeting.	3.1±0.7	2.8±0.8	3.0±0.7
13. Justify budget requirements, including purchasing of new equipment and renovation.	3.1±0.9	2.9±1.0	3.0±0.8
14. Prepare budgets (operating budget, cash budget, and pro forma balance sheet).	2.8±0.9	2.5±1.1	2.6±0.8
15. Prepare capital budgets.	2.3±1.0	2.2±1.0	2.2±0.9
16. Use budget to establish cost control system.	3.1±0.8	2.9±1.0	2.8±0.9
17. Justify requests (using methods such as return on investment, time value of money, payback period, profitability index) for external or internal funding (i.e. Capital budgets, research proposals).	2.7±1.0	2.5±1.1	2.6±1.0
18. Monitor variance reports (budget to actual) and design a plan for corrective action.	3.1±0.9	2.8±0.9	3.1±0.8
19. Determine food, labor, and operating cost per unit of service.	3.6±0.6	3.1±0.8	3.5±0.6
20. Develop and cost standardized recipes.	3.5±0.6	3.5±0.6	3.4±0.8
21. Develop and modify menus in relation to cost.	3.4±0.6	3.4±0.6	3.3±0.6
22. Price menu items in accordance with established pricing strategies.	3.4±0.6	3.4±0.6	3.3±0.8

Table 3 (Continued)

Competency	Plan IV/V	DI	AP4
23. Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.	3.6±0.6	3.5±0.6	3.4±0.7
24. Utilize precast and precontrol systems for forecasting.	3.1±0.7	2.9±0.9	2.7±0.9
25. Write purchase specifications and orders.	3.3±0.7	3.2±0.8	3.1±0.8
26. Supervise cafeteria cash activities and reporting.	3.0±0.8	3.1±0.8	3.0±1.1
27. Monitor procedures for billing, cash handling, and handling of non-cash income.	2.8±0.9	2.8±0.9	2.9±0.9
28. Analyze financial impact of operational decisions.	3.0±0.9	3.0±0.9	3.3±0.7
29. Analyze cost/benefits of programs and courses of action.	3.0±0.8	3.2±0.9	3.3±0.7
30. Develop financial ratios related to profits, investments, and assets.	2.4±0.9	2.0±1.0	2.4±0.9
31. Assess financial status based on approved budget.	3.1±0.8	2.8±0.9	3.0±0.8
32. Assess financial status based on profit and loss statement.	2.9±0.8	2.7±0.9	2.9±0.9
33. Analyze cash flow.	2.7±0.9	2.5±1.0	2.7±0.9
34. Make decisions based on the balance sheet and income statement.	2.8±0.8	2.5±0.9	2.8±0.9
35. Identify sources of funds and solicit funds for new projects.	2.6±1.0	2.5±1.0	2.7±1.0
36. Authorize expenditures.	2.7±1.1	2.4±1.1	2.7±1.0
37. Establish financial objectives of department.	2.8±1.0	2.5±1.1	2.8±0.9
38. Establish and implement fees for service.	2.8±1.0	2.8±1.0	2.9±1.1
39. Develop plan for collection of fees and accounts.	2.2±1.1	2.3±1.1	2.4±1.2
40. Calculate and use break-even analysis information.	2.7±0.9	2.6±0.9	2.6±1.0
41. Determine cost effectiveness of make vs. buy decisions.	3.1±0.8	3.1±0.8	2.9±0.8
42. Develop plans to generate revenue.	3.0±1.0	3.0±0.9	3.1±0.7
43. Know process for internal/external audits.	2.6±1.0	2.5±1.0	2.8±0.9
44. Calculate contribution margin.	2.4±1.1	2.0±1.0	2.3±1.0
45. Determine labor hour requirements in relation to volume and budget per unit of service.	3.0±0.8	3.1±0.9	3.1±0.8
46. Recommend wage and salary adjustments for employees.	2.8±1.0	2.5±1.1	3.0±0.8

Table 3 (Continued)

Competency	Plan IV/V	DI	AP4
47. Determine appropriate use of part-time and over-time labor.	3.1±0.8	3.2±0.8	3.1±0.7
48. Estimate personnel costs for a facility for budget and planning purposes.	2.9±0.9	2.6±0.9	3.0±0.9
49. Know insurance, tax, and other personnel-related requirements.	2.6±0.9	2.1±1.0	2.4±1.0
50. Calculate turnover and absenteeism costs.	2.9±0.8	2.8±0.9	2.8±0.7

*A five-point scale was used; 0 not important, 1 of little importance, 2 some importance, 3 important, and 4 very important.

^bmean±standard deviation

Table 4. Rank of the 10 Most Important Financial Management Competencies by Respondent Group

Competency	Plan IV/V no.=94	AP4 no.=36	DI no.=61
23. Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.	1	3	3
19. Determine food, labor, and operating cost per unit of service.	2	1	10
20. Develop and cost standardized recipes.	3	5	4
21. Develop and modify menus in relation to cost.	4	2	1
22. Price menu items in accordance with established pricing strategies.	5	9	2
25. Write purchase specifications and orders.	6	-	8
11. Collect appropriate information for budget planning.	7	-	9
3. Know purpose of financial reports.	8	4	-
2. Define basic financial terms.	9	8	6
4. Know financial goals of the operation (profit, break even, subsidized).	10	-	-
28. Analyze financial impact of operational decisions.	-	6	-
29. Analyze cost/benefits of programs and courses of action.	-	7	-
42. Develop plans to generate revenue.	-	10	-
47. Determine appropriate use of part-time and over-time labor.	-	-	5
41. Determine cost effectiveness of make vs. buy decisions.	-	-	7

Table 5 summarizes the 10 least important financial management competencies as rated by Plan IV/V, AP4, and DI respondents. Data show that the competencies rated least important are similar for all three groups of respondents. Competencies 43, 1, and 35 were rated least important by only the Plan IV/V respondents, and competencies 6 and 14 were rated least important by only AP4 and DI respondents. This similarity in responses would indicate that these competencies would not be as important to the dietetic curriculum.

Frequencies for all 50 financial management competencies rated as important and very important by Plan IV/V, AP4, and DI respondents are listed in Tables H-1, H-2, and H-3, respectively, in Appendix H. The frequency distributions of Plan IV/V, AP4, and DI respondents' perceived importance ratings of financial management competencies for entry-level dietitians are listed in Tables I-1, I-2, and I-3, respectively (Appendix I). Data show that most of the competencies were rated as important by the majority of Plan IV/V respondents. The majority of AP4 respondents rated the competencies as either somewhat important or important. Thirty-eight competencies were rated as important by the majority of DI respondents.

Table 5. Rank of the 10 Least Important Financial Management Competencies By Respondent Group

Competency	Plan IV/V no.=94	AP4 no.=36	DI no.=61
10. Know appropriate application of different budgeting systems.	1	6	4
49. Know insurance, tax, and other personnel-related requirements.	2	8	6
43. Know process for internal/external audits.	3	-	-
44. Calculate contribution margin.	4	9	8
1. Know reimbursement policies (such as DRGs, medicare, medicaid, private insurance).	5	-	-
35. Identify sources of funds and solicit funds for new projects.	6	-	-
30. Develop financial ratios related to profits, investments, and assets.	7	5	9
39. Develop plan for collection of fees and accounts.	8	2	3
8. Know depreciation methods and their application.	9	10	10
15. Prepare capital budgets.	10	7	7
17. Justify requests (using methods such as return on investment, time value of money, payback period, profitability index) for external or internal funding (i.e., capital budgets, research proposals).	-	1	-
6. Know how to prepare financial reports.	-	3	1
14. Prepare budgets (operating budget, cash budget, and pro forma balance sheet).	-	4	5
36. Authorize expenditures.	-	-	2

Adequacy of Preparation in Financial Management Competencies

The mean ratings for Plan IV/V, AP4, and DI educators' perceived adequacy of students' preparation in financial management competencies are summarized in Table 6. Table 7 shows rankings of the ten financial management competencies for which students were most often rated as inadequately or totally inadequately prepared. Data show similarity in respondents' perceptions of students' preparation in financial management competencies. A comparison between Tables 5 and 7 show that the competencies rated as least important by dietetic educators are the same competencies in which students are perceived to be least adequately prepared. This suggests that because dietetic educators do not perceive these competencies to be important, they may not be included in the dietetic curriculum and therefore students are not adequately prepared in them.

Table 8 ranks the ten financial management competencies for which fewest respondents' rated students to be inadequately and totally inadequately prepared. Data show a similarity in respondents' perceptions for students' preparation in the lowest 10 competencies rated as totally inadequate and inadequate.

Table 6. Mean Adequacy of Preparation Ratings^a of Financial Management Competencies for Directors of Dietetic Plan IV/V, DI, and AP4 Programs

Competency	Plan IV/V (no.=94)	DI (no.=61)	AP4 (no.=36)
1. Know reimbursement policies (such as DRGs, medicare, medicaid, private insurance).	1.9±1.0 ^b	1.3±1.0	1.5±1.1
2. Define basic financial terms.	2.9±0.7	2.0±0.8	2.4±0.7
3. Know purpose of financial reports.	2.9±0.8	1.9±0.9	2.3±0.8
4. Know financial goals of the operation (profit, break even, subsidized).	2.9±0.8	1.8±1.0	2.5±1.0
5. Know basic accounting and financial management principles.	2.7±0.8 ^c	1.9±0.9	2.3±0.8
6. Know how to prepare financial reports.	2.3±0.9	1.4±1.0	1.8±0.9
7. Use computer to generate financial information, budgets, reports.	2.1±0.9	1.5±1.0	1.8±0.9
8. Know depreciation methods and their application.	1.7±1.0	1.1±0.9	1.5±1.0
9. Use mission statement, goals, objectives, and plans in developing budgets.	2.6±0.9	1.5±1.0	2.0±1.0
10. Know appropriate application of different budgeting systems.	2.2±0.9	1.4±0.9	1.7±1.0
11. Collect appropriate information for budget planning.	2.7±0.8	1.8±1.0	2.1±1.0
12. Project units of service, cost, and revenue as basis for budgeting.	2.5±0.8	1.6±1.1	2.0±1.0
13. Justify budget requirements, including purchasing of new equipment and renovation.	2.5±0.8	1.7±1.0	2.0±1.0
14. Prepare budgets (operating budget, cash budget, and pro forma balance sheet).	2.3±0.9	1.4±1.0	1.8±1.0
15. Prepare capital budgets.	1.8±1.0	1.2±0.9	1.5±1.1
16. Use budget to establish cost control system.	2.5±0.8	1.5±1.0	1.6±1.1
17. Justify requests (using methods such as return on investment, time value of money, payback period, profitability index) for external or internal funding (i.e. Capital budgets, research proposals).	2.0±1.1	1.2±1.0	1.6±1.1
18. Monitor variance reports (budget to actual) and design a plan for corrective action.	2.4±1.0	1.5±1.1	1.8±1.1
19. Determine food, labor, and operating cost per unit of service.	3.2±0.7	2.0±1.1	2.4±1.1
20. Develop and cost standardized recipes.	3.5±0.8	2.7±0.9	2.9±0.9
21. Develop and modify menus in relation to cost.	3.1±0.7	2.5±0.9	2.6±0.8
22. Price menu items in accordance with established pricing strategies.	3.1±0.7	2.3±1.0	2.6±0.9

Table 6 (Continued)

Competency	Plan IV/V	DI	AP4
23. Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.	3.3±0.7	2.7±1.0	2.6±0.8
24. Utilize precast and precontrol systems for forecasting.	2.4±0.9	1.8±0.9	1.8±0.8
25. Write purchase specifications and orders.	3.1±0.7	2.5±0.9	2.6±0.8
26. Supervise cafeteria cash activities and reporting.	2.4±0.9	2.0±1.2	2.2±1.0
27. Monitor procedures for billing, cash handling, and handling of non-cash income.	2.1±0.9	1.8±1.1	2.0±1.0
28. Analyze financial impact of operational decisions.	2.1±1.0	1.6±0.9	2.0±1.1
29. Analyze cost/benefits of programs and courses of action.	2.3±0.9	1.6±1.0	1.9±1.1
30. Develop financial ratios related to profits, investments, and assets.	1.9±1.0	1.1±0.9	1.5±1.0
31. Assess financial status based on approved budget.	2.4±0.9	1.7±1.1	2.0±1.0
32. Assess financial status based on profit and loss statement.	2.4±0.9	1.6±1.0	2.1±1.0
33. Analyze cash flow.	2.2±0.9	1.5±1.1	1.8±1.0
34. Make decisions based on the balance sheet and income statement.	2.3±0.8	1.5±0.9	2.0±1.0
35. Identify sources of funds and solicit funds for new projects.	1.8±1.0	1.3±0.9	1.9±0.9
36. Authorize expenditures.	2.1±1.1	1.5±1.0	2.1±1.0
37. Establish financial objectives of department.	2.4±0.9	1.3±1.1	2.0±1.0
38. Establish and implement fees for service.	1.9±0.9	1.3±1.1	1.9±1.0
39. Develop plan for collection of fees and accounts.	1.6±1.0	1.3±0.9	1.8±0.9
40. Calculate and use break-even analysis information.	2.4±1.0	1.4±1.0	1.7±1.1
41. Determine cost effectiveness of make vs. buy decisions.	2.8±1.0	2.0±1.0	2.1±1.1
42. Develop plans to generate revenue.	2.2±1.1	1.7±1.1	1.9±0.9
43. Know process for internal/external audits.	1.8±1.1	1.2±1.1	1.6±1.0
44. Calculate contribution margin.	1.8±1.1	0.9±1.0	1.4±0.9
45. Determine labor hour requirements in relation to volume and budget per unit of service.	2.5±0.9	1.5±1.1	1.9±1.1
46. Recommend wage and salary adjustments for employees.	2.1±1.0	1.3±1.0 4	1.9±1.0

Table 6 (Continued)

Competency	Plan IV/V	DI	AP4
47. Determine appropriate use of part-time and over-time labor.	2.3±0.9	1.6±1.1	1.8±1.0
48. Estimate personnel costs for a facility for budget and planning purposes.	2.3±1.0	1.4±1.0	1.9±1.1
49. Know insurance, tax, and other personnel-related requirements.	1.9±1.0	1.1±0.9	1.7±1.0
50. Calculate turnover and absenteeism costs.	2.4±0.9	1.5±1.1	1.8±1.0

*A five-point scale was used; 0 totally inadequate, 1 inadequate, 2 somewhat inadequate, 3 adequate, and 4 very adequate.

^bmean±standard deviation

Table 7. Rank Order of the Ten Financial Management Competencies for Which Students' Were Most Often Rated as Inadequately and Totally Inadequately Prepared

Competency	Plan IV/V no.=94	AP4 no.=36	DI no.=61
39. Develop plan for collection of fees and accounts.	1	5	2
8. Know depreciation methods and their application.	2	3	4
15. Prepare capital budgets.	3	6	8
43. Know process for internal/external audits.	4	8	9
44. Calculate contribution margin.	5	1	1
35. Identify sources of funds and solicit funds for new projects.	6	-	-
17. Justify requests (using methods such as return on investment, time value of money, payback period, profitability index) for external or internal funding (i.e., capital budgets, research proposals).	7	-	-
30. Develop financial ratios related to profits, investments, and assets.	8	7	5
38. Establish and implement fees for service.	9	-	6
49. Know insurance, tax, and other personnel-related requirements.	10	-	3
1. Know reimbursement policies (such as DRGs, medicare, medicaid, private insurance).	-	2	10
10. Know appropriate application of different budgeting systems.	-	4	-
40. Calculate and use break-even analysis information.	-	9	-
6. Know how to prepare financial reports.	-	10	-
14. Prepare budgets (operating budget, cash budget, and pro forma balance sheet).	-	-	7

Table 8. Rank Order of the Ten Financial Management Competencies for Which Fewest Respondents' Rated Students to be Inadequately or Totally Inadequately Prepared

Competency	Plan IV/V no.=94	AP4 no.=36	DI no.=61
5. Know basic accounting and financial management principles.	1	5	4
11. Collect appropriate information for budget planning.	2	-	-
3. Know purpose of financial reports.	3	2	2
2. Define basic financial terms.	4	4	5
25. Write purchase specifications and orders.	5	10	9
20. Develop and cost standardized recipes.	6	6	10
21. Develop and modify menus in relation to cost.	7	7	7
23. Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.	8	9	8
19. Determine food, labor, and operating cost per unit of service.	9	-	-
22. Price menu items in accordance with established pricing strategies.	10	8	6
26. Supervise cafeteria cash activities and reporting.	-	1	1
4. Know financial goals of the operation (profit, break even, subsidized).	-	3	-
41. Determine cost effectiveness of make vs. buy information.	-	-	3

Frequencies for all 50 financial management competencies rated as totally inadequate and inadequate by Plan IV/V, AP4, and DI respondents are listed in Tables J-1, J-2, and J-3, respectively, in Appendix J.

The frequency distributions of Plan IV/V, AP4, and DI respondents' perceptions regarding students' preparation in financial management competencies are listed in Tables K-1, K-2, and K-3, respectively (Appendix K). A majority of Plan IV/V respondents rated students as either somewhat inadequate or adequate for most of the competencies. Students were rated as somewhat inadequate for 36 of the competencies by a majority of AP4 respondents. A majority of DI respondents rated students as inadequate for 24 of the competencies and as somewhat inadequate for 20 of the competencies.

Tests of the Research Hypotheses

As described in Chapter 3, the three factors identified in Cochrane's (1990) study were used in this study to compare the perceptions of Plan IV/V and AP4/DI educators in regard to importance and adequacy of students' preparation for 50 financial management competencies. Factor 1 was identified as budgeting, financial analysis, and cash flow management; factor 2 was financial knowledge; and factor 3 was cost control. Competencies that foodservice directors

(Cochrane, 1990) rated as very low in importance were omitted for a second hypothesis test; these competencies would not be relevant to improving the dietetic curriculum. Competencies 30, 33-36, 40, 43, and 50 were omitted from factor 1, competencies 8, 10, 14, and 17 were omitted from factor 2, and no competencies were omitted from factor 3. The hypotheses were tested a third time using the eight competencies rated as "important" or "very important" for entry-level dietitians by 50% of the foodservice directors in Cochrane's (1990) study.

Hypothesis 1

Hypothesis 1 stated that there is no significant difference between perceptions of Plan IV/V directors and AP4/DI directors regarding importance of financial management competencies to the effective job performance of entry-level dietitians. Results support this hypothesis and show that for all three hypothesis tests, there was no significant difference in mean importance ratings between the two groups.

Hypothesis 2

Hypothesis 2 stated that there is no significant difference between perceptions of Plan IV/V and AP4/DI educators regarding adequacy of students' preparation in

financial management competencies at the end of their Plan IV/V program (and at the beginning of their dietetic practice program). Results show significant differences in the mean perception ratings of undergraduate and practice program educators regarding adequacy of students' preparation in financial management competencies. A significant difference in means was noted for Financial Knowledge (factor 2) and Cost Control (factor 3) with the AP4/DI educators rating students' preparation significantly lower than the Plan IV/V educators. When competencies ranked as very low in importance by foodservice directors (Cochrane, 1990) were omitted from the factors, no significant difference in means was found between the groups for any factor. Students' t-tests for the eight most important competencies from Cochrane's (1990) study were significant for the following competencies:

- 2) Define basic financial terms.
- 4) Know financial goals of the operation (profit, break even, subsidized).
- 21) Develop and modify menus in relation to cost.
- 22) Price menu items in accordance with established pricing strategies.

AP4/DI educators rated these competencies significantly lower than the Plan IV/V educators. This suggests that Plan IV/V educators perceive their students to be more adequately

prepared in these financial management competencies when they leave their program than do AP4/DI educators when students enter their programs.

Hypothesis 3

Hypothesis 3 stated that there is no significant difference between perceptions of AP4 and DI educators on the importance of financial management competencies to the job performed by entry-level dietitians. Results showed a significant difference in mean perception ratings between AP4 and DI educators in regard to Financial Knowledge (factor 2); DI respondents' mean importance rating was significantly lower than the AP4 respondents' mean importance rating. When competencies rated as very low in importance by foodservice directors (Cochrane, 1990) were omitted, DI respondents' mean importance rating was again significantly lower than the AP4 respondents' mean importance rating.

Students' t-tests for the eight most important competencies from Cochrane's (1990) study were significant for the following competencies:

3) Know purpose of financial reports.

42) Develop plans to generate revenue.

DI respondents' mean importance rating was significantly lower than the AP4 respondents' mean importance rating. The

results of these tests suggest that AP4 respondents may perceive the financial management competencies to be more important than do the DI respondents.

Hypothesis 4

Hypothesis 4 stated that there is no significant difference between perceptions of AP4 educators and DI educators regarding adequacy of students' preparation in financial management competencies at the beginning of their program. Results support this hypothesis and show that for all three hypothesis tests, there was no significant difference in mean preparation ratings between the two groups. These results show a consensus among AP4/DI respondents regarding preparation of students in financial management competencies when entering their programs.

Financial Management Competencies in Dietetic Education Programs

Plan IV/V respondents were asked to indicate what courses were required for Plan IV/V programs that included financial management concepts. Table 9 summarizes these required courses.

Table 9. Frequency of Courses in which Financial Management Concepts are Taught as Indicated by Plan IV/V Educators (no.=94)

Course	100 Level	200	300	400	500	No Course No.	Total
Accounting	5	9	4	2	0	10	30
Quantity Food Prod.	2	2	29	10	0	20	63
Food Cost Control	1	3	12	5	0	7	28
Foodservice Mgmt.	2	6	23	13	1	23	68
Institutional Mgmt./ Administration	0	2	9	11	0	11	33

The majority of respondents indicated that the classes which contain financial management concepts are taught at the 300 (junior) and 400 (senior) levels. Data show that the class taught most frequently that contains financial management concepts is Foodservice Management. A small number of programs require a separate course in Food Cost Control.

Table 10 summarizes frequency of textbooks used by respondents for foodservice management courses that include financial management concepts. The textbooks listed most frequently by Plan IV/V respondents in the Other category were:

Quantity Food Production, Planning, and Management by
J.B. Knight and L.H. Kotschevar
Understanding Foodservice Financial Management by J.
Sneed and K.H. Kresse

Controlling and Analyzing Costs in Foodservice

Operations by J. Keiser

For AP4 respondents, the most frequently listed textbooks in the Other category were:

Controlling and Analyzing Costs in Foodservice

Operations by J. Keiser

Journal readings

Table 10. Frequency of Textbooks Used by Respondent Group for Foodservice Management Courses That Include Financial Management Concepts

Textbook and Author	Plan IV/V (no.=94)	AP4 (no.=36)	DI (no.=61)
<u>Foodservice Organizations:</u>			
<u>A Managerial and Systems Approach</u> by M.C. Spears and A.G. Vaden			
	63	16	35
<u>Foodservice in Institutions</u> by B.B. West, et al.			
	48	10	36
<u>Food Service Manual for Health Care Institutions</u> by R.P. Puckett and B.P. Miller			
	13	12	23
Others	40	9	23

Although several AP4 respondents indicated using textbooks, for each textbook listed on the questionnaire, the majority of respondents indicated that they did not use it.

DI respondents indicated the following textbooks most frequently in the Other category:

Cost Effective Quality Foodservice by J.F. Stokes

Understanding Foodservice Financial Management by J. Sneed and K.H. Kresse

Experiences/Rotations in Practice Programs

AP4 and DI educators were asked to indicate on the survey instrument what learning experiences/rotations included in the program allowed students to learn financial management concepts. A summary of the experiences listed by both AP4 and DI educators is found in Table L-1 (Appendix L). The most frequently listed rotations were: administrative rotation with Department head (no.=11), budgeting with foodservice director (no.=11), and cafeteria management (no.=11). The most frequently listed experience (n=12) that taught financial management concepts was costing recipes. Seven respondents indicated that their students had a class in budget preparation.

Comments

Many respondents wrote comments on the survey instrument. The general theme of these comments was that the 50 financial management competencies would be more appropriate for dietitians in management, not clinical or community dietitians. Also, it was suggested that these competencies were not for entry-level dietitians and could most likely be learned on the job if necessary. Some respondents indicated that the financial management competencies should only be taught in an AP4 or DI practice program, not at the undergraduate level.

CHAPTER V

Summary and Recommendations

Summary

This study identified 50 financial management competencies and determined the importance of these competencies to the entry-level dietitian's job as perceived by Plan IV/V, AP4, and DI educators. Plan IV/V, AP4, and DI educators' perceptions of the adequacy of students' preparation in these competencies were determined. The study found that there were no significant differences in perceptions of Plan IV/V and AP4/DI educators in regard to the importance of financial management competencies for the role of the entry-level dietitian.

Perceptions of adequacy of students' preparation differed, however, for Plan IV/V and AP4/DI respondents. Plan IV/V respondents rated students' preparation in financial management competencies significantly higher than did AP4/DI respondents for Financial Knowledge (factor 2) and Cost Control (factor 3). Financial Knowledge (factor 2) and Cost Control (factor 3) address the important components of cost containment. Fruin (1983), Hoover (1983), and Haschke (1983b) have documented the need for dietitians to have financial expertise because of increasing emphasis on cost containment. The results of this study show that

students beginning the AP4 or DI program are not perceived to be adequately prepared in these crucial components of cost containment.

When compared to the eight items rated as most important by 50% or more of the foodservice directors in Cochrane's (1990) study, significant differences in perceptions of Plan IV/V and AP4/DI respondents regarding students' preparation were noted for the following competencies:

- 2) Define basic financial terms.
- 4) Know financial goals of the operation.
- 21) Develop and modify menu items in relation to cost.
- 22) Price menu items in accordance with established pricing strategies.

Plan IV/V respondents rated adequacy of students' preparation higher than did AP4/DI respondents. The results indicate that students are not adequately prepared in the financial management competencies perceived to be most important by foodservice directors.

A significant difference was found in the perceptions of AP4 and DI respondents in regard to importance for all three hypothesis tests. These results suggest that AP4 respondents perceived Financial Knowledge (factor 2), and know purpose of financial reports (3.) and develop plans to generate revenue (42.) as more important than DI

respondents. It is important to note that only two of the eight items rated as most important by foodservice directors were found to be significantly different for AP4 and DI respondents. No significant difference was found in perceptions of AP4 and DI respondents in regard to how adequately prepared students were in financial management at the beginning their program.

Plan IV/V respondents' indicated that financial management is most often taught as part of a foodservice management course. Most respondents indicated using textbooks that contain only one chapter on financial management, although other cost principles may be integrated in other areas of the book.

AP4 and DI respondents' indicated that they too used textbooks that contained one chapter on financial management. AP4 respondents, however, were less likely to use a textbook than either the Plan IV/V or DI respondents. AP4/DI respondents listed costing recipes as the most frequent experience for teaching financial management. Costing recipes is an important financial management competency, but it does not begin to include the competencies rated as most important by foodservice directors, and it does not provide the financial expertise dietitians need as Hoover (1983) and others have documented.

Recommendations

The results of this study have clear implications for dietetic educators. The fact that some degree of knowledge of financial management is needed by the entry-level dietitian has been documented by this study. Also, AP4/DI respondents do not perceive students to be adequately prepared in the most important financial management competencies. It is recommended that dietetic educators use the results of this study to revise the content of courses that teach financial management.

Undergraduate programs in dietetics should focus on the ten financial management competencies rated as most important by all three groups. The following competencies should be emphasized since AP4/DI respondents rated students less adequately prepared in these than did Plan IV/V respondents:

- 2) Define basic financial terms.
- 4) Know financial goals of the operation
profit, break even, subsidized).
- 21) Develop and modify menus in relation to cost.
- 22) Price menu items in accordance with established
pricing strategies.

Plan IV/V educators should also focus on the competencies related to Financial Knowledge (factor 2) and Cost Control (factor 3) since AP4/DI educators perceived

students to be less adequately prepared in these competencies. The inclusion of these competencies in the undergraduate dietetic program would strengthen and enhance the current education for entry-level dietitians.

Undergraduate educators may want to expand the coverage of financial management in existing foodservice management courses or include financial management in other courses so that all dietetic students are exposed to these competencies multiple times. A course at the senior-level dedicated solely to financial management should warrant consideration.

Practice program educators should focus on preparing students in the eight competencies rated as most important by 50% or more of the foodservice directors in Cochrane's (1990) study. These are:

2. Define basic financial terms.
3. Know purpose of financial reports.
4. Know financial goals of the operation (profit, break even, subsidized).
20. Develop and cost standardized recipes.
21. Develop and modify menus in relation to cost.
22. Price menu items in accordance with established pricing strategies.
23. Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.
42. Develop plans to generate revenue.

AP4/DI educators have the opportunity to continue the financial management education of dietetic students by including a range of experiences that teach financial management skills. It has been documented in this study that financial expertise is needed and should be included in the practice program curriculum.

Future Studies

This study compared only the importance and adequacy of preparation ratings for 50 financial management competencies between undergraduate and practice program dietetic educators. Future studies could compare dietetic educators' importance ratings to those of foodservice directors. Other studies could compare the adequacy of preparation ratings between dietetic educators (particularly for AP4/DI programs) and foodservice directors.

This study generated a comprehensive list of experiences/rotations currently included in practice programs that teach financial management concepts. A more comprehensive study could be developed that focused only on these experiences and exactly what financial management competencies are being taught in practice programs and the effectiveness of those experiences in contributing to student learning. This would provide guidance for educators in planning and evaluating practice program experiences.

Another study could be developed that determined the perceptions practice program graduates (entry-level dietitians) had as to their preparation in financial management. Practice program graduates could use the competencies developed in this study to evaluate their practice program experiences related to financial management.

This study has documented the need for entry-level dietitians to have knowledge of financial management. It is recommended that the results of this study be used to revise dietetic curricula in order to increase the knowledge of financial management for dietetic students.

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APPENDIXES

APPENDIX A

Human Subjects Review Approval

THE UNIVERSITY OF TENNESSEE
KNOXVILLE



Office of the
Vice Provost
for Research

CRP #: 3241 A

DATE: 05/23/90

Title: Development of Financial management competencies for entry- and advanced-level dietitians

Anderson, Melinda
Nutrition & Food Sciences
229 Jessie Harris Bldg.
Campus

Sneed, Dr. Jeannie
Nutrition & Food Sciences
229 Jessie Harris Bldg.
Campus

The project listed above has been certified exempt from review by the Committee on Research Participation and is approved.

This certification is for a period ending one year from the date of this letter. Please make timely submission of renewal or prompt notification of project termination (see item #2 below).

The responsibilities of the project director include the following:

1. Prior approval from the Coordinator of Compliances must be obtained before any changes in the project are instituted.
2. Submission of a Form D at 12-month intervals attesting to the current status of the project (protocol is still in effect, project is terminated, etc.).

We wish you success in your research endeavors.

Sincerely,

Edith M. Szathmary

Edith M. Szathmary
Coordinator of Compliances

cc: Dr. James D. Moran III
229 Jessie Harris Bldg.

Attachment: Copy of Form A

APPENDIX B

List of Financial Management Competencies and Cover Letter

FINANCIAL MANAGEMENT COMPETENCIES

Directions: Please read the list of financial management competencies. Mark through any competencies that you think is not or should not be done by an administrative dietitian. Add any that are not included that either is or should be done by dietitians. Please feel free to modify or edit any item included on our list. Remember, this list should include all activities related to financial management that would be done by either entry- or advanced-level administrative dietitians.

General

Define basic financial terms.

Know purpose of financial reports.

Know financial goals of the operation (profit, break even, subsidized).

Apply accounting and bookkeeping principles.

Prepare financial reports.

Use computer to generate financial information and reports.

Budgeting

Know appropriate application of different budgeting systems.

Collect appropriate information for budget planning.

Project units of service and revenue as basis for budgeting.

Justify budget requirements, including purchasing of new equipment and renovation.

Prepare budgets.

Prepare capital budgets.

Use budget to establish cost control system.

Prepare proposals to justify requests for external or internal funding (i.e. capital budgets, research proposals)

Cost Control

Determine food, labor, and operating costs.

Develop and cost standardized recipes.

Develop and modify menus in relation to cost.

Price menu items in accordance with established pricing strategies.

Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.

Utilize precast and precontrol systems for forecasting.

Write purchase specifications and orders.

Supervise cafeteria cash activities and reporting.

Monitor procedures for billing, cash handling, and handling of non-cash income.

Financial Analysis

Analyze investments.

Analyze financial impact.

Analyze cost/benefits of programs and courses of action.

Complete variance analysis.

Assess financial status based on approved budget.

Assess financial status based on profit and loss statement.

Analyze cash flow.

Make decisions based on the balance sheet and income statement.

Identify sources of funds and solicit funds for new projects.

Authorize expenditures.

Establish financial objectives of department.

Establish and implement fees for service.

Develop plan for collection of fees and accounts.

Conduct break-even analysis.

Develop plans to generate revenue.

Know process for internal/external audits.

Personnel

Determine labor hour requirements in relation to volume and budget.

Recommend wage and salary adjustments for employees.

Develop guidelines for salary scales and merit raises.

Estimate personnel costs for a facility.

Complete insurance, tax, and other personnel-related forms.

Other

Please write in any financial management competencies that we may have forgotten.

THANK YOU FOR HELPING US WITH THIS STUDY

THE UNIVERSITY OF TENNESSEE
KNOXVILLE

February 23, 1990

College of
Human Ecology

Nutrition and
Food Science

Carol May, MS, RD
Director of Nutrition Services
East Tennessee Baptist Hospital
P.O. Box 1788
Knoxville, TN 37901

Dear Ms. May:

Thank you for agreeing to serve on the expert panel which will assist in developing a list of financial management competencies for administrative dietitians. Changes in the health care field have necessitated that dietitians become more financially astute. Some research studies have found that dietitians are not as well prepared in financial management as required by health care administrators. In addition, The American Dietetic Association is considering specialty certification for advanced-level practitioners. Thus, we want to identify financial management competencies for entry- and advanced-level dietitians.

Please review this list of financial management activities. Delete any that you think should not be done by dietitians and add any that are not included. Responses of the expert panel will be used to develop a survey for hospital foodservice directors, Plan IV/V directors, dietetic internship directors, and approved preprofessional practice program directors.

We appreciate your willingness to help us with this study. Please return this questionnaire in the enclosed self-addressed, postage-paid envelope by March 14, 1990.

Sincerely,

Elisabeth Cochrane
Graduate Student

Melinda Anderson
Graduate Student

Jeannie Sneed, PhD, RD
Assistant Professor

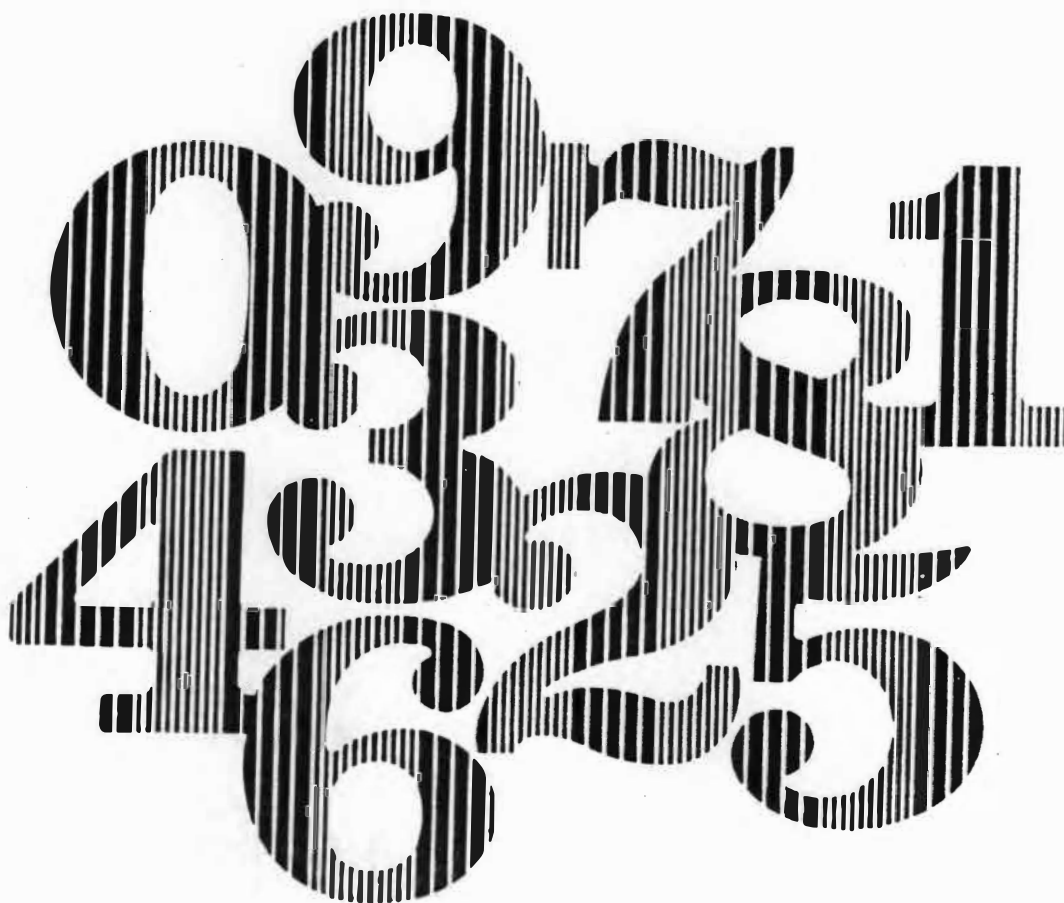
JS/mh

Enclosures: questionnaire
return envelope

Appendix C

Plan IV/V Pilot Test Survey Instrument

DEVELOPMENT OF FINANCIAL MANAGEMENT
COMPETENCIES FOR ENTRY-LEVEL DIETITIANS



Department of Nutrition and Food Sciences
College of Human Ecology
The University of Tennessee
Knoxville, TN 37996-1900

April 1990

PART I. Financial management competencies for entry-level dietitians.

INSTRUCTIONS: Please read the following financial management competencies. Indicate how important each is to the effective performance of the entry-level dietitians job using the scale 0-not important, 1-some importance, 2-important, and 3-very important. Then indicate the degree to which you feel your students are prepared in these competencies when they graduate from your program using the scale 0-totally inadequate, 1-inadequate, 2-somewhat inadequate, 3-adequate, and 4-very adequate.

	<u>Importance to Job</u>					<u>Adequacy of Preparation</u>				
	not important	some importance	important	very important		totally inadequate	inadequate	somewhat inadequate	adequate	very adequate
1. Know reimbursement policies (such as DRGs, medicare, medicaid, private insurance).	0	1	2	3		0	1	2	3	4
2. Define basic financial terms.	0	1	2	3		0	1	2	3	4
3. Know purpose of financial reports.	0	1	2	3		0	1	2	3	4
4. Know financial goals of the operation (profit, break even, subsidized).	0	1	2	3		0	1	2	3	4
5. Know basic accounting and financial management principles.	0	1	2	3		0	1	2	3	4
6. Know how to prepare financial reports.	0	1	2	3		0	1	2	3	4
7. Use computer to generate financial information, budgets, and reports.	0	1	2	3		0	1	2	3	4
8. Know depreciation methods and their application.	0	1	2	3		0	1	2	3	4
9. Use mission statement, goals, objectives, and plans in developing budgets.	0	1	2	3		0	1	2	3	4
10. Know appropriate application of different budgeting systems.	0	1	2	3		0	1	2	3	4
11. Collect appropriate information for budget planning.	0	1	2	3		0	1	2	3	4
12. Project units of service, cost, and revenue as basis for budgeting.	0	1	2	3		0	1	2	3	4
13. Justify budget requirements, including purchasing of new equipment and renovation.	0	1	2	3		0	1	2	3	4
14. Prepare budgets (operating budget, cash budget, and pro forma balance sheet).	0	1	2	3		0	1	2	3	4
15. Prepare capital budgets.	0	1	2	3		0	1	2	3	4
16. Use budget to establish cost control system.	0	1	2	3		0	1	2	3	4
17. Justify requests (using methods such as return on investment, time value of money, payback period, profitability index) for external or internal funding (i.e. capital budgets, research proposals).	0	1	2	3		0	1	2	3	4
18. Monitor variance reports (budget to actual) and design a plan for corrective action.	0	1	2	3		0	1	2	3	4
19. Determine food, labor, and operating costs per unit of service.	0	1	2	3		0	1	2	3	4
20. Develop and cost standardized recipes.	0	1	2	3		0	1	2	3	4
21. Develop and modify menus in relation to cost.	0	1	2	3		0	1	2	3	4
22. Price menu items in accordance with established pricing strategies.	0	1	2	3		0	1	2	3	4
23. Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.	0	1	2	3		0	1	2	3	4

INSTRUCTIONS: Please read the following financial management competencies. Indicate how important each is to the effective performance of the entry-level dietitians job using the scale 0-not important, 1-some importance, 2-important, and 3-very important. Then indicate the degree to which you feel your students are prepared in these competencies when they graduate from your program using the scale 0-totally inadequate, 1-inadequate, 2-somewhat inadequate, 3-adequate, and 4-very adequate.

	<u>Importance to Job</u>					<u>Adequacy of Preparation</u>				
	not important	some importance	important	very important		totally inadequate	inadequate	somewhat inadequate	adequate	very adequate
24. Utilize precast and precontrol systems for forecasting.	0	1	2	3		0	1	2	3	4
25. Write purchase specifications and orders.	0	1	2	3		0	1	2	3	4
26. Supervise cafeteria cash activities and reporting.	0	1	2	3		0	1	2	3	4
27. Monitor procedures for billing, cash handling, and handling of non-cash income.	0	1	2	3		0	1	2	3	4
28. Analyze financial impact of operational decisions.	0	1	2	3		0	1	2	3	4
29. Analyze cost/benefits of programs and courses of action.	0	1	2	3		0	1	2	3	4
30. Develop financial ratios related to profits, investments, and assets.	0	1	2	3		0	1	2	3	4
31. Assess financial status based on approved budget.	0	1	2	3		0	1	2	3	4
32. Assess financial status based on profit and loss statement.	0	1	2	3		0	1	2	3	4
33. Analyze cash flow.	0	1	2	3		0	1	2	3	4
34. Make decisions based on the balance sheet and income statement.	0	1	2	3		0	1	2	3	4
35. Identify sources of funds and solicit funds for new projects.	0	1	2	3		0	1	2	3	4
36. Authorize expenditures.	0	1	2	3		0	1	2	3	4
37. Establish financial objectives of department.	0	1	2	3		0	1	2	3	4
38. Establish and implement fees for service.	0	1	2	3		0	1	2	3	4
39. Develop plan for collection of fees and accounts.	0	1	2	3		0	1	2	3	4
40. Calculate and use break-even analysis information.	0	1	2	3		0	1	2	3	4
41. Determine cost effectiveness of make vs. buy decisions.	0	1	2	3		0	1	2	3	4
42. Develop plans to generate revenue.	0	1	2	3		0	1	2	3	4
43. Know process for internal/external audits.	0	1	2	3		0	1	2	3	4
44. Calculate contribution margin.	0	1	2	3		0	1	2	3	4
45. Determine labor hour requirements in relation to volume and budget per unit of service.	0	1	2	3		0	1	2	3	4
46. Recommend wage and salary adjustments for employees.	0	1	2	3		0	1	2	3	4
47. Determine appropriate use of part-time and over-time labor.	0	1	2	3		0	1	2	3	4
48. Estimate personnel costs for a facility for budget and planning purposes.	0	1	2	3		0	1	2	3	4
49. Know insurance, tax, and other personnel-related requirements.	0	1	2	3		0	1	2	3	4
50. Calculate turnover and absenteeism costs.	0	1	2	3		0	1	2	3	4

PART II. DEMOGRAPHIC INFORMATION

INSTRUCTIONS: Please answer the following questions about your program so that we can analyze the results of this survey.

Q-1. Is your program a Plan IV or Plan V? (Circle one)

- 1 Plan IV
- 2 Plan V

Q-2. If you have a Plan IV program, what is the emphasis? (Circle one)

- 1 General
- 2 Management
- 3 Clinical
- 4 Community

Q-3. In what courses required for your Plan IV/V program do your students learn financial management? Please indicate course numbers for all of the courses that apply to your school.

- _____ Accounting
- _____ Quantity Food Production
- _____ Food Cost Control
- _____ Foodservice Management
- _____ Institutional Management/Administration

Q-4. What textbook are currently being used for foodservice management courses in which financial management is taught? (Circle all that apply)

- 1 Foodservice Organizations: A Managerial and Systems Approach by Marian C. Spears and Allene G. Vaden
- 2 Foodservice in Institutions by Bessie B. West, et al.
- 3 Food Service Manual for Health Care Institutions by Ruby P. Puckett and Bonnie B. Miller
- 4 Others, please specify: _____

Q-5. What would you consider your area of specialization?

- 1 General
- 2 Management
- 3 Clinical
- 4 Community
- 5 Other, please specify _____

APPENDIX D

Cover Letter for Pilot Test

THE UNIVERSITY OF TENNESSEE
KNOXVILLE

April 3, 1990



College of
Human Ecology

Nutrition and
Food Science

Donna R. Seibels, MS, RD
Samford University
Dept. of Home Economics
800 Lakeshore Drive
Birmingham, AL 35229

Dear Ms. Seibels:

The profession of dietetics has moved into a new era as more emphasis is placed on cost containment in health care. As the costs of health care rise, dietitians will be called upon to provide high quality food and nutrition services within the constraints of limited financial resources. In light of these facts, we are interested in determining the financial management competencies required of the entry-level dietitian. Also, we want to determine to what extent these competencies are included in Plan IV/V programs.

Financial management competencies have been compiled from a review of literature and reviewed by an expert panel of hospital foodservice directors. We are requesting your assistance in reviewing the enclosed questionnaire. Please read the questionnaire for clarity of instructions and items. If any of the questions or items are unclear, please indicate this on the questionnaire.

Your feedback will be used to develop the final survey instrument. If you are not involved in teaching financial management to students, and feel that another faculty member could more easily respond to this questionnaire, please pass this letter and questionnaire on to the appropriate person.

All responses will be kept confidential. A postage-paid, self-addressed return envelope is enclosed for your convenience. Please return the questionnaire by April 24 if possible.

Thank you for your assistance. Your response is critical to the success of this research project.

Sincerely,

Melinda Anderson

Melinda Anderson
Graduate Student

Jeannie Sneed

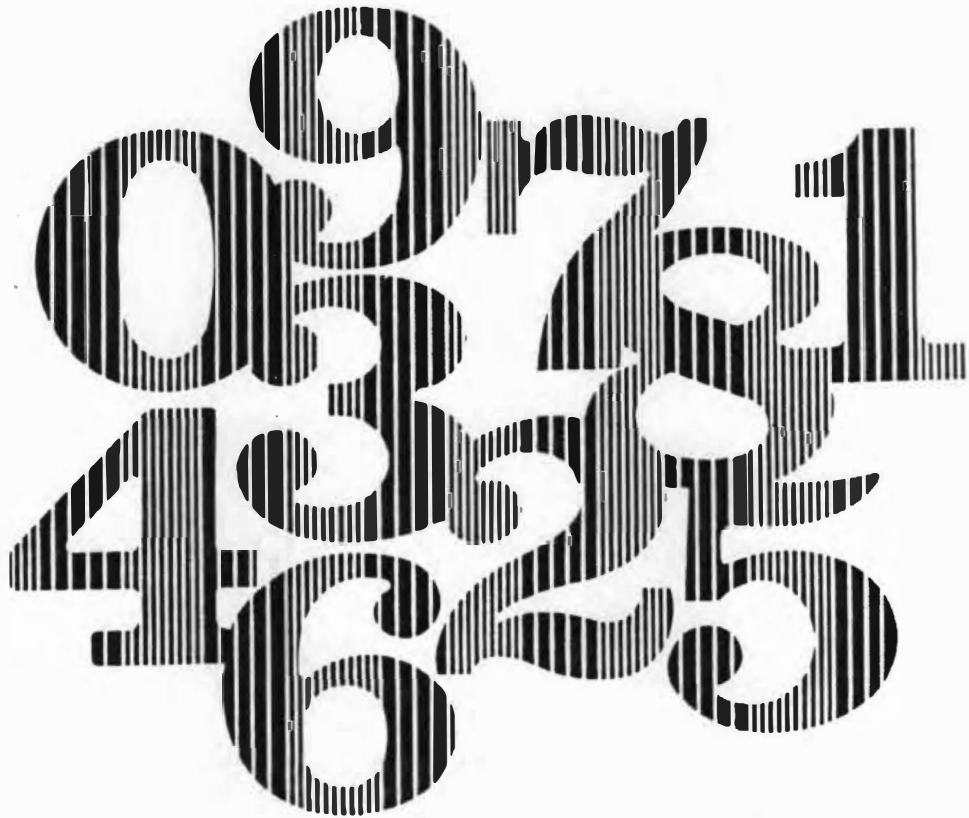
Jeannie Sneed, PhD, RD
Assistant Professor

enclosures: questionnaire
return envelope

APPENDIX E

Revised Plan IV/V Survey Instrument

DEVELOPMENT OF FINANCIAL MANAGEMENT
COMPETENCIES FOR ENTRY-LEVEL DIETITIANS



Department of Nutrition and Food Sciences
College of Human Ecology
The University of Tennessee
Knoxville, TN 37996-1900

September 1990

If you are not involved in teaching financial management to students, and feel that another faculty member could more easily respond to this questionnaire, please pass this letter and questionnaire on to the appropriate person.

PART I. FINANCIAL MANAGEMENT COMPETENCIES FOR ENTRY-LEVEL DIETITIANS.

INSTRUCTIONS: Please read the following financial management competencies. Indicate how important each is to the effective performance of the entry-level dietitians job using the scale 0-not important, 1-of little importance, 2-some importance, 3-important, and 4-very important. Then indicate the degree to which you feel your students are prepared in these competencies when they graduate from your program using the scale 0-totally inadequate, 1-inadequate, 2-somewhat inadequate, 3-adequate, and 4-very adequate. An entry-level dietitian has been defined by The American Dietetic Association as a dietitian in a position requiring the minimum level of training/experience or in a position which can be filled by a person with three years or less experience.

	Importance to Job					Adequacy of Preparation				
	not important	of little importance	some importance	important	very important	totally inadequate	inadequate	somewhat inadequate	adequate	very adequate
1. Know reimbursement policies (such as DRGs, medicare, medicaid, private insurance).	0	1	2	3	4	0	1	2	3	4
2. Define basic financial terms.	0	1	2	3	4	0	1	2	3	4
3. Know purpose of financial reports.	0	1	2	3	4	0	1	2	3	4
4. Know financial goals of the operation (profit, break even, subsidized).	0	1	2	3	4	0	1	2	3	4
5. Know basic accounting and financial management principles.	0	1	2	3	4	0	1	2	3	4
6. Know how to prepare financial reports.	0	1	2	3	4	0	1	2	3	4
7. Use computer to generate financial information, budgets, and reports.	0	1	2	3	4	0	1	2	3	4
8. Know depreciation methods and their application.	0	1	2	3	4	0	1	2	3	4
9. Use mission statement, goals, objectives, and plans in developing budgets.	0	1	2	3	4	0	1	2	3	4
10. Know appropriate application of different budgeting systems.	0	1	2	3	4	0	1	2	3	4
11. Collect appropriate information for budget planning.	0	1	2	3	4	0	1	2	3	4
12. Project units of service, cost, and revenue as basis for budgeting.	0	1	2	3	4	0	1	2	3	4
13. Justify budget requirements, including purchasing of new equipment and renovation.	0	1	2	3	4	0	1	2	3	4
14. Prepare budgets (operating budget, cash budget, and pro forma balance sheet).	0	1	2	3	4	0	1	2	3	4
15. Prepare capital budgets.	0	1	2	3	4	0	1	2	3	4
16. Use budget to establish cost control system.	0	1	2	3	4	0	1	2	3	4
17. Justify requests (using methods such as return on investment, time value of money, payback period, profitability index) for external or internal funding (i.e. capital budgets, research proposals).	0	1	2	3	4	0	1	2	3	4
18. Monitor variance reports (budget to actual) and design a plan for corrective action.	0	1	2	3	4	0	1	2	3	4
19. Determine food, labor, and operating costs per unit of service.	0	1	2	3	4	0	1	2	3	4
20. Develop and cost standardized recipes.	0	1	2	3	4	0	1	2	3	4

	Importance to Job					Adequacy of Preparation				
	not important	of little importance	some importance	important	very important	totally inadequate	inadequate	somewhat inadequate	adequate	very adequate
21. Develop and modify menus in relation to cost.	0	1	2	3	4	0	1	2	3	4
22. Price menu items in accordance with established pricing strategies.	0	1	2	3	4	0	1	2	3	4
23. Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.	0	1	2	3	4	0	1	2	3	4
24. Utilize precost and precontrol systems for forecasting.	0	1	2	3	4	0	1	2	3	4
25. Write purchase specifications and orders.	0	1	2	3	4	0	1	2	3	4
26. Supervise cafeteria cash activities and reporting.	0	1	2	3	4	0	1	2	3	4
27. Monitor procedures for billing, cash handling, and handling of non-cash income.	0	1	2	3	4	0	1	2	3	4
28. Analyze financial impact of operational decisions.	0	1	2	3	4	0	1	2	3	4
29. Analyze cost/benefits of programs and courses of action.	0	1	2	3	4	0	1	2	3	4
30. Develop financial ratios related to profits, investments, and assets.	0	1	2	3	4	0	1	2	3	4
31. Assess financial status based on approved budget.	0	1	2	3	4	0	1	2	3	4
32. Assess financial status based on profit and loss statement.	0	1	2	3	4	0	1	2	3	4
33. Analyze cash flow.	0	1	2	3	4	0	1	2	3	4
34. Make decisions based on the balance sheet and income statement.	0	1	2	3	4	0	1	2	3	4
35. Identify sources of funds and solicit funds for new projects.	0	1	2	3	4	0	1	2	3	4
36. Authorize expenditures.	0	1	2	3	4	0	1	2	3	4
37. Establish financial objectives of department.	0	1	2	3	4	0	1	2	3	4
38. Establish and implement fees for service.	0	1	2	3	4	0	1	2	3	4
39. Develop plan for collection of fees and accounts.	0	1	2	3	4	0	1	2	3	4
40. Calculate and use break-even analysis information.	0	1	2	3	4	0	1	2	3	4
41. Determine cost effectiveness of make vs. buy decisions.	0	1	2	3	4	0	1	2	3	4
42. Develop plans to generate revenue.	0	1	2	3	4	0	1	2	3	4
43. Know process for internal/external audits.	0	1	2	3	4	0	1	2	3	4
44. Calculate contribution margin.	0	1	2	3	4	0	1	2	3	4
45. Determine labor hour requirements in relation to volume and budget per unit of service.	0	1	2	3	4	0	1	2	3	4
46. Recommend wage and salary adjustments for employees.	0	1	2	3	4	0	1	2	3	4
47. Determine appropriate use of part-time and over-time labor.	0	1	2	3	4	0	1	2	3	4
48. Estimate personnel costs for a facility for budget and planning purposes.	0	1	2	3	4	0	1	2	3	4
49. Know insurance, tax, and other personnel-related requirements.	0	1	2	3	4	0	1	2	3	4
50. Calculate turnover and absenteeism costs.	0	1	2	3	4	0	1	2	3	4

PLEASE CONTINUE TO THE NEXT PAGE

PART II. PROGRAM CHARACTERISTICS

INSTRUCTIONS: Please answer the following questions about your program so that we can analyze the results of this survey.

Q-1. Is your program a Plan IV or Plan V? (Circle one)

- 1 Plan IV
- 2 Plan V

Q-2. If you have a Plan IV program, what is the emphasis? (Circle one)

- 1 General
- 2 Management
- 3 Clinical
- 4 Community

Q-3. In what courses required for your Plan IV/V program do your students learn financial management? Please indicate course numbers for all of the courses that apply to your school.

- _____ Accounting
- _____ Quantity Food Production
- _____ Food Cost Control
- _____ Foodservice Management
- _____ Institutional Management/Administration

Q-4. What textbooks are currently being used for foodservice management courses in which financial management is taught? (Circle all that apply)

- 1 Foodservice Organizations: A Managerial and Systems Approach by Marian C. Spears and Allene G. Vaden
- 2 Foodservice in Institutions by Bessie B. West, et al.
- 3 Food Service Manual for Health Care Institutions by Ruby P. Puckett and Bonnie B. Miller
- 4 Others, please specify:

Q-5. What would you consider your area of specialization?

- 1 General
- 2 Management
- 3 Clinical
- 4 Community
- 5 Other, please specify _____

Q-6. Are you the Plan IV/V Director for your school?

- 0 No
- 1 Yes

Q-7. Would you like a summary of the study results?

- 1 Yes
- 2 No

APPENDIX F

DI/AP4 Survey Instrument

DEVELOPMENT OF FINANCIAL MANAGEMENT
COMPETENCIES FOR ENTRY-LEVEL DIETITIANS



Department of Nutrition and Food Sciences
College of Human Ecology
The University of Tennessee
Knoxville, TN 37996-1900

September 1990

If you are not involved in teaching financial management to students, and feel that another faculty/staff member could more easily respond to this questionnaire, please pass this letter and questionnaire on to the appropriate person.

PART I. FINANCIAL MANAGEMENT COMPETENCIES FOR ENTRY-LEVEL DIETITIANS.

INSTRUCTIONS: Please read the following financial management competencies. Indicate how important each is to the effective performance of the entry-level dietitians job using the scale 0-not important, 1-of little importance, 2-some importance, 3-important, and 4-very important. Then indicate the degree to which you feel your students are prepared in these competencies when they begin your program using the scale 0-totally inadequate, 1-inadequate, 2-somewhat inadequate, 3-adequate, and 4-very adequate. An entry-level dietitian has been defined by The American Dietetic Association as a dietitian in a position requiring the minimum level of training/experience or in a position which can be filled by a person with three years or less experience.

	Importance to Job					Adequacy of Preparation				
	not important	of little importance	some importance	important	very important	totally inadequate	inadequate	somewhat inadequate	adequate	very adequate
1. Know reimbursement policies (such as DRGs, medicare, medicaid, private insurance).	0	1	2	3	4	0	1	2	3	4
2. Define basic financial terms.	0	1	2	3	4	0	1	2	3	4
3. Know purpose of financial reports.	0	1	2	3	4	0	1	2	3	4
4. Know financial goals of the operation (profit, break even, subsidized).	0	1	2	3	4	0	1	2	3	4
5. Know basic accounting and financial management principles.	0	1	2	3	4	0	1	2	3	4
6. Know how to prepare financial reports.	0	1	2	3	4	0	1	2	3	4
7. Use computer to generate financial information, budgets, and reports.	0	1	2	3	4	0	1	2	3	4
8. Know depreciation methods and their application.	0	1	2	3	4	0	1	2	3	4
9. Use mission statement, goals, objectives, and plans in developing budgets.	0	1	2	3	4	0	1	2	3	4
10. Know appropriate application of different budgeting systems.	0	1	2	3	4	0	1	2	3	4
11. Collect appropriate information for budget planning.	0	1	2	3	4	0	1	2	3	4
12. Project units of service, cost, and revenue as basis for budgeting.	0	1	2	3	4	0	1	2	3	4
13. Justify budget requirements, including purchasing of new equipment and renovation.	0	1	2	3	4	0	1	2	3	4
14. Prepare budgets (operating budget, cash budget, and pro forma balance sheet).	0	1	2	3	4	0	1	2	3	4
15. Prepare capital budgets.	0	1	2	3	4	0	1	2	3	4
16. Use budget to establish cost control system.	0	1	2	3	4	0	1	2	3	4
17. Justify requests (using methods such as return on investment, time value of money, payback period, profitability index) for external or internal funding (i.e. capital budgets, research proposals).	0	1	2	3	4	0	1	2	3	4
18. Monitor variance reports (budget to actual) and design a plan for corrective action.	0	1	2	3	4	0	1	2	3	4
19. Determine food, labor, and operating costs per unit of service.	0	1	2	3	4	0	1	2	3	4
20. Develop and cost standardized recipes.	0	1	2	3	4	0	1	2	3	4

	Importance to Job						Adequacy of Preparation					
	not important	of little importance	some importance	important	very important		totally inadequate	inadequate	somewhat inadequate	adequate	very adequate	
21. Develop and modify menus in relation to cost.	0	1	2	3	4		0	1	2	3	4	
22. Price menu items in accordance with established pricing strategies.	0	1	2	3	4		0	1	2	3	4	
23. Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.	0	1	2	3	4		0	1	2	3	4	
24. Utilize precast and precontrol systems for forecasting.	0	1	2	3	4		0	1	2	3	4	
25. Write purchase specifications and orders.	0	1	2	3	4		0	1	2	3	4	
26. Supervise cafeteria cash activities and reporting.	0	1	2	3	4		0	1	2	3	4	
27. Monitor procedures for billing, cash handling, and handling of non-cash income.	0	1	2	3	4		0	1	2	3	4	
28. Analyze financial impact of operational decisions.	0	1	2	3	4		0	1	2	3	4	
29. Analyze cost/benefits of programs and courses of action.	0	1	2	3	4		0	1	2	3	4	
30. Develop financial ratios related to profits, investments, and assets.	0	1	2	3	4		0	1	2	3	4	
31. Assess financial status based on approved budget.	0	1	2	3	4		0	1	2	3	4	
32. Assess financial status based on profit and loss statement.	0	1	2	3	4		0	1	2	3	4	
33. Analyze cash flow.	0	1	2	3	4		0	1	2	3	4	
34. Make decisions based on the balance sheet and income statement.	0	1	2	3	4		0	1	2	3	4	
35. Identify sources of funds and solicit funds for new projects.	0	1	2	3	4		0	1	2	3	4	
36. Authorize expenditures.	0	1	2	3	4		0	1	2	3	4	
37. Establish financial objectives of department.	0	1	2	3	4		0	1	2	3	4	
38. Establish and implement fees for service.	0	1	2	3	4		0	1	2	3	4	
39. Develop plan for collection of fees and accounts.	0	1	2	3	4		0	1	2	3	4	
40. Calculate and use break-even analysis information.	0	1	2	3	4		0	1	2	3	4	
41. Determine cost effectiveness of make vs. buy decisions.	0	1	2	3	4		0	1	2	3	4	
42. Develop plans to generate revenue.	0	1	2	3	4		0	1	2	3	4	
43. Know process for internal/external audits.	0	1	2	3	4		0	1	2	3	4	
44. Calculate contribution margin.	0	1	2	3	4		0	1	2	3	4	
45. Determine labor hour requirements in relation to volume and budget per unit of service.	0	1	2	3	4		0	1	2	3	4	
46. Recommend wage and salary adjustments for employees.	0	1	2	3	4		0	1	2	3	4	
47. Determine appropriate use of part-time and over-time labor.	0	1	2	3	4		0	1	2	3	4	
48. Estimate personnel costs for a facility for budget and planning purposes.	0	1	2	3	4		0	1	2	3	4	
49. Know insurance, tax, and other personnel-related requirements.	0	1	2	3	4		0	1	2	3	4	
50. Calculate turnover and absenteeism costs.	0	1	2	3	4		0	1	2	3	4	

PLEASE CONTINUE TO THE NEXT PAGE

PART II. PROGRAM CHARACTERISTICS

INSTRUCTIONS: Please answer the following questions about your program so that we can analyze the results of this survey.

Q-1. Is your program a Dietetic Internship (DI) or an Approved Preprofessional Practice Program (AP4)? (Circle one)

- 1 Dietetic Internship
- 2 Approved Preprofessional Practice Program

Q-2. If your program is a Dietetic Internship, what is the emphasis? (Circle one)

- 1 General
- 2 Management
- 3 Clinical
- 4 Community

Q-3. What would you consider your area of specialization?

- 1 General
- 2 Management
- 3 Clinical
- 4 Community
- 5 Other, please specify _____

Q-4. Which of the following describes your role in the internship or AP4 program?

- 1 Program director
- 2 Foodservice management faculty
- 3 Nutrition faculty

Q-5. What textbooks are currently being used in your program which include financial management concepts? (Circle all that apply)

- 1 Foodservice Organizations: A Managerial and Systems Approach by Marian C. Spears and Allene G. Vaden
- 2 Foodservice in Institutions by Bessie B. West, et al.
- 3 Food Service Manual for Health Care Institutions by Ruby P. Puckett and Bonnie B. Miller
- 4 Others, please specify:

Q-6. What learning experiences/rotations are included in your program to teach financial management to students?

Q-7. Would you like a summary of the study results?

- 1 Yes
- 2 No

Appendix G

Cover Letters for Survey Instruments

THE UNIVERSITY OF TENNESSEE
KNOXVILLE

September 19, 1990



College of
Human Ecology

Nutrition and
Food Science

Dear Plan IV/V Director:

The profession of dietetics has moved into a new era as more emphasis is placed on cost containment in health care. As the costs of health care rise, dietitians will be called upon to provide high quality food and nutrition services within the constraints of limited financial resources. In light of these facts, we are determining the financial management competencies required of the entry-level dietitian by surveying hospital foodservice directors and dietetic educators. We believe findings from this study will be helpful in planning dietetic education curricula to meet students' needs.

Financial management competencies have been compiled from a review of literature and reviewed by an expert panel of hospital foodservice directors. We need your assistance in determining perceptions of the importance of these competencies to the entry-level dietitian and the extent to which your program prepares students in these competency areas. If you are not involved in teaching financial management to students, and feel that another faculty member could more easily respond to this questionnaire, please pass this letter and questionnaire on to the appropriate person.

Response to the questionnaire will only require about 15 minutes of your time. The questionnaire is coded only for follow-up purposes. All responses will be held confidential. A self-addressed postage-paid return envelope is enclosed for your convenience.

Your assistance in completing this questionnaire is greatly appreciated. If you would like a summary of the results, please check yes to question 7 on the last page of the questionnaire. Thank you for your help.

Sincerely,

Melinda Anderson
Melinda Anderson
Graduate Student

Jeannie Sneed
Jeannie Sneed, PhD, RD
Assistant Professor

enclosures: questionnaire
return envelope

THE UNIVERSITY OF TENNESSEE
KNOXVILLE

September 19, 1990



College of
Human Ecology

Nutrition and
Food Science

Dear Approved Preprofessional Practice Program Director:

The profession of dietetics has moved into a new era as more emphasis is placed on cost containment in health care. As the costs of health care rise, dietitians will be called upon to provide high quality food and nutrition services within the constraints of limited financial resources. In light of these facts, we are determining the financial management competencies required of the entry-level dietitian by surveying hospital foodservice directors and dietetic educators. We believe findings from this study will be helpful in planning dietetic education curricula to meet students' needs.

Financial management competencies have been compiled from a review of literature and reviewed by an expert panel of hospital foodservice directors. We need your assistance in determining perceptions of the importance of these competencies to the entry-level dietitian and the extent to which students are prepared in these competency areas when they begin your program. If you are not involved in teaching financial management to students, and feel that another faculty member could more easily respond to this questionnaire, please pass this letter and questionnaire on to the appropriate person.

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Your assistance in completing this questionnaire is greatly appreciated. If you would like a summary of the results, please check yes to question 7 on the last page of the questionnaire. Thank you for your help.

Sincerely,

Melinda Anderson

Melinda Anderson
Graduate Student

Jannie Sneed

Jannie Sneed, PhD, RD
Assistant Professor

enclosures: questionnaire
return envelope

THE UNIVERSITY OF TENNESSEE
KNOXVILLE

September 19, 1990



College of
Human Ecology

Nutrition and
Food Science

Dear Dietetic Internship Director:

The profession of dietetics has moved into a new era as more emphasis is placed on cost containment in health care. As the costs of health care rise, dietitians will be called upon to provide high quality food and nutrition services within the constraints of limited financial resources. In light of these facts, we are determining the financial management competencies required of the entry-level dietitian by surveying hospital foodservice directors and dietetic educators. We believe findings from this study will be helpful in planning dietetic education curricula to meet students' needs.

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Your assistance in completing this questionnaire is greatly appreciated. If you would like a summary of the results, please check yes to question 7 on the last page of the questionnaire. Thank you for your help.

Sincerely,

Melinda Anderson

Melinda Anderson
Graduate Student

Jannie Sneed

Jannie Sneed, PhD, RD
Assistant Professor

enclosures: questionnaire
return envelope

APPENDIX H

Frequency of Financial Management Competencies
Rated as Important and Very Important

Table H-1. Frequency of Financial Management Competencies for Entry-Level Dietitians Rated as Important and Very Important by Plan IV/V Educators (no.=94)

Competency	Frequency
23. Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.	90
19. Determine food, labor, and operating cost per unit of service.	89
20. Develop and cost standardized recipes.	89
21. Develop and modify menus in relation to cost.	88
22. Price menu items in accordance with established pricing strategies.	87
25. Write purchase specifications and orders.	86
11. Collect appropriate information for budget planning.	85
3. Know purpose of financial reports.	84
2. Define basic financial terms.	84
4. Know financial goals of the operation (profit, break even, subsidized).	83
41. Determine cost effectiveness of make vs. buy decisions.	80
12. Project units of service, cost, and revenue as basis for budgeting.	79
47. Determine appropriate use of part-time and over-time labor.	79
13. Justify budget requirements, including purchasing of new equipment and renovation.	77
24. Utilize precast and precontrol systems for forecasting.	75
5. Know basic accounting and financial management principles.	75
9. Use mission statement, goals, objectives, and plans in developing budgets.	74
45. Determine labor hour requirements in relation to volume and budget per unit of service.	74
16. Use budget to establish cost control system.	74
26. Supervise cafeteria cash activities and reporting.	74
48. Estimate personnel costs for a facility for budget and planning purposes.	72
29. Analyze cost/benefits of programs and courses of action.	70
50. Calculate turnover and absenteeism costs.	70

Table H-1 (Continued)

Competency	Frequency
31. Assess financial status based on approved budget.	69
7. Use computer to generate financial information, budgets, reports.	69
42. Develop plans to generate revenue.	69
18. Monitor variance reports (budget to actual) and design a plan for corrective action.	67
28. Analyze financial impact of operational decisions.	66
14. Prepare budgets (operating budget, cash budget, and pro forma balance sheet).	66
34. Make decisions based on the balance sheet and income statement.	65
32. Assess financial status based on profit and loss statement.	65
46. Recommend wage and salary adjustments for employees.	64
27. Monitor procedures for billing, cash handling, and handling of non-cash income.	61
37. Establish financial objectives of department.	60
38. Establish and implement fees for service.	60
40. Calculate and use break-even analysis information.	60
6. Know how to prepare financial reports.	58
36. Authorize expenditures.	57
17. Justify requests (using methods such as return on investment, time value of money, payback period, profitability index) for external or internal funding (i.e. Capital budgets, research proposals).	56
33. Analyze cash flow.	55
10. Know appropriate application of different budgeting systems.	53
49. Know insurance, tax, and other personnel-related requirements.	50
43. Know process for internal/external audits.	50
44. Calculate contribution margin.	49
1. Know reimbursement policies (such as DRGs, medicare, medicaid, private insurance).	47

Table H-1 (Continued)

Competency	Frequency
35. Identify sources of funds and solicit funds for new projects.	47
30. Develop financial ratios related to profits, investments, and assets.	43
39. Develop plan for collection of fees and accounts.	40
8. Know depreciation methods and their application.	37
15. Prepare capital budgets.	35

Table H-2. Frequency of Financial Management Competencies for Entry-Level Dietitians Rated as Important and Very Important by AP4 Educators (no.=36)

Competency	Frequency
19. Determine food, labor, and operating cost per unit of service.	34
21. Develop and modify menus in relation to cost.	33
23. Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.	33
3. Know purpose of financial reports.	32
20. Develop and cost standardized recipes.	32
28. Analyze financial impact of operational decisions.	32
29. Analyze cost/benefits of programs and courses of action.	31
2. Define basic financial terms.	30
22. Price menu items in accordance with established pricing strategies.	30
42. Develop plans to generate revenue.	30
12. Project units of service, cost, and revenue as basis for budgeting.	29
41. Determine cost effectiveness of make vs. buy decisions.	29
47. Determine appropriate use of part-time and over-time labor.	29
4. Know financial goals of the operation (profit, break even, subsidized).	28
11. Collect appropriate information for budget planning.	28
13. Justify budget requirements, including purchasing of new equipment and renovation.	28
25. Write purchase specifications and orders.	28
31. Assess financial status based on approved budget.	28
1. Know reimbursement policies (such as DRGs, medicare, medicaid, private insurance).	27
45. Determine labor hour requirements in relation to volume and budget per unit of service.	27
46. Recommend wage and salary adjustments for employees.	27
48. Estimate personnel costs for a facility for budget and planning purposes.	27
5. Know basic accounting and financial management principles.	26

Table H-2 (Continued)

Competency	Frequency
9. Use mission statement, goals, objectives, and plans in developing budgets.	26
18. Monitor variance reports (budget to actual) and design a plan for corrective action.	26
27. Monitor procedures for billing, cash handling, and handling of non-cash income.	25
50. Calculate turnover and absenteeism costs.	25
26. Supervise cafeteria cash activities and reporting.	24
32. Assess financial status based on profit and loss statement.	24
35. Identify sources of funds and solicit funds for new projects.	24
34. Make decisions based on the balance sheet and income statement.	24
43. Know process for internal/external audits.	24
33. Analyze cash flow.	23
38. Establish and implement fees for service.	23
16. Use budget to establish cost control system.	22
37. Establish financial objectives of department.	22
24. Utilize precast and precontrol systems for forecasting.	22
36. Authorize expenditures.	22
40. Calculate and use break-even analysis information.	21
7. Use computer to generate financial information, budgets, reports.	20
17. Justify requests (using methods such as return on investment, time value of money, payback period, profitability index) for external or internal funding (i.e. Capital budgets, research proposals).	19
39. Develop plan for collection of fees and accounts.	19
6. Know how to prepare financial reports.	18
14. Prepare budgets (operating budget, cash budget, and pro forma balance sheet).	18
30. Develop financial ratios related to profits, investments, and assets.	17

Table H-2 (Continued)

Competency	Frequency
10. Know appropriate application of different budgeting systems.	14
15. Prepare capital budgets.	14
49. Know insurance, tax, and other personnel-related requirements.	14
44. Calculate contribution margin.	14
8. Know depreciation methods and their application.	9

Table H-3. Frequency of Financial Management Competencies for Entry-Level Dietitians Rated as Important and Very Important by DI Educators (no.=61)

Competency	Frequency
21. Develop and modify menus in relation to cost.	56
22. Price menu items in accordance with established pricing strategies.	56
23. Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.	56
20. Develop and cost standardized recipes.	55
47. Determine appropriate use of part-time and over-time labor.	52
2. Define basic financial terms.	51
41. Determine cost effectiveness of make vs. buy decisions.	51
25. Write purchase specifications and orders.	50
11. Collect appropriate information for budget planning.	50
19. Determine food, labor, and operating cost per unit of service.	49
3. Know purpose of financial reports.	48
26. Supervise cafeteria cash activities and reporting.	48
29. Analyze cost/benefits of programs and courses of action.	48
5. Know basic accounting and financial management principles.	46
28. Analyze financial impact of operational decisions.	45
45. Determine labor hour requirements in relation to volume and budget per unit of service.	45
42. Develop plans to generate revenue.	44
4. Know financial goals of the operation (profit, break even, subsidized).	43
24. Utilize precast and precontrol systems for forecasting.	43
9. Use mission statement, goals, objectives, and plans in developing budgets.	42
13. Justify budget requirements, including purchasing of new equipment and renovation.	42
16. Use budget to establish cost control system.	41
31. Assess financial status based on approved budget.	41
38. Establish and implement fees for service.	41

Table H-3 (Continued)

Competency	Frequency
10. Monitor variance reports (budget to actual) and design a plan for corrective action.	41
1. Know reimbursement policies (such as DRGs, medicare, medicaid, private insurance).	40
12. Project units of service, cost, and revenue as basis for budgeting.	40
27. Monitor procedures for billing, cash handling, and handling of non-cash income.	40
50. Calculate turnover and absenteeism costs.	38
46. Recommend wage and salary adjustments for employees.	35
35. Identify sources of funds and solicit funds for new projects.	34
40. Calculate and use break-even analysis information.	34
48. Estimate personnel costs for a facility for budget and planning purposes.	34
33. Analyze cash flow.	33
34. Make decisions based on the balance sheet and income statement.	33
37. Establish financial objectives of department.	33
32. Assess financial status based on profit and loss statement.	33
7. Use computer to generate financial information, budgets, reports.	32
17. Justify requests (using methods such as return on investment, time value of money, payback period, profitability index) for external or internal funding (i.e. Capital budgets, research proposals).	32
43. Know process for internal/external audits.	31
6. Know how to prepare financial reports.	30
36. Authorize expenditures.	29
39. Develop plan for collection of fees and accounts.	29
10. Know appropriate application of different budgeting systems.	28
14. Prepare budgets (operating budget, cash budget, and pro forma balance sheet).	27

Table H-3 (Continued)

Competency	Frequency
49. Know insurance, tax, and other personnel-related requirements.	25
15. Prepare capital budgets.	22
44. Calculate contribution margin.	19
30. Develop financial ratios related to profits, investments, and assets.	10
8. Know depreciation methods and their application.	9

APPENDIX I

Frequency Distribution Tables for Respondents'

Perceived Importance Ratings for 50

Financial Management Competencies

Table I-1. Frequency Distribution of Plan IV/V Educator's Perceived Importance Ratings of Financial Management Competencies (no.=94)

Competency	Importance to Job				
	Not Imp.	Of Lit Imp.	Some Imp.	Impt Imp.	Very Imp.
1. Know reimbursement policies (such as DRGs, medicare, medicaid, private insurance).	1	6	40	30	17
2. Define basic financial terms.	0	0	10	43	41
3. Know purpose of financial reports.	0	1	9	34	50
4. Know financial goals of the operation (profit, break even, subsidized).	0	2	8	32	51
5. Know basic accounting and financial management principles.	0	2	16	37	38
6. Know how to prepare financial reports.	1	11	23	37	21
7. Use computer to generate financial information, budgets, reports.	2	4	18	42	27
8. Know depreciation methods and their application.	4	15	38	31	6
9. Use mission statement, goals, objectives, and plans in developing budgets.	0	2	14	44	31
10. Know appropriate application of different budgeting systems.	1	7	33	47	6
11. Collect appropriate information for budget planning.	0	0	8	49	36
12. Project units of service, cost, and revenue as basis for budgeting.	1	1	12	50	29
13. Justify budget requirements, including purchasing of new equipment and renovation.	1	4	11	41	36
14. Prepare budgets (operating budget, cash budget, and pro forma balance sheet).	2	7	18	48	18
15. Prepare capital budgets.	5	12	40	24	11
16. Use budget to establish cost control system.	1	3	15	42	32
17. Justify requests (using methods such as return on investment, time value of money, payback period, profitability index) for external or internal funding (i.e. Capital budgets, research proposals).	2	8	28	37	19
18. Monitor variance reports (budget to actual) and design a plan for corrective action.	1	2	23	32	35
19. Determine food, labor, and operating cost per unit of service.	0	0	5	28	61
20. Develop and cost standardized recipes.	0	0	5	30	59
21. Develop and modify menus in relation to cost.	0	0	5	41	47
22. Price menu items in accordance with established pricing strategies.	0	0	6	44	43

Table I-1 (Continued)

Competency	Importance to Job				
	Not Imp.	Of Lit Imp.	Some Imp.	Impt	Very Imp.
23. Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.	0	0	3	31	59
24. Utilize precast and precontrol systems for forecasting.	0	1	16	47	28
25. Write purchase specifications and orders.	0	2	6	46	40
26. Supervise cafeteria cash activities and reporting.	1	1	17	48	26
27. Monitor procedures for billing, cash handling, and handling of non-cash income.	3	3	26	41	20
28. Analyze financial impact of operational decisions.	1	6	21	37	29
29. Analyze cost/benefits of programs and courses of action.	1	2	21	44	26
30. Develop financial ratios related to profits, investments, and assets.	4	8	39	33	10
31. Assess financial status based on approved budget.	0	2	22	42	27
32. Assess financial status based on profit and loss statement.	0	3	25	38	27
33. Analyze cash flow.	2	6	30	36	19
34. Make decisions based on the balance sheet and income statement.	1	4	23	46	19
35. Identify sources of funds and solicit funds for new projects.	2	10	35	27	20
36. Authorize expenditures.	4	9	22	35	22
37. Establish financial objectives of department.	2	9	23	35	25
38. Establish and implement fees for service.	3	4	27	35	25
39. Develop plan for collection of fees and accounts.	6	16	32	29	11
40. Calculate and use break-even analysis information.	2	5	26	44	16
41. Determine cost effectiveness of make vs. buy decisions.	2	0	12	48	32
42. Develop plans to generate revenue.	2	4	19	35	34
43. Know process for internal/external audits.	3	5	36	31	19
44. Calculate contribution margin.	5	13	25	34	15
45. Determine labor hour requirements in relation to volume and budget per unit of service.	1	4	14	47	27

Table I-1 (Continued)

Competency	Importance to Job				
	Not Imp.	OffLit Imp.	Some Imp.	Impt Imp.	Very Imp.
46. Recommend wage and salary adjustments for employees.	3	5	22	38	26
47. Determine appropriate use of part-time and over-time labor.	0	6	8	49	30
48. Estimate personnel costs for a facility for budget and planning purposes.	2	4	16	45	27
49. Know insurance, tax, and other personnel-related requirements.	2	8	34	33	17
50. Calculate turnover and absenteeism costs.	1	3	20	46	24

Table I-2. Frequency Distribution of AP4 Educators' Perceived Importance Ratings of Financial Management Competencies (no.=36)

Competency	Importance to Job				
	Not Imp.	Of Lit Imp.	Some Imp.	Impt Imp.	Very Imp.
1. Know reimbursement policies (such as DRGs, medicare, medicaid, private insurance).	0	3	6	16	11
2. Define basic financial terms.	0	0	6	22	8
3. Know purpose of financial reports.	0	0	4	22	10
4. Know financial goals of the operation (profit, break even, subsidized).	0	1	7	10	18
5. Know basic accounting and financial management principles.	0	0	10	20	6
6. Know how to prepare financial reports.	0	4	14	13	5
7. Use computer to generate financial information, budgets, reports.	0	6	10	17	3
8. Know depreciation methods and their application.	1	10	16	9	0
9. Use mission statement, goals, objectives, and plans in developing budgets.	0	1	9	16	10
10. Know appropriate application of different budgeting systems.	1	3	17	12	2
11. Collect appropriate information for budget planning.	0	0	8	21	7
12. Project units of service, cost, and revenue as basis for budgeting.	0	1	6	22	7
13. Justify budget requirements, including purchasing of new equipment and renovation.	0	2	6	19	9
14. Prepare budgets (operating budget, cash budget, and pro forma balance sheet).	0	2	16	13	5
15. Prepare capital budgets.	1	7	13	13	1
16. Use budget to establish cost control system.	0	3	9	14	8
17. Justify requests (using methods such as return on investment, time value of money, payback period, profitability index) for external or internal funding (i.e. Capital budgets, research proposals).	0	5	11	12	7
18. Monitor variance reports (budget to actual) and design a plan for corrective action.	0	1	7	15	11
19. Determine food, labor, and operating cost per unit of service.	0	0	2	14	20
20. Develop and cost standardized recipes.	0	1	3	14	18
21. Develop and modify menus in relation to cost.	0	0	3	17	16
22. Price menu items in accordance with established pricing strategies.	0	1	4	15	15

Table I-2 (Continued)

Competency	Importance to Job				Very Imp.
	Not Imp.	Of Lit Imp.	Some Imp.	Imp.	
23. Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.	0	0	3	14	19
24. Utilize precast and precontrol systems for forecasting.	1	1	10	17	5
25. Write purchase specifications and orders.	0	1	6	16	12
26. Supervise cafeteria cash activities and reporting.	1	2	9	9	15
27. Monitor procedures for billing, cash handling, and handling of non-cash income.	1	1	9	16	9
28. Analyze financial impact of operational decisions.	0	0	4	17	15
29. Analyze cost/benefits of programs and courses of action.	0	0	5	15	16
30. Develop financial ratios related to profits, investments, and assets.	1	3	15	14	3
31. Assess financial status based on approved budget.	0	2	6	17	11
32. Assess financial status based on profit and loss statement.	0	2	10	15	9
33. Analyze cash flow.	0	4	9	17	6
34. Make decisions based on the balance sheet and income statement.	0	3	9	17	7
35. Identify sources of funds and solicit funds for new projects.	1	3	8	17	7
36. Authorize expenditures.	1	2	11	14	8
37. Establish financial objectives of department.	0	2	12	13	9
38. Establish and implement fees for service.	0	6	6	10	13
39. Develop plan for collection of fees and accounts.	2	7	8	11	8
40. Calculate and use break-even analysis information.	1	4	10	15	6
41. Determine cost effectiveness of make vs. buy decisions.	0	3	4	21	8
42. Develop plans to generate revenue.	0	0	6	20	10
43. Know process for internal/external audits.	0	3	9	16	8
44. Calculate contribution margin.	1	6	13	9	5
45. Determine labor hour requirements in relation to volume and budget per unit of service.	0	0	9	16	11

Table I-2 (Continued)

Competency	Importance to Job				
	Not Imp.	Of Lit Imp.	Some Imp. Imp.	Imp. Imp.	Very Imp.
46. Recommend wage and salary adjustments for employees.	0	2	7	17	10
47. Determine appropriate use of part-time and over-time labor.	0	0	7	18	11
48. Estimate personnel costs for a facility for budget and planning purposes.	0	2	7	15	12
49. Know insurance, tax, and other personnel-related requirements.	2	2	18	8	6
50. Calculate turnover and absenteeism costs.	0	1	10	19	6

Table I-3. Frequency Distribution of DI Educators' Perceived Importance Ratings of Financial Management Competencies (no.=61)

Competency	Importance to Job				
	Not Imp.	Of Lit Imp.	Some Imp.	Impt	Very Imp.
1. Know reimbursement policies (such as DRGs, medicare, medicaid, private insurance).	0	2	18	27	13
2. Define basic financial terms.	0	1	8	34	17
3. Know purpose of financial reports.	0	3	9	28	20
4. Know financial goals of the operation (profit, break even, subsidized).	0	2	15	23	20
5. Know basic accounting and financial management principles.	0	2	12	28	18
6. Know how to prepare financial reports.	1	10	19	22	8
7. Use computer to generate financial information, budgets, reports.	2	6	19	23	9
8. Know depreciation methods and their application.	6	15	30	8	1
9. Use mission statement, goals, objectives, and plans in developing budgets.	1	3	13	26	16
10. Know appropriate application of different budgeting systems.	2	8	21	25	3
11. Collect appropriate information for budget planning.	0	2	8	37	13
12. Project units of service, cost, and revenue as basis for budgeting.	0	3	16	28	12
13. Justify budget requirements, including purchasing of new equipment and renovation.	2	2	14	27	15
14. Prepare budgets (operating budget, cash budget, and pro forma balance sheet).	2	8	22	14	13
15. Prepare capital budgets.	3	10	25	16	6
16. Use budget to establish cost control system.	2	3	15	21	19
17. Justify requests (using methods such as return on investment, time value of money, payback period, profitability index) for external or internal funding (i.e. Capital budgets, research proposals).	4	6	17	22	10
18. Monitor variance reports (budget to actual) and design a plan for corrective action.	0	5	13	27	14
19. Determine food, labor, and operating cost per unit of service.	0	1	10	28	21
20. Develop and cost standardized recipes.	0	0	4	23	32
21. Develop and modify menus in relation to cost.	0	0	4	28	28

Table I-3 (Continued)

Competency	Importance to Job				
	Not Imp.	OffLit Imp.	Some Imp.	Imp	Very Imp.
22. Price menu items in accordance with established pricing strategies.	0	0	4	30	26
23. Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.	0	0	4	25	31
24. Utilize precast and precontrol systems for forecasting.	1	1	15	27	16
25. Write purchase specifications and orders.	1	1	8	28	22
26. Supervise cafeteria cash activities and reporting.	0	2	10	30	18
27. Monitor procedures for billing, cash handling, and handling of non-cash income.	0	6	14	26	14
28. Analyze financial impact of operational decisions.	0	4	11	28	17
29. Analyze cost/benefits of programs and courses of action.	0	4	7	23	25
30. Develop financial ratios related to profits, investments, and assets.	3	14	23	15	3
31. Assess financial status based on approved budget.	1	3	15	28	13
32. Assess financial status based on profit and loss statement.	1	3	23	22	11
33. Analyze cash flow.	2	8	17	24	9
34. Make decisions based on the balance sheet and income statement.	1	6	20	28	5
35. Identify sources of funds and solicit funds for new projects.	1	10	15	25	9
36. Authorize expenditures.	3	9	19	18	11
37. Establish financial objectives of department.	3	8	16	21	12
38. Establish and implement fees for service.	1	8	9	27	14
39. Develop plan for collection of fees and accounts.	3	12	16	20	9
40. Calculate and use break-even analysis information.	0	8	17	25	9
41. Determine cost effectiveness of make vs. buy decisions.	1	1	7	31	20
42. Develop plans to generate revenue.	0	5	11	25	19
43. Know process for internal/external audits.	2	9	18	21	10
44. Calculate contribution margin.	4	14	20	15	4

Table I-3 (Continued)

Competency	Importance to Job				
	Not Imp.	Of Lit Imp.	Some Imp.	Imp	Very Imp.
45. Determine labor hour requirements in relation to volume and budget per unit of service.	1	2	11	24	21
46. Recommend wage and salary adjustments for employees.	4	7	14	24	11
47. Determine appropriate use of part-time and over-time labor.	0	3	5	28	24
48. Estimate personnel costs for a facility for budget and planning purposes.	1	7	18	25	9
49. Know insurance, tax, and other personnel-related requirements.	2	16	17	19	6
50. Calculate turnover and absenteeism costs.	0	4	18	23	15

APPENDIX J

Frequency of Financial Management Competencies
Rated as Totally Inadequate and Inadequate

Table J-1. Frequency of Financial Management Competencies for Entry-Level Dietitians Rated as Totally Inadequate and Inadequate by Plan IV/V Educators

Competency	Frequency (no.=94)
39. Develop plan for collection of fees and accounts.	41
8. Know depreciation methods and their application.	37
44. Calculate contribution margin.	35
15. Prepare capital budgets.	34
43. Know process for internal/external audits.	33
35. Identify sources of funds and solicit funds for new projects.	32
17. Justify requests (using methods such as return on investment, time value of money, payback period, profitability index) for external or internal funding (i.e. Capital budgets, research proposals).	31
30. Develop financial ratios related to profits, investments, and assets.	29
38. Establish and implement fees for service.	29
49. Know insurance, tax, and other personnel-related requirements.	29
1. Know reimbursement policies (such as DRGs, medicare, medicaid, private insurance).	28
46. Recommend wage and salary adjustments for employees.	26
36. Authorize expenditures.	26
28. Analyze financial impact of operational decisions.	24
27. Monitor procedures for billing, cash handling, and handling of non-cash income.	21
7. Use computer to generate financial information, budgets, reports.	21
42. Develop plans to generate revenue.	20
33. Analyze cash flow.	20
10. Know appropriate application of different budgeting systems.	18
48. Estimate personnel costs for a facility for budget and planning purposes.	18
6. Know how to prepare financial reports.	17
14. Prepare budgets (operating budget, cash budget, and pro forma balance sheet).	17

Table J-1 (Continued)

Competency	Frequency
29. Analyze cost/benefits of programs and courses of action.	17
40. Calculate and use break-even analysis information.	17
18. Monitor variance reports (budget to actual) and design a plan for corrective action.	16
34. Make decisions based on the balance sheet and income statement.	16
47. Determine appropriate use of part-time and over-time labor.	16
24. Utilize precast and precontrol systems for forecasting.	15
37. Establish financial objectives of department.	14
32. Assess financial status based on profit and loss statement.	14
50. Calculate turnover and absenteeism costs.	14
31. Assess financial status based on approved budget.	13
16. Use budget to establish cost control system.	12
45. Determine labor hour requirements in relation to volume and budget per unit of service.	12
12. Project units of service, cost, and revenue as basis for budgeting.	10
26. Supervise cafeteria cash activities and reporting.	9
41. Determine cost effectiveness of make vs. buy decisions.	8
9. Use mission statement, goals, objectives, and plans in developing budgets.	8
13. Justify budget requirements, including purchasing of new equipment and renovation.	8
4. Know financial goals of the operation (profit, break even, subsidized).	5
5. Know basic accounting and financial management principles.	5
11. Collect appropriate information for budget planning.	5
3. Know purpose of financial reports.	4
2. Define basic financial terms.	3
25. Write purchase specifications and orders.	3
20. Develop and cost standardized recipes.	2
21. Develop and modify menus in relation to cost.	2

Table J-1 (Continued)

Competency	Frequency
23. Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.	2
19. Determine food, labor, and operating cost per unit of service.	1
22. Price menu items in accordance with established pricing strategies.	1

Table J-2. Frequency of Financial Management Competencies for Entry-Level Dietitians Rated as Totally Inadequate and Inadequate by AP4 Educators

Competency	Frequency (no.=36)
44. Calculate contribution margin.	20
1. Know reimbursement policies (such as DRGs, medicare, medicaid, private insurance).	19
8. Know depreciation methods and their application.	19
10. Know appropriate application of different budgeting systems.	17
39. Develop plan for collection of fees and accounts.	16
15. Prepare capital budgets.	15
30. Develop financial ratios related to profits, investments, and assets.	15
43. Know process for internal/external audits.	15
40. Calculate and use break-even analysis information.	14
6. Know how to prepare financial reports.	13
17. Justify requests (using methods such as return on investment, time value of money, payback period, profitability index) for external or internal funding (i.e. Capital budgets, research proposals).	13
18. Monitor variance reports (budget to actual) and design a plan for corrective action.	13
12. Project units of service, cost, and revenue as basis for budgeting.	12
16. Use budget to establish cost control system.	12
24. Utilize precast and precontrol systems for forecasting.	12
38. Establish and implement fees for service.	12
48. Estimate personnel costs for a facility for budget and planning purposes.	12
49. Know insurance, tax, and other personnel-related requirements.	12
50. Calculate turnover and absenteeism costs.	12
13. Justify budget requirements, including purchasing of new equipment and renovation.	11
14. Prepare budgets (operating budget, cash budget, and pro forma balance sheet).	11

Table J-2 (Continued)

Competency	Frequency
28. Analyze financial impact of operational decisions.	11
33. Analyze cash flow.	11
37. Establish financial objectives of department.	11
47. Determine appropriate use of part-time and over-time labor.	11
7. Use computer to generate financial information, budgets, reports.	10
9. Use mission statement, goals, objectives, and plans in developing budgets.	10
27. Monitor procedures for billing, cash handling, and handling of non-cash income.	10
29. Analyze cost/benefits of programs and courses of action.	10
31. Assess financial status based on approved budget.	10
34. Make decisions based on the balance sheet and income statement.	10
42. Develop plans to generate revenue.	10
46. Recommend wage and salary adjustments for employees.	10
11. Collect appropriate information for budget planning.	9
32. Assess financial status based on profit and loss statement.	9
41. Determine cost effectiveness of make vs. buy decisions.	9
45. Determine labor hour requirements in relation to volume and budget per unit of service.	9
19. Determine food, labor, and operating cost per unit of service.	8
35. Identify sources of funds and solicit funds for new projects.	8
36. Authorize expenditures.	8
26. Supervise cafeteria cash activities and reporting.	7
3. Know purpose of financial reports.	6
4. Know financial goals of the operation (profit, break even, subsidized).	5
2. Define basic financial terms.	3
5. Know basic accounting and financial management principles.	3

Table J-2 (Continued)

Competency	Frequency
20. Develop and cost standardized recipes.	3
21. Develop and modify menus in relation to cost.	3
22. Price menu items in accordance with established pricing strategies.	3
23. Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.	3
25. Write purchase specifications and orders.	3

Table J-3. Frequency of Financial Management Competencies for Entry-Level Dietitians Rated as Totally Inadequate and Inadequate by DI Educators

Competency	Frequency
	(no.=61)
44. Calculate contribution margin.	44
39. Develop plan for collection of fees and accounts.	40
49. Know insurance, tax, and other personnel-related requirements.	40
8. Know depreciation methods and their application.	38
30. Develop financial ratios related to profits, investments, and assets.	38
38. Establish and implement fees for service.	38
14. Prepare budgets (operating budget, cash budget, and pro forma balance sheet).	37
15. Prepare capital budgets.	37
43. Know process for internal/external audits.	37
1. Know reimbursement policies (such as DRGs, medicare, medicaid, private insurance).	36
17. Justify requests (using methods such as return on investment, time value of money, payback period, profitability index) for external or internal funding (i.e. Capital budgets, research proposals).	36
37. Establish financial objectives of department.	36
46. Recommend wage and salary adjustments for employees.	36
35. Identify sources of funds and solicit funds for new projects.	35
48. Estimate personnel costs for a facility for budget and planning purposes.	35
40. Calculate and use break-even analysis information.	32
6. Know how to prepare financial reports.	31
33. Analyze cash flow.	31
50. Calculate turnover and absenteeism costs.	31
10. Know appropriate application of different budgeting systems.	30
34. Make decisions based on the balance sheet and income statement.	30

Table J-3 (Continued)

Competency	Frequency
45. Determine labor hour requirements in relation to volume and budget per unit of service.	30
47. Determine appropriate use of part-time and over-time labor.	30
9. Use mission statement, goals, objectives, and plans in developing budgets.	28
36. Authorize expenditures.	28
16. Use budget to establish cost control system.	27
18. Monitor variance reports (budget to actual) and design a plan for corrective action.	27
29. Analyze cost/benefits of programs and courses of action.	27
12. Project units of service, cost, and revenue as basis for budgeting.	26
7. Use computer to generate financial information, budgets, reports.	25
13. Justify budget requirements, including purchasing of new equipment and renovation.	25
31. Assess financial status based on approved budget.	25
32. Assess financial status based on profit and loss statement.	25
27. Monitor procedures for billing, cash handling, and handling of non-cash income.	24
28. Analyze financial impact of operational decisions.	24
42. Develop plans to generate revenue.	24
4. Know financial goals of the operation (profit, break even, subsidized).	23
11. Collect appropriate information for budget planning.	22
19. Determine food, labor, and operating cost per unit of service.	21
24. Utilize precost and precontrol systems for forecasting.	21
26. Supervise cafeteria cash activities and reporting.	20
3. Know purpose of financial reports.	19
41. Determine cost effectiveness of make vs. buy decisions.	18
5. Know basic accounting and financial management principles.	16
2. Define basic financial terms.	13

Table J-3 (Continued)

Competency	Frequency
22. Price menu items in accordance with established pricing strategies.	11
21. Develop and modify menus in relation to cost.	7
23. Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.	7
25. Write purchase specifications and orders.	7
20. Develop and cost standardized recipes.	6

APPENDIX K

Frequency Distribution Tables for Respondents'
Perceptions of Students' Adequacy of Preparation
in Financial Management Competencies

Table K-1. Frequency Distribution of Plan IV/V Educators' Perception Ratings Regarding Students' Preparation in Financial Management Competencies (no.=94)

Competency	<u>Adequacy of Preparation</u>				
	Tot.	Some		Very	
	Inad.	Inad.	Inad.	Adq.	Adq.
1. Know reimbursement policies (such as DRGs, medicare, medicaid, private insurance).	11	17	39	25	0
2. Define basic financial terms. .	1	2	15	60	15
3. Know purpose of financial reports.	3	1	12	60	17
4. Know financial goals of the operation (profit, break even, subsidized).	2	3	15	53	17
5. Know basic accounting and financial management principles.	1	4	25	47	14
6. Know how to prepare financial reports.	4	13	30	39	6
7. Use computer to generate financial information, budgets, reports.	6	15	41	25	5
8. Know depreciation methods and their application.	14	23	35	16	2
9. Use mission statement, goals, objectives, and plans in developing budgets.	1	7	31	36	14
10. Know appropriate application of different budgeting systems.	2	16	37	33	5
11. Collect appropriate information for budget planning.	1	4	28	50	10
12. Project units of service, cost, and revenue as basis for budgeting.	0	10	31	42	8
13. Justify budget requirements, including purchasing of new equipment and renovation.	2	6	35	39	9
14. Prepare budgets (operating budget, cash budget, and pro forma balance sheet).	5	12	32	38	3
15. Prepare capital budgets.	11	23	28	27	1
16. Use budget to establish cost control system.	1	11	29	46	4
17. Justify requests (using methods such as return on investment, time value of money, payback period, profitability index) for external or internal funding (i.e. Capital budgets, research proposals).	9	21	30	26	5
18. Monitor variance reports (budget to actual) and design a plan for corrective action.	5	11	28	41	6
19. Determine food, labor, and operating cost per unit of service.	0	1	16	45	31
20. Develop and cost standardized recipes.	1	1	5	33	53
21. Develop and modify menus in relation to cost.	0	2	11	54	26

Table K-1 (Continued)

Competency	<u>Adequacy of Preparation</u>				
	Tot. Inad.	Inad.	Some Inad.	Adq.	Very Adq.
22. Price menu items in accordance with established pricing strategies.	1	0	15	55	22
23. Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.	0	2	5	45	41
24. Utilize precost and precontrol systems for forecasting.	1	14	32	33	12
25. Write purchase specifications and orders.	0	3	10	50	30
26. Supervise cafeteria cash activities and reporting.	2	7	36	38	8
27. Monitor procedures for billing, cash handling, and handling of non-cash income.	3	18	39	26	5
28. Analyze financial impact of operational decisions.	5	19	32	30	4
29. Analyze cost/benefits of programs and courses of action.	3	14	33	37	4
30. Develop financial ratios related to profits, investments, and assets.	11	18	35	24	3
31. Assess financial status based on approved budget.	3	10	34	38	6
32. Assess financial status based on profit and loss statement.	3	11	31	37	9
33. Analyze cash flow.	3	17	36	29	6
34. Make decisions based on the balance sheet and income statement.	2	14	34	37	3
35. Identify sources of funds and solicit funds for new projects.	9	23	36	22	2
36. Authorize expenditures.	8	18	26	31	5
37. Establish financial objectives of department.	3	11	32	39	7
38. Establish and implement fees for service.	6	23	35	25	2
39. Develop plan for collection of fees and accounts.	13	28	33	17	1
40. Calculate and use break-even analysis information.	5	12	28	38	8
41. Determine cost effectiveness of make vs. buy decisions.	4	4	14	51	20
42. Develop plans to generate revenue.	8	12	29	33	9
43. Know process for internal/external audits.	12	21	32	24	3
44. Calculate contribution margin.	15	20	28	23	4
45. Determine labor hour requirements in relation to volume and budget per unit of service.	2	10	34	38	8

Table K-1 (Continued)

Competency	<u>Adequacy of Preparation</u>				
	Tot.	Some		Very	
	Inad.	Inad.	Inad.	Adq.	Adq.
46. Recommend wage and salary adjustments for employees.	7	19	27	33	6
47. Determine appropriate use of part-time and over-time labor.	3	13	32	36	6
48. Estimate personnel costs for a facility for budget and planning purposes.	7	11	30	39	5
49. Know insurance, tax, and other personnel-related requirements.	9	20	41	19	3
50. Calculate turnover and absenteeism costs.	4	10	33	37	7

Table K-2. Frequency Distribution of AP4 Educators' Perception Ratings
Regarding Students' Preparation in Financial Management Competencies (no.=36)

Competency	<u>Adequacy of Preparation</u>				
	Tot. Inad.	Some Inad.	Some Inad.	Very Adq.	Very Adq.
1. Know reimbursement policies (such as DRGs, medicare, medicaid, private insurance).	5	14	9	6	1
2. Define basic financial terms.	0	3	17	14	1
3. Know purpose of financial reports.	0	6	16	11	2
4. Know financial goals of the operation (profit, break even, subsidized).	1	4	13	12	5
5. Know basic accounting and financial management principles.	2	1	18	12	1
6. Know how to prepare financial reports.	3	10	14	8	0
7. Use computer to generate financial information, budgets, reports.	3	7	19	5	1
8. Know depreciation methods and their application.	5	14	9	7	0
9. Use mission statement, goals, objectives, and plans in developing budgets.	2	8	13	9	2
10. Know appropriate application of different budgeting systems.	4	13	9	9	0
11. Collect appropriate information for budget planning.	2	7	14	9	2
12. Project units of service, cost, and revenue as basis for budgeting.	1	11	11	10	2
13. Justify budget requirements, including purchasing of new equipment and renovation.	3	8	12	11	1
14. Prepare budgets (operating budget, cash budget, and pro forma balance sheet).	4	7	14	8	1
15. Prepare capital budgets.	7	8	13	5	1
16. Use budget to establish cost control system.	7	5	15	3	2
17. Justify requests (using methods such as return on investment, time value of money, payback period, profitability index) for external or internal funding (i.e. Capital budgets, research proposals).	8	5	13	8	0
18. Monitor variance reports (budget to actual) and design a plan for corrective action.	6	7	10	9	1
19. Determine food, labor, and operating cost per unit of service.	2	6	9	13	5
20. Develop and cost standardized recipes.	0	3	6	17	9
21. Develop and modify menus in relation to cost.	0	3	13	15	4
22. Price menu items in accordance with established pricing strategies.	0	3	11	15	5

Table K-2 (Continued)

Competency	<u>Adequacy of Preparation</u>				
	Tot. Inad.	Some Inad.	Some Inad.	Very Adq.	Very Adq.
23. Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.	0	3	11	18	3
24. Utilize precast and precontrol systems for forecasting.	2	10	15	6	0
25. Write purchase specifications and orders.	0	3	13	14	4
26. Supervise cafeteria cash activities and reporting.	2	5	15	10	3
27. Monitor procedures for billing, cash handling, and handling of non-cash income.	3	7	14	10	1
28. Analyze financial impact of operational decisions.	3	8	12	10	2
29. Analyze cost/benefits of programs and courses of action.	6	4	14	9	2
30. Develop financial ratios related to profits, investments, and assets.	6	9	15	5	0
31. Assess financial status based on approved budget.	3	7	13	11	1
32. Assess financial status based on profit and loss statement.	2	7	14	10	2
33. Analyze cash flow.	5	6	13	11	0
34. Make decisions based on the balance sheet and income statement.	3	7	13	11	1
35. Identify sources of funds and solicit funds for new projects.	4	4	19	8	0
36. Authorize expenditures.	1	7	15	9	3
37. Establish financial objectives of department.	1	10	13	9	2
38. Establish and implement fees for service.	2	10	12	8	2
39. Develop plan for collection of fees and accounts.	1	15	10	8	1
40. Calculate and use break-even analysis information.	6	8	11	10	0
41. Determine cost effectiveness of make vs. buy decisions.	3	6	13	10	3
42. Develop plans to generate revenue.	2	8	17	7	1
43. Know process for internal/external audits.	5	10	14	5	1
44. Calculate contribution margin.	6	14	11	2	1

Table K-2 (Continued)

Competency	<u>Adequacy of Preparation</u>				
	Tot. Inad.	Some Inad.		Very Adq.	Adq.
45. Determine labor hour requirements in relation to volume and budget per unit of service.	5	4	16	8	2
46. Recommend wage and salary adjustments for employees.	4	6	14	10	0
47. Determine appropriate use of part-time and over-time labor.	4	7	14	8	1
48. Estimate personnel costs for a facility for budget and planning purposes.	4	8	11	9	2
49. Know insurance, tax, and other personnel-related requirements.	6	6	17	5	1
50. Calculate turnover and absenteeism costs.	3	9	14	7	1

Table K-3. Frequency Distribution of DI Educators' Perception Ratings
Regarding Students' Preparation in Financial Management Competencies (no.=61)

Competency	Adequacy of Preparation				
	Tot. Inad.	Inad.	Some Inad.	Adq.	Very Adq.
1. Know reimbursement policies (such as DRGs, medicare, medicaid, private insurance).	13	23	15	5	1
2. Define basic financial terms.	3	10	29	14	1
3. Know purpose of financial reports.	4	15	22	15	1
4. Know financial goals of the operation (profit, break even, subsidized).	4	19	20	12	2
5. Know basic accounting and financial management principles.	3	13	25	14	1
6. Know how to prepare financial reports.	9	22	18	6	1
7. Use computer to generate financial information, budgets, reports.	13	12	26	5	1
8. Know depreciation methods and their application.	15	23	15	4	0
9. Use mission statement, goals, objectives, and plans in developing budgets.	10	18	19	9	1
10. Know appropriate application of different budgeting systems.	9	21	20	7	0
11. Collect appropriate information for budget planning.	5	17	21	13	1
12. Project units of service, cost, and revenue as basis for budgeting.	10	16	19	9	2
13. Justify budget requirements, including purchasing of new equipment and renovation.	7	18	19	11	2
14. Prepare budgets (operating budget, cash budget, and pro forma balance sheet).	13	19	18	6	1
15. Prepare capital budgets.	13	24	14	6	0
16. Use budget to establish cost control system.	10	17	20	7	2
17. Justify requests (using methods such as return on investment, time value of money, payback period, profitability index) for external or internal funding (i.e. Capital budgets, research proposals).	15	21	16	3	2
18. Monitor variance reports (budget to actual) and design a plan for corrective action.	13	14	20	8	1
19. Determine food, labor, and operating cost per unit of service.	4	17	18	13	5
20. Develop and cost standardized recipes.	1	5	15	27	9
21. Develop and modify menus in relation to cost.	0	7	24	18	8
22. Price menu items in accordance with established pricing strategies.	1	10	23	15	8

Table K-3 (Continued)

Competency	<u>Adequacy of Preparation</u>				
	Tot. Inad.	Some Inad.	Some Inad.	Very Adq.	Very Adq.
23. Maintain cost control through monitoring receiving, storage, inventory, and sanitation procedures.	1	6	14	26	10
24. Utilize precast and precontrol systems for forecasting.	4	17	21	13	1
25. Write purchase specifications and orders.	2	5	17	29	4
26. Supervise cafeteria cash activities and reporting.	7	13	14	18	5
27. Monitor procedures for billing, cash handling, and handling of non-cash income.	8	16	17	14	2
28. Analyze financial impact of operational decisions.	7	17	23	10	0
29. Analyze cost/benefits of programs and courses of action.	7	20	17	10	2
30. Develop financial ratios related to profits, investments, and assets.	15	23	13	3	1
31. Assess financial status based on approved budget.	8	17	18	11	2
32. Assess financial status based on profit and loss statement.	10	15	21	10	1
33. Analyze cash flow.	11	20	15	10	1
34. Make decisions based on the balance sheet and income statement.	8	22	18	9	0
35. Identify sources of funds and solicit funds for new projects.	11	24	16	6	0
36. Authorize expenditures.	10	18	20	8	1
37. Establish financial objectives of department.	14	22	11	9	1
38. Establish and implement fees for service.	13	25	9	9	1
39. Develop plan for collection of fees and accounts.	10	30	9	8	0
40. Calculate and use break-even analysis information.	12	20	18	5	2
41. Determine cost effectiveness of make vs. buy decisions.	5	13	21	15	3
42. Develop plans to generate revenue.	8	16	20	11	2
43. Know process for internal/external audits.	17	20	12	7	1
44. Calculate contribution margin.	20	24	5	6	0
45. Determine labor hour requirements in relation to volume and budget per unit of service.	12	18	15	10	2

Table K-3 (Continued)

Competency	<u>Adequacy of Preparation</u>				
	Tot. Inad.	Some Inad.		Very Adq.	Adq.
46. Recommend wage and salary adjustments for employees.	11	26	11	7	1
47. Determine appropriate use of part-time and over-time labor.	8	21	13	14	1
48. Estimate personnel costs for a facility for budget and planning purposes.	9	26	12	10	0
49. Know insurance, tax, and other personnel-related requirements.	16	24	11	6	0
50. Calculate turnover and absenteeism costs.	10	21	12	12	1

APPENDIX L

Frequency Table of Learning Experiences of
AP4/DI Students

Table L-1. Frequency of Learning Experiences/Rotations Listed by AP4 and DI Educators That Allow Students to Learn Financial Management Concepts (no.=97)

Item	Frequency Listed
<u>Experiences</u>	
costing recipes	12
cost menus	11
food service purchasing -specs	8
identify labor, food, supply costs	8
procurement and inventory rotation	7
costing	7
types of financial reports	6
budgeting workshop	6
review of monthly budget variance reports	5
production rotation	4
write specs for food/equipment	3
financial management case study	3
complete QA audits	3
prepare budget	3
production of theme meal	2
break-even	2
analysis of cost/benefits	2
analyze profit-loss statements	2
budget evaluation/controls	2
cost study	2
forecast using a mathematical model	2
work with DRG evaluator at hospital	2
yield studies	2
food production with director of small hospital	1
food production with director of large state facility	1
how to identify financial status of units (food prod., cafeteria, patient services)	1
food distribution unit	1
2 weeks in purchasing with financial planning	1
can cutting-evaluate price	1
formal/informal bid process	1
work with purchasing agent	1
contribution margin	1
determine PFEs	1
menu planning	1
experiences with performance budgets	1
equipment study	1

Table L-1 (Continued)

Item	Frequency Listed
end-of-month report	1
cost-containment study	1
reimbursement	1
for-profit Fun Run to raise money for	
internship-interns must manage finances	1
no financial management taught	1
observe data collection process	1
financial management seminar	1
review accounting practices	1
finance unit	1
marketing workshop	1
analyze labor schedules	1
pricing seminar	1
computer spread sheets	1
observe forecasting procedures	1
quantity foods lab	1
computer applications	1
<u>Rotations</u>	
management rotation	20
administrative rotation with Department	
head	11
budgeting with foodservice director	11
cafeteria management	11
hospital patient foodservice	5
retail rotation	2
consulting rotation	1
progressive field experience with	
community agencies	1
food management rotation and staff	
experience-11 weeks	1
emphasize financial management in all	
aspects of program	1
financial analysis of foodservice	
department	1
federal nutrition research and foodservice	
facility rotation involves budgeting	1
clinical management rotation	1
profit-oriented food service management	1
human resource management	1
long-term care facility foodservice	
experience	1
systems rotation	1
catering	1

Table L-1 (Continued)

Item	Frequency Listed
<u>Courses</u>	
financial management class	11
budget preparation	7
advanced food systems management course	2
DRGs	2
administrative policies	1
operations management (inc. financial management)	1
4 hours fiscal management in class	1
lecture on reimbursement policies	1
clinical management course	1
cost-containment	1
health care finance	1
assigned readings on financial management	1
needs assessment and evaluation	1

VITA

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