LEVEL OF IMPORTANCE AND INSTRUCTIONAL/ COGNITIVE LEVEL OF SELECT APPAREL MERCHANDISING CURRICULUM CONCEPTS

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TABLE OF CONTENTS

Chapter Page

Chapter Page

LIST OF TABLES

Table Page

LIST OF FIGURES

CHAPTER I

INTRODUCTION

During the past three decades, the higher education system of the United States has expanded notably. Between 1954 and 1983, the number of institutions of higher education increased by fifty percent, and the student enrollment more than tripled (Resnick, 1987). At the end of this period of expansion, student enrollments were holding steady or even declining at some institutions. Colleges and universities were also faced with problems of sustaining quality programs, securing adequate financing and maintaining public confidence.

Educational accountability and productivity have become key issues and concerns in terms of the future impact of higher education upon society. During the 1980s, assessment arrived as a driving force in the arena of higher education. This was due in part to a number of issues and concerns facing American higher education and the call for fundamental changes within the educational community. A number of studies and reports have illuminated concerns for the future of higher education and called for educational reform.

Probably the most publicized call for reform was the report by the National Commission on Excellence in Education entitled "A Nation at Risk: The Imperative for Educational Reform" (A Nation at Risk, 1983). One of the recommendations in the report was for colleges and universities to adopt more rigorous and measurable standards and higher expectations for academic performance and student conduct.

The current national interest in assessment of the outcomes of higher education is generally for the purpose of providing evidence of the quality of educational programs rather than determining the level of individual student attainment (Banta & Schneider, 1988). However, comparatively few campuses have undertaken a hard look at what and how they teach as well as how students learn (Grossman, 1988). In today's competitive higher education environment, educational institutions with proof of student learning have a solid foundation to ensure future stability (McClain, 1987).

Many higher education assessment programs examine the outcomes of a student's general education through the use of professionally developed commercially available standardized assessment examinations. Some institutions are also utilizing nationally developed or institutionally developed tests to assess knowledge, skills and competencies within the student's major field of study. This trend is referred to as "curriculum-embedded

assessment," and it has become a viable option for many institutions/departments (Ewell, 1991, p. 104).

Examinations developed for specialized knowledge areas are on the rise as educational departments increasingly concern themselves with identifying and improving the impact of their program upon students. Instruments constructed with domains carefully matched to local curricular coverage have proven to be powerful mechanisms for overall curricula review and improvement (Boyer, 1989; Farmer, 1988). A recent study of 364 colleges and universities indicated that the majority of institutions (66%) relied primarily on locally-developed instruments for assessing student learning (El-Khawas, 1990).

Each institution engaged in an assessment program must develop a program of multiple measures that is unique to the institution. Student learning and development is a complex, multifaceted phenomenon which may be resistant to single-factor explanations (Ewell, 1988; Pascarella, 1985). Even though assessment can take a number of different forms within higher education institutions, the use of testing as one alternative assessment mode has been on the rise in recent years (Hutchings & Marchese, 1990).

Within higher education today, a movement toward increased narrowing and fragmentation is also occurring within much of the undergraduate curriculum. As a result, many undergraduate programs prepare their students for a future career and are considered career-oriented programs.

In recent years, two-thirds of all baccalaureate degrees have been awarded in career-oriented curricula (Elman and Lynton, 1986).

Although career-oriented educational programs are often criticized for becoming too vocationally oriented, colleges and universities must still address the question of assessment within these specialized subject matter areas. The level of student outcomes/competencies must continually be assessed in career-oriented programs to determine the approach and content necessary to provide students with an adequate background relevant to our modern ever-changing society. Therefore, assessment is often perceived as a potential tool which may be used to shape the future directions of higher education.

Statement Of The Problem

Within home economics, the push toward increased specialization in higher education began in the 1950s after almost fifty years of general programs within the undergraduate curriculum (Horn, 1988). Even within the textiles and clothing subject matter area, the curriculum has become more narrowed and fragmented. As a result, an increasingly larger number of students in textiles and clothing have chosen an undergraduate major in apparel merchandising (fashion merchandising, apparel marketing, apparel retailing, etc.). According to Green (1989), if the growth in this subject-matter area continues according

to straight-line projections, forty-one percent of all home economics majors in the next decade will major in clothing, textiles and related arts, with the greatest preponderance of those in apparel merchandising.

With this increased student emphasis in the apparel merchandising subject-matter area, continual research is needed which addresses curriculum content in undergraduate apparel merchandising programs within colleges and universities across the United States. The current study was based on the following research question: Are undergraduate apparel merchandising programs at colleges and universities integrating relevant educational concepts into the apparel merchandising curriculum to enable students to function adequately within an ever-changing global society?

To address this fundamental research question, it becomes necessary to identify what student concepts/ competencies are currently being integrated into the apparel merchandising curriculum. Another consideration is at what cognitive level those concepts are being taught within the curriculum. In addition, the study will provide the basis for the development of a table of specifications. The table of specifications may ultimately be used by institutions to determine how outcomes can be measured and assessed through time to provide a lever of change for the undergraduate apparel merchandising curriculum across the country.

Purpose Of The Study

The purpose of the study was to identify the level of importance and instructional/cognitive level of select apparel merchandising curriculum concepts as a beginning step in assessment. The development of a comprehensive table of specifications utilizing undergraduate apparel merchandising curriculum concepts could assist educators in developing institutionally appropriate summative assessment instruments for apparel merchandising majors.

Phase I of the study focused on the competencies of students majoring in apparel merchandising as identified in a review of relevant literature in the field. The concepts identified were delineated to facilitate in the development of a survey instrument. A census of the active ACPTC (Association of College Professors of Textiles and Clothing) membership evaluated the concepts to determine both the level of importance and desired instructional/ cognitive level of each concept within the undergraduate curriculum.

In phase II, the concepts/competencies were aggregated in order to develop a comprehensive table of specifications for apparel merchandising undergraduate majors. The table of specifications will provide a mechanism for institutions to develop valid and reliable assessment instruments for the field of apparel merchandising. Institutionally developed assessment instruments may provide a means of judging how well a learner has developed the expected

competencies in apparel merchandising programs in universities and colleges across the country (a measure of the efficacy of the undergraduate instruction) and determining whether all aspects of the discipline that ought to be offered are offered (audit the content).

To date, no definitive studies appear to exist which examine apparel merchandising concepts in relation to the level of importance and the desired instructional/cognitive level within higher education. In addition, in a continuing era of accountability, the table of specifications developed may provide a direct link for institutions to begin to assess the outcomes of their apparel merchandising curriculum.

Research Questions

Due to the evaluative nature of the study, the following research questions were identified to guide the inquiry process:

1. What educational concepts are considered important to include in an undergraduate apparel merchandising curriculum as identified by textiles and clothing educators?

2. At what instructional/cognitive level are the educational concepts currently being taught within the undergraduate apparel merchandising curriculum?

3. Do educators in two-year and four-year educational institutions consider the same concepts important for apparel merchandising majors?

4. Do educators in two-year and four-year educational institutions evaluate the instructional/cognitive level of select apparel merchandising curriculum concepts within the same cognitive category based on Bloom's (1956) taxonomy?

5. Does the importance rating and instructional/ cognitive level of these concepts within a four-year educational institution vary depending upon the size of the apparel merchandising program as indicated by the number of faculty teaching in the area and the number of graduates each year?

6. Do educators who have merchandising experience outside of academe rate the importance and instructional/ cognitive level of concepts differently?

7. Do other factors such as a respondent's age, academic rank, and years of experience affect the level of importance and instructional/cognitive level of select apparel merchandising curriculum concepts?

Assumptions

The following assumptions provided a foundation upon which the study was based:

1. Apparel retailers, graduates and college faculty within the apparel merchandising subject-matter area surveyed by other researchers have provided relevant up-to-

date information concerning student competencies/outcomes or current curriculum elements.

2. Information/data collected from the literature will provide a thorough framework from which the undergraduate apparel merchandising competencies may be delineated into a survey instrument.

3. The Association of College Professors of Textiles and Clothing active membership will serve as an acceptable frame in which to study the survey population (faculty members in the clothing, textiles and apparel merchandising subject-matter areas at 2-year and 4-year institutions).

4. Full-time faculty members within the survey population will have a more direct and consistent impact on curriculum decisions than part-time faculty.

5. College/university faculty will have a basic understanding of Bloom's Taxonomy of Educational Objectives - Cognitive Domain.

6. College/university faculty will provide accurate feedback as to the cognitive level and level of importance of each undergraduate apparel merchandising curriculum concept identified on the survey instrument.

Limitations

The study was limited in the following ways:

1. Select undergraduate apparel merchandising curriculum concepts were identified from relevant literature in the field and might not be all inclusive. In

addition, due to individual variations/definitions in terminology, some subjective interpretations of concepts may be necessary.

2. The concepts/competencies will reflect broad mastery level concepts for undergraduate apparel merchandising majors which may not necessarily reflect individual institutional deviations or variations in the curriculum.

3. The level of importance and cognitive level of apparel merchandising curriculum concepts within the undergraduate curriculum will be evaluated by a census of active ACPTC members and will not reflect the opinions of faculty members who do not belong to the Association of College Professors of Textiles and Clothing (missing elements in the population).

4. Those ACPTC members willing to participate in the study may have varying levels of knowledge concerning the basis for Bloom's Taxonomy of Educational Objectives and its implications for an educational setting.

5. The evaluation will be undertaken at a single point in time and will reflect the opinions/beliefs of educators at that given point. Educational programs are rarely if ever static; therefore, the opinions/beliefs of educators in the study are subject to change over time.

Definitions

The following are the definitions of terms as used in this study:

Assessment: procedures that are used to determine the extent to which individual students have met the curriculum goals, mastered the prescribed subject-matter, and acquired the skills necessary for the student to be recognized as an educated person (Chandler, 1986).

Association of College Professors of Textiles and Clothing: a non-profit educational and scientific association to further scholarly development in the textiles and clothing field. Active membership includes those individuals with bachelors or advanced degrees from accredited colleges and universities with a specialization in textiles and clothing or a related discipline who are currently in resident instruction, administration, research, or serve as a state extension specialist at an accredited college or university. In 1991, the name of the organization was changed to International Textile and Apparel Association (ITAA).

Cognitive Domain: educational outcomes that emphasize the attainment, retention, and development of knowledge and intellect. The acquisition of subject-matter, whether it is very simple or complex in nature, is primarily a cognitive function (Sax, 1989, p. 79).

Evaluation: determination of the worth or quality of an educational phenomena (program, product, procedure or objective) through a systematic formal appraisal.

Merchandising: the analysis and response to the varied changes (transformations) and processes (advances) which occur in the planning, negotiating, acquisition and selling of numerous products/services from their inception to their reception and use by the ultimate consumer (Kean, 1987).

Student Outcomes/Competencies: any change or consequence occurring as a result of enrollment in a particular educational institution and involvement in its program (Ewell, 1983).

Summative Assessment: assessments made at the end of a learning activity which provide feedback as to the sum of learning that has taken place (King, 1979).

Taxonomy of Educational Objectives - Cognitive Domain: a hierarchical classification of the cognitive domain in relation to our educational system which focuses on the recall or recognition of knowledge and the development of intellectual abilities and skills (Bloom, 1956).

Undergraduate Apparel Merchandising Curriculum: an organized set of formal educational objectives relating to the primary, secondary and retail level of the apparel

industry that leads to a baccalaureate degree within the college or university setting (may also be referred to as fashion merchandising or apparel marketing).

Overview Of The Study

Presentation of the study will follow the article format criteria developed by the Design, Housing and Merchandising faculty at Oklahoma State University. The second chapter of the document will provide a complete overview of the literature relevant to the development of the study by focusing on educational evaluation and clothing and textiles literature. Chapter three will present in detail the procedures and methodology utilized within the study.

The following three chapters will provide the reader with an overview of various components of the research in manuscript form. Chapter four will focus on the first two research questions related to the identification of the level of importance and instructional/cognitive level of select apparel merchandising curriculum concepts. The development of a table of specifications relevant to educators with an assessment orientation is also presented in chapter four. Chapter five will examine differences among personnel and institutional dimensions with respect to the level of importance of apparel merchandising curriculum concepts. Chapter six will present data concerning the instructional/cognitive level of select

apparel merchandising curriculum concepts based on numerous demographic variables. Finally, the last chapter (followed by appendices) will concentrate on a brief summary of the major points of the investigation as well as provide recommendations for further research in the area.

CHAPTER II

REVIEW OF LITERATURE

A survey of the literature pertinent to the development of the study was conducted. The review was divided into five broad content areas: (1) educational evaluation - assessment through the major, (2) educational competencies and objectives, (3) higher education curriculum, (4) clothing and textiles curriculum within higher education with an emphasis on apparel merchandising and (5) summative assessment instrument development. A brief review of instrument (test) development literature has been included to provide a final link for the development of assessment instruments relevant to apparel merchandising programs.

Educational Evaluation - Assessment Through the Major

The history of formal evaluations is much longer than is generally recognized by most people. As early as 2000 B.C., Chinese officials were conducting civil service examinations and Greek teachers used evaluations as part of the learning process for students (Worthen & Sanders, 1973). Within the educational setting in the United

States, the first evidence of program evaluation is recorded in Joseph Rice's 1897-1898 comparative study of the spelling performance of over 33,000 students in a large school system (Worthen & Sanders, 1973).

Since the early 1900s, individuals were advocating that educators measure human change, and this was the beginning of large scale testing programs (personality and interest) in the United States. In addition, the accreditation movement (which had its beginnings in the late 1800s) encouraged the establishment of accreditating agencies, and the need for evaluative procedures began to permeate the educational system. From 1930 to 1945, Ralph W. Tyler (often described as the father of educational evaluation) had enormous influence on education because of his innovative views on both curriculum and evaluation (Madaus, Scriven & Stufflebeam, 1983).

Current Components of Educational Inquiry

In recent years, evaluation has become just one component within the overall spectrum of educational inquiry. In addition to evaluation, other inquiry activities include research, development and diffusion (Worthen & Sanders, 1973). Evaluative inquiry relies on a theory of valuation in addition to the specific models which analyze the relationships among variables (Cooley & Lohnes, 1976).

Although evaluation and research have come from two different origins (research in science, evaluation in technology) and the mission of each is different (research - theory building, evaluation - product delivery or mission accomplishment) there is one common component in that both produce knowledge, whether it is general or specific, that was not previously available (Isaac & Michael, 1981; Worthen & Sanders, 1973).

Evaluation has sometimes been considered a form of applied research since it focuses on only one curriculum, one program or one lesson and it is not generalizable to providing knowledge relevant to all situations or learning experiences. Evaluation then is focused primarily on collecting specific information relevant to a specific problem, program or product (Worthen & Sanders, 1973).

Evaluation is very complex and may be defined as "the determination of the worth of a thing. It includes obtaining information for use in judging the worth of a program, product, procedure, objective or the potential utility of alternative approaches designed to obtain specified objectives" (Worthen & Sanders, 1973, p. 19). Cooley and Lohnes (1976) indicated that the primary task of the evaluator is to conduct research which generates information about the validity of propositions relating to educational means and ends.

Worthen and Sanders (1973; 1987), and Wolf (1990) have listed several characteristics of inquiry which distinguish

evaluation from research. Although the ten characteristics are rather simplified and general in focus, they do provide insight into the role of evaluation within higher education.

1. Motivation of the Inquirer - research and evaluation appear to be undertaken for slightly different reasons. Research is pursued to satisfy curiosity because the researcher is intrigued, whereas, the evaluator is concerned and seeks solutions to a practical problem.
2. Objective of the Search - research seeks conclusions and evaluation leads to decisions.
3. Laws vs. Descriptions - research is the quest for laws which are basically statements about the relationships of two or more variables. Basically, research involves nomothetic activities and evaluation involves idiographic activities. Evaluation seeks to describe a particular thing with respect to one or more scales of value.
4. Role of Explanation - scientific law requires a scientific explanation. Within evaluation, a study may be conducted without producing an explanation of why the product or program being evaluated is good or bad.
5. Autonomy of the Inquiry - science is described as an independent and autonomous enterprise whereby

the researchers set out their own problems. Evaluation activities are often undertaken at the request of the client; therefore, researchers and evaluators enjoy differing degrees of autonomy.

6. Properties of the Phenomena Which are Assessed - educational evaluation is an attempt to assess the worth or value of a thing and research is undertaken in an attempt to assess scientific truth.

7. Salience of the Value Question - according to theory, a value can be placed on the outcome of an inquiry, and all inquiry is directed toward the discovery of something worthwhile and useful. In assessing the value of things, the difference between research and evaluation is one of degree, not of kind.

8. Investigative Techniques - while there may be legitimate differences between research and evaluation methods, both work within the same inquiry paradigm and they both include skill development in general educational research methodology.

9. Criteria for Judging the Activity - the two most important criteria for judging the adequacy of research are internal and external validity. The two most important criteria for judging evaluation would be isomorphism (the extent to

which information obtained is isomorphic with the reality-based information desired) and credibility (the extent to which the information is viewed as believable by clients who need the information).

10. Disciplinary Base - research may be tackled from a multi-disciplinary base; however, it is doubtful that educational evaluators can attack their particular area of interest simultaneously from several different disciplinary bases.

When comparing the educational evaluator with the researcher, one may begin to identify some differences between the two (focus of the inquiry, generalizability of inquiry results, and salience of the value question). In addition, one may see the similarities in that they both engage in disciplined inquiry, use measurement devices and analyze their data systematically, often with the same analytic techniques (Popham, 1988).

Theoretical Foundations of Educational Evaluation

Throughout its history as a method of disciplined inquiry, educational evaluation has been conceptualized a number of different ways depending upon the theoretical foundations utilized by the evaluators. A critical review of the possible approaches to evaluation allows evaluators

to operationalize and advance various conceptual frameworks. In the past, major evaluation perspectives were developed around a method orientation (Chen, 1990). Thirteen types of evaluation approaches were identified in the literature and classified according to the underlying foundations of the framework. Of those identified, two pertain to the political approach, five to the questions-oriented approach and six to the values oriented approach (Stufflebeam & Webster, 1983).

The questions-oriented studies are so labeled because they start with a particular question and then utilize an appropriate methodology to answer the proposed question. Questions-oriented studies may be further subdivided into those that focus on objective-based studies, accountability studies, experimental research studies, testing programs and management information systems (Stufflebeam & Webster, 1983).

Ralph Tyler is generally viewed as the pioneer of the questions-oriented studies and this approach to educational evaluation is the most prevalent framework utilized by evaluators. The objectives are formulated according to an analysis of three sources (the student, society, and subject matter) and two-goal screens (a psychology of learning and a philosophy of education) (Popham, 1988). The general purpose of the objectives based study is to determine if the objectives have been achieved by the student. Generally, the objectives based type of study has

been the most prevalent type used in educational evaluation (Stufflebeam & Webster, 1983).

The accountability studies have a more recent history since they became prominent in the early 1970s as a result of widespread disenchantment with the educational system. The purpose of the accountability study is to provide constituents (taxpayers, governing boards, funding agencies, parents, employers) with an accurate accounting of results and to ensure that those results are positive (Stufflebeam & Webster, 1983). The methods that have been used for accountability purposes include mandated testing programs and performance contracting.

Evaluation - Assessment

Within higher education today, accountability is often equated with assessment. Although there is no general consensus on the definition of assessment, it is often used interchangably with testing, evaluation, measurement or documentation. Others view assessment narrowly as being tied specifically to student learning, knowledge, skills and outcomes. In addition, there is little consensus about how evaluation and assessment interrelate. Today, one may find three stances in the literature related to this situation: that evaluation is a subset of assessment, that assessment is a subset of evaluation, and that evaluation and assessment are converging (Davis, 1989).

Assessment is derived from a Latin word meaning "to sit beside" or "assist in the office of judge" (Hartle, 1986). Institutions of higher education are implementing assessment measures often due to external demands on the institution. The mechanisms utilized by institutions for implementation have included both departmental/program assessments as well as institutional-wide assessment initiatives at the undergraduate level. Some individuals believe that assessment within the department or major has many advantages over an institution-wide assessment of undergraduate education.

Proponents of assessment have identified several positive attributes of assessment in higher education. Overall, Grossman (1988) and Mingle (1986) have concluded that assessment has at least three constructive outcomes. First, assessment encourages faculties to develop common program objectives to function more effectively within a new level of accountability and competitiveness around the country. Second, assessment provides educational institutions with a "lever of change" and a tool for curriculum reform within departments. Finally, there is a philosophy that students appear to be learning more at institutions where assessment systems are in place.

From institution to institution and from academic program to academic program, the process of assessment may vary. Even though there are differences among assessment models, three major categories or typologies have emerged

(Halpren, 1987). The typologies include the functions of program improvement, gatekeeping and budget/accountability. Most assessment programs that have been implemented tend to be blends of all of these typologies (Halpren, 1987).

Ewell (1991) has taken the typologies identified by Halpren (1987) and has expanded them in the development of a more complete taxonomy or classification system. The first taxonomic dimension is basic purpose which ultimately distinguishes formative and summative evaluation designs. A second dimension is based on the primary unit of analysis (individual or group level), and a final dimension focuses on the domain of assessment (knowledge, skills, attitudes, or values). Methodologically, the dimensions require profoundly different approaches to measurement. For example, to provide a demonstrative purpose the overall requirement is for instruments and techniques that can determine whether or not a given performance standard has been fully achieved (Ewell, 1991. p. 85). On the other hand, information based improvement demands a very different kind of assessment.

Assessment in higher education may be viewed as an issue of accountability. If educators are to be held accountable for student performance, the desired performance must be clearly stated and adequately measured. Tests and other forms of measurement are an intrinsic part of a properly conceived accountability system (Anderson, Ball, Murphy & Associates, 1977). Testing sounds very

straight forward, and it is when students are quite young. However, as those individuals progress to higher levels of cognitive understanding in college, assessment is not as straight forward. At a high level of cognitive operations, there is a high ceiling to student performance; therefore, the test constructor/examiner has to be above the student's ceiling level to challenge the cognitive skill level of the student (Jordan, 1989).

As part of the assessment mode, many institutions have been asked to provide outside constituents with information concerning educational outcomes. According to Ewell (1984, p. 13), all institutions should be held accountable (1) for clearly stating what kinds of outcomes they are trying to produce, (2) for explicitly assessing the degree to which they are attaining these outcomes, and (3) for making appropriate changes to improve the situation where the data warrant.

Purposes of Assessment in Higher Education

Within higher education, the first issue that must be determined within the design and execution phase is the purpose of assessment. Applebaum (1988, p. 120) identified three general purposes for which assessment is conducted:

1. Audit the Content of the Curriculum - to ensure that all aspects of the discipline that ought to be offered are offered, and a suitable proportion

of students who graduate in that discipline have been exposed to that content.

2. Provide Some Measure of the Efficacy of the Undergraduate Unit - an evaluation at this level is concerned not only with what is being taught, but also how well it is taught, retained, and internalized by the typical or representative student in that discipline.
3. Certification of the Individual Student - measure the degree to which each student in the major has mastered the objectives of the curriculum and to provide a quantitative or qualitative index of the level or degree of mastery.

The purpose of the assessment, as identified by Applebaum (1988), must be examined when developing an assessment program for the curriculum within the major. When examining a baccalaureate program or curriculum, it becomes essential to identify the interrelated stages of program development. If curriculum is to change or be altered due to assessment measures, program planners must be aware of the ramifications of change within program development. Dressel (1961, p. 9) developed a schema which demonstrates the various stages of program development. The schema includes selection and clarification of objectives, selection and planning of educational experiences, organization of experiences and evaluation. The model has been included in Appendix A.

Educational Competencies and Objectives

One of the most long-standing principles in creating curricula for educational programs is that planners must first decide upon the outcomes being sought by the educational experience. In a recent article, Rogers and Gentemann (1989) indicated that the first step toward the development of assessment procedures is to define expected outcomes. However, in a study of 167 higher education institutions only 44% of the responding institutions indicated that educational outcomes had been identified at their institutions (Rogers & Gentemann, 1989).

It is not uncommon for objectives/competencies to be developed from a broad educational perspective or more focused toward a specific program/major. Dressel (1968) identified seven competencies which are considered as basic outcomes of any college or educational program. These competencies are:

1. The recipient of any baccalaureate degree should be qualified for some type of work.
2. The student should know how to acquire knowledge and how to use it effectively.
3. The student should have a high mastery of the skills of communication.
4. The student should be aware of his own values and he should be aware that other individuals and cultures hold contrasting values.

5. The college graduates should be able to cooperate and collaborate with others.
6. The graduates should have the awareness, concern, and sense of responsibility for contemporary events, issues and problems.
7. The graduate should see his total college experience as coherent, cumulative and unified by the development of broad competencies and by the realization that the competencies are relevant to further development (Dressel, 1968, p. 210).

Similarly, other institutions have developed common outcomes/goals for all undergraduate students. Recently, the State University of New York-Albany developed eleven goals within two domains at a university-wide level. These outcomes/goals include eight goals for student development and three for societal development.

Student Development:

1. To develop skills of critical thinking and reasoning.
2. To develop and foster the process of intellectual discovery and explanation of the unknown.
3. To develop an awareness and interest in the breadth of human intellectual achievement and cultural experience.
4. To facilitate emotional development and clarification of personal values.

5. To facilitate social development and effectiveness in interpersonal relationships.
6. To facilitate physical development, health and well-being.
7. To prepare students for personally satisfying careers.
8. To maintain a campus environment which will foster a sense of community and social responsibility.

Societal Development:

1. To contribute to the general advancement of knowledge and to the solution of societal problems.
2. To offer opportunities for life-long learning as an integral part of institutional activities.
3. To contribute to the development of the local area through the provision of cultural and clinical services which reinforce educational mission (Jordan, 1989, p. 40).

These rather broad competencies of a baccalaureate program set the stage for each academic unit to develop more specific and appropriate objectives within their subject-matter areas. Specific objectives are then determined for each course in the curriculum, and often educators order and classify objectives through the use of a taxonomy that can be empirically verified (Anderson, Ball, Murphy & Associates, 1977).

Educational objectives can be described as being

process or product, behavioral or implicit, immediate or ultimate, and restrictive or inclusive (Sax, 1974). Objectives therefore provide direction, motivation, organization or unity to the learning experiences for the students (Dressel, 1963). An objective indicates a desired outcome of education.

Taxonomies of the Cognitive Domain

Bloom's Taxonomy of Educational Objectives (1956) provides a mechanism which may be utilized to classify and describe educational outcomes. The cognitive domain deals with solving intellectual tasks, from simple recall of facts to original ways of combining, synthesizing and evaluating new ideas and materials. There are six main categories of objectives in the taxonomy for the cognitive domain (knowledge, comprehension, application, analysis, synthesis, and evaluation). The organizing principle for the cognitive domain centers around the issue of complexity, such that each category in the taxonomy is assumed to involve behavior more complex and abstract than the previous category. A condensed version of the taxonomy may be found in Appendix B.

The taxonomy as developed by Bloom (1956) allows nearly all cognitive objectives to be classified; thus the content validity of the taxonomy is considered adequate. However, there has been some discussion in the literature related to the hierarchical structure of Bloom's taxonomy.

In a pure hierarchy, there must be a direct link between adjacent levels and only between these two levels (De Landsheere, 1990).

Hill (1984) employed maximum likelihood estimation procedures and provided evidence to support the hierarchical structure between the hierarchical categories. Using a quantitative causal model, Madaus, Woods and Nuttal (1973) examined the strength of the direct links between preceding adjacent levels and found that knowledge, comprehension and application are well-hierarchized. However, the researchers found that as one moves higher up in the hierarchy, a branching takes place. On one side is analysis and on the other side is synthesis and evaluation.

Miller, Snowman and O'Hara (1979) took the work of Madaus, Woods and Nuttal (1973) one step further by using a number of analytic methods as a means of gaining a clearer conception of the causal relationships within the taxonomy. By using commonality analysis, stepwise regression and factor analysis the researchers found that all the techniques rejected a simple hierarchical interpretation in terms of the relationships among the six levels. Once again, the analysis suggested a branched model where the node of the branch was at application with analysis skills developing independently of synthesis and evaluation.

Other taxonomies of cognitive/mental processes can also be identified in the literature such as Guilford's Structure of Intellect Model, The Gagne-Merrill Taxonomy,

Gerlach and Sullivan's Taxonomy or DeBlock's Taxonomy (De Landsheere, 1990). Each of the taxonomies can be critically examined to determine deficiencies relative to the cognitive domain.

Within the literature, the taxonomy developed by Bloom (1956) was found to be the most prevalent among educators. Bloom's taxonomy is frequently used by evaluators since it provides a framework from which educational objectives and outcomes may be identified and ultimately tested. As a means, the taxonomy includes activities and procedures which are designed to maintain or improve the quality of instruction and learning. As an end, improved thought, whether it be critical, reflective, creative or productive, is undoubtedly the most frequently expressed single objective for higher education (Dressel, 1961). Therefore, evaluation was chosen as the culminating category in the hierarchical ordering of cognitive objectives.

Higher Education Curriculum

Over the past four decades, institutions have become larger, more specialized and more public (Ewell, 1984). Today in higher education, we see a narrowing and fragmentation of curriculum as majors become more career-oriented and competency-based. Practitioners must be prepared to deal with new and varied job requirements that have been created in most occupations because of the rapid

change and the complexity of our modern society (Elman & Lynton, 1986).

From institution to institution, most curriculum design models will have some elements in common, regardless of the subject matter considered or the level at which the curriculum operates (Rudd, 1981). Those elements which are considered commonalties include goals and objectives regarding outcomes, selection and organization of subject matter content, learning and teaching experiences related to content and evaluation of intended outcomes (Taba, 1962).

Clothing and Textiles Curriculum Within Higher Education

In the 1960s, Home Economics in Business was one of the new directions identified for inclusion within undergraduate higher education curriculum (Greenwood, 1981). Quickly fashion merchandising and interior design options began to emerge due to increased student interest and demand. This interest was due in part to the overall movement in higher education toward more career-oriented education.

Throughout the developmental years for apparel merchandising programs within higher education, individuals have relied heavily on curriculum development models and have utilized Bloom's Taxonomy of Educational Objectives to understand and organize the levels of objectives and

outcomes within undergraduate programs. Today, the clothing and textiles option (including apparel merchandising) has grown in higher education and is frequently the largest degree granting program in home economics units.

For graduates, the opportunities in the apparel industry are numerous and varied for those students who are appropriately trained and well qualified. The apparel merchandising curriculum offered and the cognitive level at which those concepts are taught at higher education institutions has a fundamental effect on the outcomes/ competencies of students. Greenwood (1981) indicated that the curriculum requirements for apparel merchandising programs should focus on a base in clothing and textiles with supplementary components in marketing, finance, management and other business areas.

Evaluation of Apparel Merchandising Programs

In recent years, a number of research studies have been conducted which have investigated undergraduate apparel merchandising programs with respect to curriculum content or competencies/outcomes. Many of these studies have taken a broad all-encompassing approach in relation to apparel merchandising curriculum. The main thrust of this line of research has been a continual evaluation of undergraduate apparel merchandising programs.

Concern in recent years has increased within the merchandising area as to who should be the arbiter(s) of curriculum content (Fair, Hamilton, & Norum, 1990). The debate has been centered around allowing a particular client group (possibly with a short-term goal orientation) to garner tremendous power in directing the long-term educational goals within the apparel merchandising area. Because of this concern, researchers over the years have examined a number of groups to ascertain feedback directed toward overall curriculum development. The primary groups (survey populations) utilized in previous studies include graduates, employers and/or educators.

Strain (1970) conducted a survey relative to courses of value and competencies needed by home economists working in business. The participants in the study (retailing executives and home economists in business) identified seven business-oriented courses which were viewed as fundamental and would provide the competencies needed to qualify individuals for positions within merchandising.

Evans (1973) conducted a similar study of graduates which evaluated the clothing and textiles curriculum at Ohio State University with recommendations for curriculum development. The courses mentioned most frequently as being relevant by graduates in their professional field were clothing and textiles courses, retailing and marketing. Those courses found to be more relevant in their personal use than in their professions were

tailoring, flat pattern design and history of costume.

An evaluation of the fashion merchandising program at Florida State University was conducted by Cole (1974). She found that graduates, retailers and faculty viewed basic textiles courses, fashion merchandising courses, business and marketing courses as being very valuable.

Hartman (1979) conducted a study which had as its main goal the development of an instrument for fashion merchandising instructors to use to evaluate students' readiness for employment. A questionnaire was developed based on the competencies needed by students when completing a practicum or field work experience. She recommended that fashion merchandising curriculum development place more emphasis on the competencies which employers consider the most important.

In a study completed at Texas Women's University, Neal (1981) followed up on the recommendation made by Hartman (1979) and examined the needs of employers in relation to apparel merchandising graduates. Neal (1981) identified 100 colleges and universities which offered baccalaureate degrees in fashion merchandising and compiled information from the catalogs of the institutions regarding course titles.

The survey populations for the Neal (1981) study were a group of managers (personnel, department, store) and graduates of an undergraduate program. Each group responded to the list of 39 course titles. The managers

identified 14 courses as being essential or valuable including: communications skills, basic math, basic textiles, fashion merchandising, visual merchandising, merchandising accessories, internship, principles of selling, principles of marketing, management principles, promotion strategy, principles of retailing, business communications and personnel management.

Also in the Neal (1981) study, those courses that were identified by at least seventy percent of the graduates as essential included: communication skills, basic textiles, fashion merchandising, internship, principles of retailing, principles of selling, and principles of marketing. Neal (1981) observed slight differences between the evaluations of the two groups for the 39 courses examined.

Mariotz (1980) also examined the apparel merchandising curriculum from a cooperative education orientation. She wanted to assess retail executives' perceptions in relation to cooperative education competencies necessary for employment. Students were also included in the study to determine the level of exposure the students had to each of the activities identified in the study.

An instrument was developed listing 29 activities and was sent to individuals in both populations. The three activities which received the highest ranking by retailers were: demonstrate leadership qualities, arouse interest in merchandise, and determine customer wants. The activities the students indicated they had the greatest exposure to in

developing competencies for mid-management positions included: meeting customers graciously and presenting a good appearance, arousing interest in merchandise and motivating customers to buy, determining customer wants, and developing effective selling techniques.

At Iowa State University, Berry (1980) examined mid-management and entry level fashion merchandising competencies. The objectives for the study were to identify the competencies perceived as important by business persons and educators in department and specialty stores at two levels (mid-management and entry level). Respondents were asked to rate the level of importance of 51 competencies on a scale from one to eleven for each employment level. Factor analysis was conducted on the data. Berry (1980) found that the competencies needed by entry level and mid-management were different (four factors were derived for entry level competencies whereas eight were identified as mid-management competencies). The eight factors identified at mid-management included: working relations with customers, budgeting/profitable pricing, theories and technical aspects of textiles and clothing, external influences on store planning/operation, development/control of merchandise assortment plans, determination of merchandise desired by customers, development/adjustment of store plans, and understanding of the fashion and retail industry. In addition, she found

that educators and business personnel agreed on the importance of competencies to a considerable extent.

Chambers (1986) in Alabama examined the desirable competencies needed by fashion merchandising students by using retailers and educators as the survey populations of interest. A total of 235 questionnaires were sent out to both groups. The competencies were developed around six areas which included: sales promotion, basic skills, social skills, management and administration, buying/pricing and selling skills. The researcher found there were significant differences between the two populations in three areas: sales promotion, basic skills and buying/pricing. The educators for the most part rated the competencies higher than the retailers.

In a recent study, Garner and Buckley (1988) examined the occupational field of fashion merchandising by identifying the content of clothing and textiles curricula and determining which elements of that content were perceived as important to job performance. Graduates, employers and educators were surveyed to determine if there was consensus among the three audiences on the perceived importance or need for current course offerings within fashion merchandising programs. The researchers indicated that those curriculum elements which rated over 3.5 on a 4.0 point Level of Importance scale must receive the highest priority in curriculum planning in the fashion merchandising field. The nine items identified as

receiving the highest priority were inventory management, merchandise buying methods, price-quality relationships in apparel, salesmanship, consumer behavior, self-presentation in business, management, marketing and speech communications.

Evaluation of Specific Courses/Subject-Matter Areas

While many of the preceding studies were follow-up studies of graduates to identify courses that were in use, or of employers to determine the courses needed in curriculum, few focused on the identification of specific competencies within a course. Several studies have been conducted which focus on the apparel construction component within the undergraduate curriculum.

Miller (1974) conducted a study at Oklahoma State University to identify or define the competencies that should be included in a beginning clothing construction course at the college level. Miller identified 54 specific competencies which she separated into eight categories for inclusion into the beginning clothing construction course.

In a study by Marshall (1987), the researcher wanted to determine if there is a sequence for presenting objectives in the area of clothing construction which would facilitate the acquisition of new learning and thus increase knowledge and skills. An instrument was developed that included 159 objectives related to clothing

construction. Two hundred seventy members of the Association of College Professors of Textiles and Clothing returned the questionnaire. Factor analysis was performed on the data using the Varimax method of rotation. Seven factors were identified (cognitive skills in basic construction, mass production of apparel, evaluation and decision making in garment construction and fitting, apparel design and patternmaking, tailoring, evaluation of garments and psychomotor skills in basic construction) and the findings indicated that educators could utilize the hierarchy of objectives as a guide for planning instructional sequences.

Other studies have focused on the textiles subject-matter area within the apparel merchandising major. At Florida State University, Hawkins (1976) investigated the need for a textiles course related specifically to fashion merchandising majors. A questionnaire was used to measure the graduates' evaluation of the current fashion merchandising curriculum and the need for a fashion merchandising textiles course. A need for a textiles course related specifically to fashion merchandising majors was identified by 90 percent of the respondents and it was recommended that it be a required course for majors.

Recently, in a study conducted by Fair, Hamilton and Norum (1990) the researchers examined textile knowledge for merchandising professionals with a broader focus aimed toward the pedagogical mission of the textiles and clothing

curriculum. A survey research methodology was utilized by the researchers and a total of 273 questionnaires were sent out to recent textiles and clothing graduates within a single institution. Fifty-four of the questionnaires were returned for analysis.

In the study, graduates were asked to rate both security with and level of importance of 21 categories of textiles knowledge. The graduates were also asked to report the degree to which they were expected by employers and colleagues to have specific textile knowledge as a result of their undergraduate education. In addition, graduates were asked to what extent they believed more competency with textile information would improve their organizational performance.

The results of the Fair, Hamilton and Norum (1990) study indicated that respondents (graduates) were secure with basic knowledge in relation to the types and properties of fibers, fabric construction, end uses, common fabric names, finishes and general care of textiles. Respondents also indicated that colleagues and employers expected them to have above average knowledge of textiles due to their undergraduate major. A large percentage of the respondents also felt that increased textile knowledge would increase productivity/competency in the workplace.

In addition to the textiles subject-matter area, other researchers have examined relevant areas for emphasis within apparel merchandising programs. Rogers and Lutz

(1990) conducted a study of apparel retail buyers in relation to evaluating garment quality and they made recommendations for the apparel merchandising curriculum. The researchers concluded that apparel merchandising programs must prepare students to be more knowledgeable concerning apparel quality. In addition, the students should be prepared to identify garments that are likely to meet consumer expectations.

In a similar study, Stone and Cassill (1989) indicated that judging the saleability of merchandise is critical in successful retail buying. The researchers concluded that educators should use the results of this study and emphasize the differences in saleability judgements based on merchandise category (women's and men's) within the curriculum.

Other recent studies have focused on the area of technology within the curriculum. Several researchers (Sheldon & Regan, 1990; Collier & Collier, 1990) have indicated that institutions increasingly need to integrate computer-aided-design competencies within higher education fashion merchandising curriculum since many retailers are finding that CAD facilitates business efficiency. Retailers, like apparel manufacturers, are understanding that CAD capabilities allow them to change designs quickly, therefore, generating a number of design options not only to garment design, but also to visual merchandising and store planning.

This review of clothing and textiles studies provides an overview in terms of the developments in curricula throughout the United States over the past few years. Information/data of this type provide a framework on which an apparel merchandising summative assessment instrument may be constructed. Although several researchers have identified specific competencies or curriculum elements for apparel merchandising graduates and have recommended that competencies be assessed, no research to date has formulated the competencies into a suitable table of specifications and ultimately into summative assessment instruments for use in undergraduate apparel merchandising programs.

Movement Toward Assessment in the Apparel Merchandising Curriculum

Movement toward the development of assessment instruments for undergraduate education in apparel merchandising has been evident for a number of years. In 1986, Chambers (1986) recommended that the findings from her study be used to develop competency examinations for the various areas within the apparel merchandising curriculum. Also Garner (1985) recommended that further study be done to identify the levels of competence which may be needed in the apparel merchandising content area.

As we move toward the 21st century, institutions are increasingly being called upon to substantiate what they

are teaching and what students are learning. Byrd (1990) indicated that institutions will be increasingly concerned with assessing the outcomes and effectiveness of educational programs. Student testing is just one component within higher education assessment; however, it has received the greatest amount of attention in recent years.

In state after state, assessment is being mandated and institutions are finding that they must implement assessment measures. The University of Tennessee-Knoxville has been in the forefront of the assessment movement in the United States. At the university eleven departmental faculties developed comprehensive examinations upon a core of common courses or objectives they felt all students should master within the various majors (Banta & Schneider, 1988). In a general sense, three units within the College of Human Ecology (Nutrition, Nutrition and Food Science and Textiles and Clothing) employed Bloom's Taxonomy of Educational Objectives to classify each item on the examination. The units wanted to include items from each cognitive level.

The exercise at the University of Tennessee-Knoxville is only one example of the assessment movement in the United States. Increasingly institutions/departments are being called upon to validate student learning, and testing is being utilized in a great number of cases.

Table of Specifications Development

A starting point for determining the content of summative assessment instruments would be an explicit statement of objectives by the instructional program faculty (Applebaum, 1988). Objectives may be conveniently categorized as cognitive, affective and psychomotor (Sax, 1989). The categorizing of behaviors into these three categories does not imply that each is independent of the other. However, the primary purpose of many assessment instruments within higher education is to assess the cognitive development of students.

Once the objectives have been identified, the specific learning outcomes to be measured by a particular test should be determined. Particular items included in an assessment instrument would require the building of a table of specifications through the utilization of a content representativeness study. The table of specifications would provide information to test users and test constructors about the test objectives, the domain being measured and the characteristics of the items on the test (Sax, 1989, p. 83).

The basic idea underlying the table of specifications is the formation of a grid that has as its columns the specified objectives of the instructional program and as its rows the items under consideration (Applebaum, 1988). The two-way chart relates outcomes to content and identifies the relative weight to be given to each of the

various areas (Gronlund, 1982).

The actual construction of the specification table is a crucial step in the development of assessment instruments. This is true because the validity and reliability of the instrument depends upon the alignment between the purposes for which it is intended and its consistency. In the development process, consideration must also be given to the type of evaluation being undertaken (summative or formative) and also the assessment format (objective or open-ended format).

Formative or Summative Instruments

There are two basic distinctions in evaluation in relation to implementation modes and they correlate with Ewell's (1991) classification system for assessment instrumentation. Formative evaluations take place during the classroom instruction process in which an educator assesses how the students are meeting the instructional objectives and they are primarily improvement driven. Summative evaluation on the other hand provides evidence that a program is satisfactory and should be continued in the future (Sax, 1989). Basically summative assessment provides a demonstrative purpose (Ewell, 1991).

In relation to the two evaluation roles, the audiences for the two are very different. In formative evaluation, the audience would be primarily program personnel (those responsible for developing the curriculum). The audience

for summative evaluation could include potential consumers (students, teachers, or other professionals), and funding sources (taxpayers or funding agencies) in addition to program personnel (Worthen & Sanders, 1987).

It should be apparent that both formative and summative evaluation are essential because decisions are being made at all stages within the evolution of a program. Therefore, the emphasis on formative and summative evaluation will change throughout the life of an educational program. Of a greater concern within today's assessment movement is summative evaluation and the development of summative assessment instruments.

The format of summative assessment instruments can differ depending upon the number of students who will be tested, time limits required for the test and the cost of the assessment process. Some tests can be administered to large groups of students simultaneously, others to only one student at a time (Ahmann & Glock, 1981).

Individual tests that are administered to one student at a time allow the examiner to establish rapport with each student; whereas, group tests may range into the hundreds if sufficient proctors are available (Ahmann and Glock, 1981). Group tests are considered to be more impersonal; however, they do allow for greater economies in terms of time and money.

Test Question Formats Used in Higher Education

In developing specific questions to be included on assessment instruments there are two basic format options. The two options include objective type questions and open-end questions. Objective tests are those formats that can be scored in a manner whereby the subjective judgement is eliminated (Almann & Glock, 1981). Objective type formats would include multiple choice, true/false, and matching tests. Some of the advantages of objective tests include ease of scoring, ease of construction, maximizing the subject matter covered, and the development of items that are amenable to item analyses (Sax, 1989).

Although objective tests are very common in education, there are several disadvantages to the objective test format. The most serious disadvantage to objective tests deals with the level (in terms of cognitive demand) at which the format operates. Bloom's (1956) Taxonomy of Educational Objectives lists knowledge (recall and recognition), comprehension, application, analysis, synthesis and evaluation as the goals of the educational process. According to Applebaum (1988) objective tests rarely, if ever, operate beyond the level of simple recall and recognition. When assessing the major, Applebaum (1988) also pointed out that the objective format examinations generally pull for recall and recognition

level skills, but that it is somewhat a function of the area being tested. In some cases (such as chemistry, physics, and the various specialities in engineering) it has been demonstrated that multiple choice items that demand higher cognitive levels can be constructed.

In contrast, Gronlund (1982) contends that multiple choice items and the alternative response items are useful in measuring complex achievements. Test items for measuring complex achievement are characterized by the fact that the problems often contain some novelty and the items are adapted to the intended outcomes.

Beyond objective type formats, other formats are available such as open-ended and free response questions which require the examinee to generate a correct answer as opposed to simply recognizing one (Applebaum, 1988). While this format may allow for assessing higher cognitive levels, the formats do have some limitations. These limitations include the substantially higher cost of administering and evaluating the assessment instrument and the greater subjectivity in scoring and interpretation.

Whatever format is chosen for an assessment instrument developed within the major, the designers of the individual instruments must consider the test format in relation to the goals and objectives of the assessment procedure. Assessment designers may also use a multi-method formulation of assessment which allows the strengths and

weaknesses of a program to be assessed in terms of all levels of cognitive skills (Applebaum, 1988).

Outcomes of Assessment in Higher Education

The information/data collected from an assessment has a threefold function. First of all, the data may provide institutions with a mechanism for which to change or alter curriculum. Curriculum reform must begin with faculties feeling a responsibility for developing common program objectives and working toward that end. Secondly, assessment may provide institutions or departments with a new level of accountability and competitiveness. Finally, as more states mandate assessment measures, departments or programs that demonstrate a more proactive stance may benefit in terms of increased financial allocations.

CHAPTER III

METHODS AND PROCEDURES

The purpose of the study was to build upon the literature foundations related to higher education assessment in the United States by developing a comprehensive table of specifications utilizing major underlying apparel merchandising concepts. To achieve the stated purpose of the study it was necessary to assess the concepts/competencies currently incorporated into the undergraduate apparel merchandising curriculum. The objectives of this phase of the study were to: a) identify the level of importance of each curricula concept delineated through the literature review process, and b) identify the desirable instructional/cognitive level of each concept within the undergraduate apparel merchandising curriculum.

Once identified, the level of importance and instructional/cognitive level of each concept was aggregated in the development of a table of specifications which may ultimately be used by institutions to develop summative assessment instruments. To achieve the stated objectives, research procedures were accomplished through a

two phased approach as described in the following discussion.

Research Design

The study consisted of two phases. Phase I utilized a cross-sectional survey methodology to determine the level of importance and instructional/cognitive level of apparel merchandising curriculum concepts. Using the data collected in Phase I of the study, Phase II consisted of the development of a comprehensive table of specifications of relevant apparel merchandising curriculum concepts.

Phase I - Instrument Development

During the first phase of the study, the literature survey methodology was employed to determine from the literature those concepts/competencies that are relevant for apparel merchandising graduates in today's society. In a number of dissertations and theses the broad subject-matter area of clothing and textiles has been examined; however the focus has been on specific curricular content and objectives needed in clothing and textiles programs and specifically apparel merchandising programs.

In addition, recent articles in the literature have illuminated more specific areas for in-depth curriculum focus. Based upon a number of previous studies dealing with curriculum concepts/competencies a content analysis was performed to identify essential curriculum elements.

In a critical examination of the merchandising subject-matter area, Kotsiopulos (1987) identified the need for merchandising professionals to focus on specific definitions and clarify terminology. Kotsiopulos (1987, p. 13) stated that "we have multiple terms to denote one activity and we are inconsistent in the derivation of our quantitative solutions."

In developing a formal content-analysis procedure for identifying the curriculum concepts/competencies in the literature, the idea of multiple interpretations for specific terminology was evident. Interpretation toward a "common definition" for specific terminology was utilized by the researcher to maintain consistency.

In addition to the concepts identified through the clothing and textiles literature, several recent articles in business trade publications gave rise to a number of concepts which had not yet been researched in detail by clothing and textiles professionals. Concepts falling into this category composed less than ten percent of the overall survey instrument. A select number of those concepts included global environmental concerns, mergers and acquisitions, workplace issues and trends (AIDS, drugs) and non-store retailing (VCR, vending machines, computers).

The concepts which were identified in the literature review process were placed on the questionnaire in random order. The instrument was composed of two sections. In section I, the respondents were asked to identify both the

level of importance and the cognitive/instructional level of each curriculum concept. A total of 102 curriculum concepts were included on the final survey instrument. The concepts were written in such a way that an instructional/cognitive level was not implied by the researcher. In addition to the responses on the forced-choice concepts, the respondents were also provided with an opportunity to include any additional concepts within an open-ended format.

Due to the utilization of an existing frame (ACPTC active membership list) a screening question "Are you currently employed full-time in a post-secondary position?" was used to identify any foreign elements within the survey population. This question served to identify those individuals who were either currently employed part-time or were not employed. If the respondent answered "no" to the screening question, they were instructed to return the questionnaire in the enclosed envelope.

If the individuals were employed full-time, they were instructed to continue with the instrument. For each curriculum concept, respondents were asked to identify both the level of importance and the desired instructional/ cognitive level.

The level of importance side of the instrument utilized a 7-point forced choice asymmetrical numeric scale (from 1 - not important to 7 - extremely important). Seven levels were utilized on this scale since Anderson (1990, p.

335) indicated that a larger number of response options reflects a method for increasing the internal consistency of the scale by increasing the number of total response opportunities given to the respondent.

The instructional/cognitive level utilized a numeric scale with three levels. Blooms Taxonomy of Educational Objectives (1956) served as the basis for the three levels of possible responses. The taxonomy was condensed into three levels (Level 1 - Knowledge, Level 2 - Comprehension/ Application, and Level 3 - Analysis/Synthesis/Evaluation) to facilitate in ease of understanding by respondents. The three-stage classification scheme used in the development of the instructional/cognitive levels was based on the work of Madaus, Woods and Nuttal (1973).

Since it was assumed that not all of the survey population would be familiar with the Taxonomy of Educational Objectives - Cognitive Domain, the directions outlined each of the six levels in hierarchical form. The three overall response levels used in the study were then identified for the respondents.

For both the level of importance and instructional/ cognitive level respondents were asked to circle their response. This same procedure was utilized in Section II which contained ten primarily multiple-choice demographic type questions. The demographic questions were developed to learn about not only the respondents but also the institutions in which they were currently employed. The

demographic questions provided a mechanism of comparison among respondent groups in the analysis.

Pilot Test For The Questionnaire

The proposed questionnaire and cover letter were both pilot tested by a panel of experts (OSU faculty and graduate students) similar in experience and educational background to the survey population. From the comments and suggestions provided by the panel of experts minor revisions were made to the questionnaire and cover letter. At this time, the questionnaire was also evaluated for ease of coding and analysis. In addition, a copy of the questionnaire was sent to the Institutional Review Board for Human Subjects Research at Oklahoma State University for approval. Upon approval, the instrument was prepared for the subsequent stage of Phase I.

Preparation of the Correspondence

The questionnaire was developed in booklet form with a graphic front cover and a separate cover letter. For tracking purposes, each instrument was identified with a respondent number which was located on the inside back cover. On this same page, space was also provided for additional comments.

The questionnaire and cover letters were printed using Xerox technology on a graystone 22 pound recycled paper. The reminder postcard was also printed on a similar gray

recycled paper utilizing a heavier cover stock. Care was taken so that postcard dimensions corresponded to acceptable postal requirements.

Sample Selection

The population of interest for the study was clothing, textile and merchandising educators within higher education institutions in the United States and Canada. The sample was selected from the active membership list of the Association of College Professors of Textiles and Clothing (ACPTC). The membership list was obtained from the executive director of ACPTC during the first week in March (1991). Prior to sending the listing, the executive director updated the listing to include any new members, changes in address or changes in membership status.

The active membership listing included the names and addresses of 616 individuals. Of the total, two individuals were from Japan and seven were Oklahoma State University faculty. Due to limited time constraints or a conflict of interest (served as participants in the pilot study), those nine individuals were discarded from the frame. Of the 607 individuals remaining, 12 were living in Canada and 595 were living in the United States.

Administration of the Questionnaire

A census procedure was utilized for the study; therefore, the overall sample size was 607. On March 11,

1991 each individual was mailed an initial cover letter explaining the purpose of the study and soliciting participation in the study, a copy of the questionnaire, and a self-addressed stamped envelope. For the Canadian participants, a self addressed envelope and a one dollar bill were included with a note stating "Due to the nature of this study, a dollar has been enclosed for return postage. Thank you for your cooperation."

An identification number was assigned to each questionnaire for tracking purposes. As questionnaires were returned the numbers were recorded on a master list along with the return date. In addition, a notation was made of those individuals who requested a copy of the results. Using this procedure also allowed non-respondents to be readily identified for follow-up purposes.

Exactly one week after the initial mailing a reminder postcard was sent to all of the participants in the study. Approximately one month after the initial contact, a follow-up letter and another questionnaire was mailed to those who had not yet responded. For the purposes of this study, all mailings to participants utilized first-class mail procedures with commemorative stamps affixed to each correspondence. See Appendix C for a copy of the questionnaire and correspondence (initial cover letter, postcard reminder and follow-up cover letter).

A pre-specified termination date for the return of questionnaires was identified based on return rate and a

reasonable postal delivery cycle between Oklahoma State University and respondents. The termination date for the return of questionnaires was then set for May 15, 1991.

A final tabulation revealed that out of the 607 questionnaires mailed, a total of 425 were returned for a 70% overall response rate. Of the 425 returned, 64 were deemed not usable either because they chose not to participate in the study or they were considered foreign elements in the sample (not employed full-time, were Cooperative Extension Specialists or they did not have a merchandising program at their institution). Subsequently, 361 responses were usable for a 59% usable response rate.

Telephone Follow-Up to Non-Respondents

Since non-response is one source of bias introduced within a study, a follow-up procedure was utilized to determine how similar or different the non-respondents were from the respondents in terms of demographic information. A random sample of the non-respondents was taken and a follow-up telephone interview was conducted. Forty-six of the non-respondents (25%) were identified through the use of a random number table to be included in this follow-up procedure.

The ACPTC directory was used to determine office telephone numbers for each of the non-respondents in the random sample. In addition, the telephone company directory assistance was used to obtain home telephone

numbers of those not included in the ACPTC directory. The random sample of non-respondents was called during the first two weeks in June (1991). Both morning and afternoon time periods were used in an attempt to locate individuals in their offices. Also, due to the nature of the study, telephone calls were made in conjunction with appropriate time zone considerations.

A multiple-call back procedure was utilized and three attempts were made to contact each individual. Upon each attempt, the telephone was allowed to ring six times prior to termination. Also, if the phone call was intercepted by another individual, probing questions were utilized to ascertain a better time to reach the individual of interest. An interview brief and data tabulation sheets were developed for the telephone follow-up procedures. See Appendix D for a copy of the interview brief.

Compilation of Data

The data received from the 361 respondents were entered directly into a personal computer using PC File. The level of importance component of the questionnaire was coded with a range from a low score equal to 1 and a high score being a 7. The instructional/cognitive component of the questionnaire was coded with 1 indicating those concepts which were to be taught at the knowledge level (lowest cognitive level) through a 3 which indicated the

highest cognitive level (synthesis, analysis and evaluation).

Item non-response was handled in a systematic manner and the appropriate column was left blank when entering the data. In addition, a single individual (the researcher) entered all of the data to reduce problems associated with office processing (individual coder errors). Care was taken to recheck/clean the data to identify any problems prior to the next stage of the analysis.

The data were subsequently up-loaded onto the mainframe computer at Oklahoma State University in preparation for analysis. The statistical analysis was performed using the Statistical Analysis System (SAS).

Concepts identified by respondents within the open-ended format of the questionnaire were grouped into six broad categories. The categories included career/ professional development/personal skills, computers/ technology, cultural/social aspects of apparel/consumer influences/historical, international, planning/buying/ negotiating/vendor relationships, textiles/design/ manufacturing. The results of the compilation of data are in Appendix E. Of the data received from the 361 respondents, only 56 (15.5%) identified additional concepts within the open-ended question.

Analysis of Data

The analytical techniques used in the analysis of data included both descriptive and inferential statistical methods. The descriptive statistics employed within the framework of this study included frequency distributions and measures of central tendency (means). The descriptive statistics were used to summarize the entire data set including the level of importance of each concept, the instructional/cognitive level and demographic information. Frequency distributions for the level of importance and instructional/cognitive level of each curriculum concept are provided in Tables XXII and XXIII (Appendix F).

To identify any underlying dimensions and to aid in the categorization of concepts in relation to the level of importance of each concept, exploratory factor analysis, using the principal components technique with Varimax rotation, was used to extract factors. According to Kim and Mueller (1982, p. 12), factor analysis is based on the fundamental assumption that some underlying factors, which are smaller in number than the number of observed variables, are responsible for the covariation among the observed variables. The main objective of factor analysis is to represent a set of variables in terms of a smaller number of hypothetical variables.

Examination of the unrotated factor matrix was first used to identify the presence of any underlying dimensions. The second step in a stepwise analysis is to rotate factors

(Gorsuch, 1983). Since items loaded heavily on the first unrotated factor and the amount of variance explained by the first factor was relatively high, the Varimax rotation procedure was used. The eigenvalues, scree plot and the amount of variance explained were all used in determining the number of factors to retain in the rotation procedure. The data were subsequently rotated using the Varimax orthogonal rotation to aid in the interpretation of the results. Although a number of orthogonal rotation methods are utilized by researchers and each has slight advantages over others, it is generally accepted that Varimax is the best (Nunnally, 1978).

In determining what constitutes a salient loading on a factor, the literature is somewhat divided and the decision is often based on personal judgement (Kachigan, 1986). A salient loading is one that is sufficiently high to assume that a relationship exists between the variable and the factor (Gorsuch, 1983). According to Kachigan (1986), loadings of .30, .40, or .50 are most often used as lower bounds for meaningful loadings. Nunnally (1978, p. 423), indicated that loadings of .30 or higher are acceptable in exploratory analysis after factors have been rotated. Refer to Table XXIV (Appendix F) for a complete summary of the factor loadings for each curriculum concept.

The level of importance and instructional/cognitive level were also analyzed through the use of nonparametric statistical procedures. According to Marascuilo and

McSweeney (1977), nonparametric procedures should be used when the assumptions for classical tests cannot be satisfied. In addition, the level measurement employed within the study (ordinal scaling) also contributed to the decision to utilize nonparametric techniques.

Two-sample Wilcoxon tests were employed to compare the means of two groups. The groups that were compared included respondents within two-year and four-year institutions, and individuals who had merchandising experience outside of education with those who had no merchandising experience. Significant differences among the curriculum concepts based on these two variables will be expounded upon in manuscripts II and III. However, raw data for each of the Wilcoxon procedures are presented in Appendix F (Tables XXV - XXVIII).

The nonparametric Kruskal-Wallis one-way ANOVA (H) was utilized to examine differences in relation to the age of respondents, academic rank, number of years employed in a higher education institution and size of each institution (based on number of full-time faculty and average number of graduates per year). According to Huck, Cormier and Bounds (1974, p. 210), the Kruskal-Wallis H test is an appropriate technique to use if the researcher feels it necessary to avoid the assumptions of the one-way ANOVA (F test).

As a follow-up to the Kruskal-Wallis, multiple comparisons were calculated to determine which pairs of populations tend to differ. According to Conover (1980, p.

231), populations i and j are deemed different if the following inequality is satisfied:

$$\left| \frac{R_i}{n_i} - \frac{R_j}{n_j} \right| > t_{1-(\alpha/2)} \left(S^2 \frac{N-1-T}{N-k} \right)^{1/2} \left(\frac{1}{n_i} + \frac{1}{n_j} \right)^{1/2}$$

The procedure was repeated for all pairs of populations.

Results of the Kruskal-Wallis procedure based on each of the demographic variables will be presented in Manuscripts II and III. Curriculum concepts identified as significantly different will be examined in greater detail through the use of pairwise comparisons and reported in each manuscript. The raw data (x^2 and p-value) are presented in Appendix F (Tables XXIX - XXXVIII).

Sample Characteristics - Respondents and Non-Respondents

A demographic profile of respondents is presented in Table I. Over 96% of the educators were female and 78.7% indicated they currently taught a merchandising or merchandising related course. Approximately 66% of the respondents were at the rank of assistant or associate professor; however, 45.1% of the respondents had been employed in higher education positions for more than 15 years. The largest percentage (38.9%) of the respondents were in the 41-50 age category.

When asked whether respondents had been employed in a merchandising position outside of education, almost 63% indicated they had been employed in a merchandising

position. Upon further investigation, 66.8% were employed for less than four years.

Three institutional related questions were asked on the instrument and a profile of responses is presented in Table II. In relation to the institution where the respondents were currently employed, over 88% of the respondents were employed in a four-year educational institution. However, a large percentage (83.2%) were employed in departments with less than five full-time faculty members. The average number of graduates within the departments was also indicative of their size, where 62.6% of the departments were responsible for graduating 40 students or less per year.

The characteristics of non-respondents contacted through a follow-up telephone interview were summarized in Table XXXIX. A random sample of non-respondents (46) were identified and contacted through telephone numbers listed in the ACPTC Membership Directory. Of the 46 non-respondents selected for the random sample, it was not possible to contact ten (22%) of the non-respondents due to a change in phone numbers or unavailability during the time the follow-up calls were attempted.

Of the 36 remaining non-respondents, data were collected from a total of 15 for an overall response rate of 31 percent. All 15 were currently employed full-time in a higher education position; however, six of the fifteen were employed in a Cooperative Extension Specialist

position, were in an administrative position with no teaching responsibilities or were serving in a technical (non-teaching) capacity. These six could be characterized as foreign elements in relation to the overall characteristics of the population and they were omitted from further analysis.

Since the sample size of non-respondents was small, frequencies and percentages were calculated so that some comparisons could be made between the demographic data of the respondents and the non-respondents to ascertain similarities and differences between the two groups. No further statistical analysis was employed to examine the data due to a large variation in sample size. Based on the descriptive statistics, some intriguing comparisons may be made between the respondents and non-respondents.

Both groups were composed of a large percentage of females (93.3% for non-respondents and 96.1% for respondents). In terms of age, the 41-50 age category accounted for the largest percentage of respondents for both the respondent and non-respondent groups. Nearly 45% of both the respondents and non-respondents had at least 15 or more years of college teaching experience. However, in relation to academic rank, the largest percentage of respondents were categorized within the assistant professor category (37.6%) and within the associate professor rank for non-respondents (55.5%). In addition, a larger percentage of the non-respondents (44.4%) did not teach a

merchandising or merchandising related course as compared to the respondents (37.1%).

One comparison to be made between the respondents and non-respondents relates to the issue of employment outside higher education. In both groups, the percentages of those who had been employed outside education and those who had not were almost identical. Also the length of time employed outside higher education varied within both groups, the largest preponderance (100% for non-respondents and 81.8% for respondents) were employed outside higher education for less than six years.

Phase II - Table of Specifications Development

Often the first step in the planning/developmental stages of testing procedures is the determination of the relative importance of objectives. Teachers with the same objectives often differ noticeably with respect to the relative importance they assign to each objective since it is a rather subjective process (Ahman & Glock, 1981). The relative importance an objective receives within the process of instruction may then be used as an indicator of the emphasis to be given that objective when an assessment instrument is developed.

To reduce the subjectivity which is apparent within many test development procedures, ACPTC members were asked to identify the level of importance of select apparel

merchandising curriculum concepts delineated from previous literature. Although Ahman & Glock (1981) referred to the development of tests on the basis of objectives, the current study is based on relevant concepts and the instructional/cognitive level of those concepts which may be roughly equated with the terminology utilized by Ahman and Glock (1981).

Identification of The Level of Importance

The data collected from the respondents were utilized to identify those concepts deemed to be most important within the undergraduate apparel merchandising curriculum. To facilitate in the development of a table of specifications for undergraduate apparel merchandising majors the concepts were divided into three groups based on overall scores. The mean scores for the level of importance ranged from 2.8 to 6.5.

The concepts identified in each group were categorized into those groups based on the perceived level of importance of the concept within the curriculum. A histogram was prepared utilizing mean scores in order to develop a visual representation of the data. The histogram indicated that the distribution of means was skewed towards the higher end of the scale. (See Appendix G). Thus, the demarcation of concepts in each group was based on the following methodology:

Overall Mean Score	Level of Importance
5.50 - 6.50	Very Important
4.50 - 5.49	Important
2.80 - 4.49	Least Important

The development of the previous framework provided a foundation upon which the table of specifications would be based. Subsequently, individual institutions could use this information in the development of institutionally conceived assessment instruments. Questions written for a summative assessment instrument could be based on the level of importance of the concepts.

Identification of Instructional/Cognitive Level

The desirable instructional/cognitive level was then examined because it could also be used as a guide in the development of questions for an institutionally established assessment instrument. The instructional/cognitive level would provide a basis in terms of complexity of questions and the thought processes utilized by students to answer those questions. Ultimately, the questions on the summative assessment instrument could be based on the mean scores of the respondents.

The mean scores for the instructional/cognitive level ranged from 1.2 to 2.7. A histogram was also prepared from the mean scores in order to examine the dispersion of data. Upon observation of the histogram, it was identified that

the means basically formed a normal curve. (See Appendix G). Therefore, the classification of the desired instructional/cognitive responses into three levels based on Bloom's (1956) cognitive taxonomy utilized the following methodology:

Overall Mean Score	Cognitive Level
1.20 - 1.69	Knowledge
1.70 - 2.21	Comprehension/Application
2.22 - 2.73	Analysis/Synthesis/Evaluation

Once the level of importance and desirable instructional/cognitive level were determined, a table of specifications was developed. In its simplest form, the table of specifications is a two-way table, one dimension of which is a breakdown of behavioral changes, and the other of subject matter topics (Ahman & Glock, 1981, p. 55). The behavioral changes portion of the table utilized the three levels of the taxonomy of educational objectives for the cognitive domain and the other component correlated with the apparel merchandising concepts.

According to Ahman and Glock (1981), in order to build a table of specifications the teacher must determine the relative importance of the behavioral changes and the topics and represent those as percentages. The percentages are then used as rough approximations of the percentage of test items within the test that are devoted to the behavioral changes within a specific topic. In spite of the crudeness of a table of specifications and the

difficulty of constructing a sufficient number of questions within each cell, the use of this procedure will result in tests that are vastly superior to those constructed through a casual, unsystematic skimming of instructors guides and textbooks (Ahman & Glock, 1981, p. 56).

From the data provided by the respondents, a specification table was developed whereby those apparel merchandising concepts identified as very important composed the largest weighting in the table and subsequently the largest number of questions within the examination. Very important concepts were given a weighting of 3, important concepts a weighting of 2 with the least important concepts given a weighting of 1.

Although this initial weighting procedure was rather subjective in nature, Ahman and Glock (1981) indicated that test developers often alter the table of specifications during test development in order to maintain a realistic view of the overall process. To use the percentage weights within the specifications table, the test constructor must then determine the type of examination to be given (essay or objective type formats).

CHAPTER IV

EDUCATIONAL OUTCOMES ASSESSMENT FOR APPAREL MERCHANDISING MAJORS

MANUSCRIPT I FOR PUBLICATION

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EDUCATIONAL OUTCOMES ASSESSMENT FOR APPAREL MERCHANDISING MAJORS

Abstract

As we approach the 21st century, higher education is faced with increasing challenges in securing adequate financing, maintaining student enrollments and sustaining quality programs. As the call for educational accountability continues, institutions are forced to consider ways to assess educational outcomes. The study was undertaken to examine the level of importance and the instructional/cognitive level of select undergraduate apparel merchandising curriculum concepts. Three hundred sixty-one Association of College Professors of Textiles and Clothing active members completed a questionnaire containing 102 curriculum concepts. From the results of the study, a table of specifications and weighting criteria were developed based on a factor analysis procedure and mean scores. The table of specifications may serve as a guide for those institutions developing outcome (summative) assessment measures, and may provide direction for curriculum decisions.

Introduction

Educational accountability and maintaining quality programs are key issues in higher education today. During the late 1980s, the call for increased assessment of educational outcomes began to permeate higher education as a number of studies postulated a need for educational reform. The current national interest in assessment of the outcomes of higher education is generally for the purpose of providing evidence of the quality of educational programs rather than for determining the level of individual student attainment (Banta & Schneider, 1988). Few campuses have undertaken a hard look at what and how they teach and how students learn (Grossman, 1988).

As a result of the continual push toward reform, institutions began to implement assessment programs on a college-wide and/or departmental basis. Each institution engaged in an assessment program should develop a strategy of multiple measures unique to the institution. Even though assessment can take a number of different forms within higher education institutions, the use of testing has been on the rise in recent years (Hutchings & Marchese, 1990).

On a parallel path with the assessment movement, higher education has witnessed a progression toward increased narrowing and fragmentation within much of the undergraduate curriculum. As a result, many undergraduate programs prepare their students for a future career and are considered career-oriented programs. In recent years, two-thirds of all baccalaureate degrees have been awarded in career-oriented curricula (Elman & Lynton, 1986).

The push toward increased specialization in home economics began in the 1950s after almost fifty years of general programs within the undergraduate curriculum (Horn, 1988). The development of specialized programs was evident in home economics units across the country. In the 1960s, Home Economics in Business was one of the new directions identified for inclusion within undergraduate higher education curriculum (Greenwood, 1981).

Even within the textiles and clothing subject matter area, the curriculum has become more fragmented. An

increasingly larger number of students in textiles and clothing have chosen an undergraduate major in apparel merchandising (fashion merchandising, apparel marketing, apparel retailing, etc.). According to Green (1989), if the growth in this subject-matter area continues according to straight-line projections, forty-one percent of all home economics majors in the next decade will major in clothing, textiles and related arts, with the greatest preponderance of those in apparel merchandising.

With this increased interest in the apparel merchandising subject-matter area, continual research is needed which addresses curriculum content in undergraduate apparel merchandising programs within colleges and universities across the United States. In recent years, a number of researchers have evaluated apparel merchandising curriculum content from either a broad all-encompassing approach or from a specific course approach. The survey populations in these studies have included educators, graduates and/or business personnel. Each study has resulted in recommendations for elements/competencies which should be included in the undergraduate curriculum.

The current study was undertaken to evaluate the underlying foundations of apparel merchandising programs by evaluating the level of importance and the instructional/ cognitive level of select undergraduate apparel merchandising concepts. According to Cowan and Zbaracki (1989, p. 46), the integration and interrelatedness of

concepts hold a profession or field of study together and provide unity. Therefore, assessing curriculum concepts is an essential activity. The results of the study facilitated the formulation of a table of specifications which could ultimately be used by educators to develop summative assessment instruments for apparel merchandising programs. Institutionally developed assessment instruments based on specific underlying foundations may be used in apparel merchandising programs to evaluate student learning and provide a guide for curriculum development.

Research Questions

The research was guided by the following research questions:

1. What educational concepts are considered important to include in an undergraduate apparel merchandising curriculum as identified by textiles and clothing educators?

2. At what instructional/cognitive level are the educational concepts currently being taught within the undergraduate apparel merchandising curriculum?

Methodology

A literature survey methodology was employed to determine those concepts/competencies that are relevant for apparel merchandising graduates in today's society. Based upon a number of previous studies dealing with curriculum

concepts/competencies a content analysis was performed to identify essential underlying curriculum elements.

In addition to the concepts identified through the clothing and textiles literature, several recent articles in business trade publications gave rise to a number of concepts which had not yet been researched in detail by clothing and textiles professionals. Concepts falling into this category composed less than ten percent of the overall survey instrument. A select number of those concepts included global environmental concerns, mergers and acquisitions, workplace issues and trends (AIDS, drugs), and non-store retailing (VCR, vending machines, computers).

Questionnaire Development

The concepts identified from the content analysis of the literature were delineated to facilitate in the development of the survey instrument. A total of 102 curriculum concepts were included on the final survey instrument (following input from a pilot test using a panel of experts similar in experience and educational background to the respondents).

The instrument was composed of two sections. In section I respondents were asked to identify both the level of importance and instructional/cognitive level of each curriculum concept. The concepts were written in such a way that an instructional/cognitive level was not implied by the researcher.

For level of importance a 7-point forced choice asymmetrical numeric scale was used ranging from 1 - not important to 7 - extremely important. Seven levels were utilized since Anderson (1990, p. 335) indicated that a larger number of response options reflects a method for increasing the internal consistency of the scale by increasing the number of total response opportunities given to the respondent.

For instructional/cognitive level, a numeric scale with three levels was selected. Bloom's Taxonomy of Educational Objectives (1956) served as the basis for the levels of response. The taxonomy was condensed into three levels (Level 1 - Knowledge, Level 2 - Comprehension/ Application, and Level 3 - Analysis/Synthesis/Evaluation) to facilitate in ease of understanding by respondents. The three-stage classification scheme used in the development of the instructional/cognitive levels was based on the work of Madaus, Woods and Nuttal (1973).

Section II of the questionnaire contained ten primarily multiple-choice demographic questions. The demographic questions were developed to collect information about the respondents and their institutions.

Survey Population

The population of interest was educators within higher education institutions in the United States and Canada. The sample was selected from the active membership list of

the Association of College Professors of Textiles and Clothing (ACPTC). The active membership listing included the names and addresses of 616 individuals. Of the total, two individuals were from Japan and seven were Oklahoma State University faculty. Due to limited time constraints for responses or a conflict of interest (used as participants in the pilot study), those nine individuals were discarded from the frame. A census procedure was utilized for the study; therefore, the overall sample size was 607.

Administration of the Questionnaire

Each individual was mailed an initial cover letter explaining the purpose of the study and soliciting participation, a copy of the questionnaire, and a self-addressed stamped envelope. Exactly one week after the initial mailing a reminder postcard was sent to all participants in the study. Approximately one month after the initial contact, a follow-up letter and another questionnaire were mailed to those who had not yet responded.

A final tabulation revealed that out of the 607 questionnaires mailed, a total of 425 were returned for a 70% overall response rate. Of the 425 returned, 64 were deemed not usable because the respondents were not employed full-time, were Cooperative Extension Specialists, did not have a merchandising program at their institution, or chose

not to participate in the study. Subsequently, 361 responses were usable for a 59% usable response rate.

Demographic Analysis

The data analysis utilized both descriptive and inferential statistical methods using the Statistical Analysis System (SAS). A demographic profile of respondents is presented in Table I. Over 96% of the educators were female and 78.7% indicated they currently taught a merchandising or merchandising related course. In addition, when asked whether respondents had been employed in a merchandising position outside of education, almost 63% indicated they had been employed in a merchandising position. Of those who had been employed in a merchandising position outside of education, 66.8% were employed for less than three years.

Insert Table I about here

Responses to three institutional related questions are summarized and presented in Table II. More than 88% of the respondents were employed in a four-year educational institution. A large percentage (83.2%) were employed in departments with less than five full-time faculty.

Insert Table II about here

Findings

To address the two research questions posed prior to the implementation of the study, both the level of importance and instructional/cognitive level were analyzed. The findings related to the research questions are presented first by means and then factors.

Mean Scores

The mean score for the level of importance of each concept was calculated and the scores ranged from 2.8 - 6.5 on a scale from 1 (not important) to 7 (extremely important). Visual analysis of the distribution showed that the means were skewed toward the higher end of the scale. Subsequently, to facilitate the interpretation of data, the concepts were subdivided into three groups (2.80 - 4.49 Least Important, 4.50 - 5.49 Important, and 5.50 - 6.50 Very Important). Using this categorization scheme, 40 concepts were identified as very important, 46 concepts as important and 16 were placed in the least important category (See Table III).

Insert Table III about here

The mean score for the instructional/cognitive level of each concept was also calculated and the scores ranged from 1.20 - 2.73 (1 - Knowledge, 2 - Comprehension/

Application, and 3 - Analysis/Synthesis/Evaluation). Concepts with a mean score between 1.20 - 1.69 were identified at the lowest cognitive level (Knowledge). Mean scores between 1.70 - 2.21 were grouped into the Comprehension/Application level and the Analysis/Synthesis/ Evaluation level was composed of concepts with a mean instructional/cognitive score of 2.22 - 2.73. Of the 102 concepts, 24 were categorized in the highest cognitive level (Analysis/Synthesis/Evaluation), 59 at the Comprehension/Application level and 19 at the Knowledge level (See Table IV).

Insert Table IV about here

Factor Analysis

To identify underlying dimensions within the 102 apparel merchandising curriculum concepts, exploratory factor analysis, using the principal components technique with Varimax rotation, was used to extract factors. Eleven factors were retained and they were labeled: Factor 1 - Merchandising (38 concepts), Factor 2 - Production (11), Factor 3 - Textiles (10), Factor 4 - Socio-Political (9), Factor 5 - Communications (6), Factor 6 - Global (5), Factor 7 - Design (8), Factor 8 - Target Marketing (6), Factor 9 - Strategies (3), Factor 10 - Fit (3), and Factor 11 - Technology (3). The eleven factor rotation accounted

for 60.6794 percent of the variance.

Since the factor analysis was utilized to provide an overall framework for categorizing the concepts, a factor loading criteria greater than .3 was used. Although this procedure is not considered to be the most stringent, it is acceptable as a lower boundary for exploratory factor analysis (Kachigan, 1986).

Table of Specifications Development

Once the level of importance and instructional/ cognitive level were determined for each concept, a table of specifications was developed utilizing all 102 concepts. According to Ahman & Glock (1981, p. 55), a table of specifications is a two-way table; one dimension is a breakdown of behavioral changes using Bloom's (1956) taxonomy and the other dimension represents subject matter topics. The results of the factor analysis provided the basic framework by which the concepts were classified for inclusion within the table. The results are presented in Table V.

Insert Table V about here

The three factors with the greatest number of concepts categorized at the highest cognitive level included merchandising (with 6 concepts), communications (6) and target marketing (5). Of interest is the fact that all six

concepts within the communications factor (decision making skills, personal communications, customer service, leadership qualities, personnel management and supervision of employee performance) were rated at the highest cognitive level and all but one were considered to be very important within the undergraduate curriculum.

From the data, weighting criteria were applied to the specification table. Those apparel merchandising concepts categorized as very important composed a larger weighting than the important and least important concepts. Very important concepts were given a weighting of 3, important concepts a weighting of 2 with the least important concepts given a weighting of 1 (See Table VI).

Insert Table VI about here

From an assessment standpoint, the weighting could serve as a guide in the development of questions for summative assessment instruments for apparel merchandising majors. Using this procedure, approximately 38% of the questions for a summative assessment instrument would focus on concepts identified within Factor I (Merchandising). Factors 3, 4 and 5 (Textiles, Socio-Political, and Communications) would each compose approximately 8.5% of the questions, followed by Factors 7 and 8 (Design and Target Marketing) comprising 8% of the content. Subsequently, Factor 2 (Production), Factor 6 (Global),

Factor 9 (Strategies), and Factors 11 and 10 (Technology and Fit) would comprise smaller percentages of the instrument respectively.

To facilitate use of the data from the table of specifications in an assessment instrument, the level of importance data (on which the weighting was based) must be coupled with data depicting the instructional/cognitive level of curriculum concepts. Whether the assessment is designed in an objective or open-ended format, individual questions may be designed to elicit responses from all six levels of Bloom's (1956) taxonomy of the cognitive domain. Several authors (Ahmann & Glock, 1981; Bloom, 1956; Sax, 1989) have illustrated how to operationalize Bloom's taxonomy in test construction to utilize all levels of the taxonomy.

Discussion and Conclusions

According to McClain (1987), in today's competitive higher education environment, educational institutions with proof of student learning have a solid foundation on which to base future stability. Often faculty find themselves in a precarious position; they are being asked to implement assessment measures with little time or resources allocated to the task.

The study was undertaken to begin to identify the level of importance and the instructional/cognitive level of select apparel merchandising curriculum concepts.

Although 102 concepts were identified for inclusion in the study, the listing should not be considered all inclusive or indicative of every undergraduate program. Every college, curriculum and student body in some respects is unique; therefore, it is important that each institution/program build an assessment initiative that is adapted to their institutional goals and mission.

The table of specifications and weighting procedure are presented as a guide to help faculty implement assessment procedures. In the development of tests from a table of specifications, Ahmann and Glock (1981) indicated that test developers often alter the table of specifications during test development in order to maintain a realistic view of the overall process.

From a curriculum evaluation standpoint, the weighting procedure may provide some overall direction for undergraduate apparel merchandising programs. At a time of contraction within many higher education institutions, faculty members are being asked to cut or combine courses in an attempt to streamline programs and make them more cost effective. Faculty may begin to rethink curriculum strategies and combine concepts not only in relation to the level of importance of concepts within the curriculum, but also in relation to the instructional/cognitive level of select concepts.

The table of specifications may also stimulate additional discussion and study concerning the

instructional/cognitive level of curriculum concepts. In the past, many educators were preoccupied with what was taught (content specific), not how it was taught and how students learned. Professionals should begin to ask some fundamental questions in relation to teaching, testing and learning.

Do teaching and testing procedures include (both formative and summative) all levels of Bloom's (1956) taxonomy? In recent years, American colleges and universities have been criticized for failing to move students toward higher levels of cognitive thinking. Therefore, are students adequately prepared to synthesize, analyze and evaluate incoming information in order to make more complex decisions? Or do curriculum and evaluation procedures focus too heavily on rote learning and memorization? Ultimately, we must ask ourselves what is the half-life of knowledge?

What is the role of an apparel merchandising student in the future? As educators, by better understanding the connection between the level of importance and instructional/cognitive level of curriculum concepts, we may better prepare students for the demands and opportunities of the 21st century.

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TABLE I

SAMPLE DESCRIPTION: DEMOGRAPHIC INFORMATION

Characteristics of Educators	N	%		N	%
Gender			**Teach a Merchandising Course**		
Males	14	3.9	Yes	280	78.7
Females	344	96.1	No	76	21.3
Total	358	100.0	Total	356	100.0
Age			**Employed Outside of Education**		
30 Years	14	3.9	Yes	222	62.9
31 - 40	106	29.7	No	131	37.1
41 - 50	139	38.9	Total	353	100.0
51 - 60	79	22.1			
61 or Older	19	5.3			
Total	357	100.0			
Number Years Teaching			**Years Employed Outside**		
Under 2 Yrs	9	2.5	Under 2 Yrs	88	40.0
2 - 4	37	10.4	2 - 4	59	26.8
5 - 9	70	19.6	5 - 6	33	15.0
10 - 14	80	22.4	7 - 8	13	5.9
15 or More	161	45.1	Over 9 Yrs	27	12.3
Total	357	100.0	Total	220	100.0
Academic Rank					
Lecturer	11	3.1			
Instructor	42	11.9			
Asst. Prof	133	37.6			
Asso. Prof	101	28.5			
Professor	55	15.5			
Other	12	3.4			
Total	354	100.0			

TABLE II

DESCRIPTION OF INSTITUTIONS

Institution Characteristics	N	%
Type of Institution		
2 Year	33	9.4
4 Year	309	88.3
Other	8	2.3
Total	350	100.0
Number of Full-Time Faculty		
1 - 2	111	31.6
3 - 5	181	51.6
6 - 8	40	11.4
9 or More	19	5.4
Total	351	100.0
Average Number of Graduates Each Year		
1 - 20	103	29.9
21 - 40	113	32.8
41 - 60	77	22.3
61 or More	52	15.1
Total	345	100.0

TABLE III

LEVEL OF IMPORTANCE OF SELECT CURRICULUM CONCEPTS

	Number	Concept	Mean	SD
		VERY IMPORTANT (5.50 - 6.50)		
1.	V95	Decision Making Skills	6.480	0.941
2.	V76	Personal Communications	6.411	0.948
3.	V58	Apparel Terminology	6.285	1.060
4.	V45	Computers/Retail Buying	6.274	0.946
5.	V82	Merchandise Buying	6.238	0.970
6.	V80	Price Merchandise	6.184	1.067
7.	V18	Forecasting Demand	6.173	0.999
8.	V32	Merchandise Assortments	6.156	1.070
9.	V65	Managing Open to Buy	6.127	1.206
10.	V88	Market Segmentation	6.096	1.062
11.	V87	Consumption Patterns	6.067	1.043
12.	V19	Vendor Terms	6.000	1.102
13.	V49	Consumer Decision Making	5.964	1.198
14.	V29	Fabric Characteristics	5.955	1.250
15.	V41	Price/Quality Rel in App	5.913	1.167
16.	V6	Demographic Variables	5.891	1.201
17.	V23	Customer Service	5.850	1.208
18.	V15	Global Sourcing	5.847	1.132
19.	V5	Import/Export Reg	5.794	1.344
20.	V25	Stockturn	5.794	1.142
21.	V85	Store Types	5.783	1.252
22.	V27	Marketing Research	5.769	1.085
23.	V90	Computer Terminology	5.755	1.208
24.	V35	Cyclical/Fashion Trends	5.745	1.287
25.	V51	International App Mkts	5.725	1.110
26.	V89	Leadership Qualities	5.725	1.223
27.	V21	Psychographic Variables	5.696	1.257
28.	V1	Ethical	5.688	1.335
29.	V13	Trade Publications	5.673	1.308
30.	V9	Personnel Management	5.647	1.310
31.	V20	Global Interdependence	5.634	1.273
32.	V44	Cultural Diversity	5.628	1.358
33.	V67	Initiate & Close Sales	5.599	1.306
34.	V81	Int Trading Agreements	5.598	1.205
35.	V53	Theories of Fashion	5.566	1.347
36.	V24	Inventory Shrinkage	5.563	1.258
37.	V12	QR Techniques	5.525	1.269

TABLE III (Continued)

IMPORTANT (4.50 - 5.49)

1.	V70	Macroenvironmental Cond.	5.470	1.351
2.	V11	Principles of Design	5.458	1.421
3.	V75	Branded Vs. Private Label	5.452	1.196
4.	V92	Resident Buying Offices	5.434	1.220
5.	V77	Types of Orders	5.433	1.277
6.	V54	Federal Legislation	5.421	1.272
7.	V17	Supervise Employee Perf	5.419	1.425
8.	V10	Visual Merch. Techniques	5.406	1.298
9.	V97	Entrepreneurship	5.402	1.259
10.	V93	Organizational Structures	5.394	1.265
11.	V33	Promotional Media	5.393	1.134
12.	V74	Care Labeling	5.377	1.392
13.	V64	Role of Purchase Orders	5.370	1.377
14.	V102	Rec/Chk/Sto Merchandise	5.345	1.365
15.	V31	Environmentally Safe Wk	5.343	1.381
16.	V56	Elements of Design	5.318	1.524
17.	V86	POP Displays	5.314	1.182
18.	V46	Global Enviro. Concerns	5.312	1.398
19.	V66	Vertical Integration	5.312	1.182
20.	V72	Types of Retail Ads	5.294	1.227
21.	V62	Employee Training Prog.	5.272	1.329
22.	V57	Role of Apparel Mart	5.271	1.266
23.	V2	Fiber Production	5.253	1.457
24.	V38	Forms/Business Ownership	5.246	1.333
25.	V47	Public Relations	5.239	1.224
26.	V26	Push/Pull Strategies	5.237	1.283
27.	V73	Sales Promotion Approp.	5.236	1.201
28.	V84	Color Concepts	5.185	1.543
29.	V30	Social Responsibilities	5.182	1.332
30.	V71	Workplace Issues/Trends	5.176	1.412
31.	V59	Non-Store Retailing	5.162	1.312
32.	V22	Private Label Programs	5.161	1.178
33.	V60	Fabric Finishes	5.067	1.397
34.	V69	Fabrication Methods	5.061	1.577
35.	V8	Ind. Apparel Production	4.992	1.397
36.	V94	In-store Special Events	4.983	1.328
37.	V48	RTW Sizing Specifications	4.978	1.482
38.	V52	Mergers/Acquisitions	4.950	1.397
39.	V43	Direct Mail Techniques	4.905	1.266
40.	V91	Floor Plan Designs	4.880	1.316
41.	V37	Production Automation	4.849	1.495
42.	V55	Fashion Designers	4.786	1.465
43.	V63	Types of Display Settings	4.704	1.389
44.	V83	Figure Analysis	4.660	1.719
45.	V7	Cooperative Advertising	4.656	1.222
46.	V3	Historic T & C	4.624	1.471

TABLE III (Continued)

		IMPORTANT (4.50 - 5.49)		
47.	V98	Industry Assocations	4.620	1.538
48.	V16	Garment Construction	4.575	1.697
49.	V28	Made in the USA	4.531	1.481
		LEAST IMPORTANT (2.80 - 4.49)		
1.	V100	Activities/Comm. Events	4.447	1.388
2.	V68	Accessories Distribution	4.370	1.425
3.	V34	Fashion Show Production	4.304	1.577
4.	V42	Designing - Mass Market	4.304	1.577
5.	V61	Textile Testing Proc.	4.285	1.592
6.	V101	Textile Dyeing/Printing	4.258	1.605
8.	V78	Garment Fitting/Alter	4.228	1.666
9.	V36	Fiber Processing Stages	4.120	1.514
10.	V4	Accessories Production	3.852	1.399
11.	V14	Ind. Pattern Making Tech	3.842	1.602
12.	V40	Layout/Render/Design Ads	3.802	1.509
13.	V39	Fashion Sketching	3.330	1.639
14.	V79	Flat Pattern Techniques	3.144	1.792
15.	V99	Industrial Sewing Equip.	3.080	1.681
16.	V96	Draping Techniques	2.805	1.673

TABLE IV

INSTRUCTIONAL/COGNITIVE LEVEL OF
SELECT CURRICULUM CONCEPTS

	Number	Concept	Mean	SD
		Analysis/Synthesis/Evaluation	**2.22 - 2.73**	
1.	V95	Decision Making Skills	2.730	0.536
2.	V76	Personal Communications	2.609	0.578
3.	V18	Forecasting Demand	2.571	0.621
4.	V65	Managing Open-to-Buy	2.507	0.658
5.	V82	Merchandise Buying	2.500	0.635
6.	V32	Merchandise Assortments	2.494	0.642
7.	V6	Demographic Variables	2.465	0.689
8.	V49	Consumer Decision Making	2.445	0.662
9.	V87	Consumption Patterns	2.424	0.673
10.	V80	Price Merchandise	2.421	0.620
11.	V88	Market Segmentation	2.403	0.699
12.	V41	Price/Quality Rel in App	2.399	0.673
13.	V45	Computers/Retail Buying	2.394	0.660
14.	V9	Personnel Management	2.353	0.694
15.	V27	Marketing Research	2.342	0.683
16.	V24	Fabric Characteristics	2.304	0.736
17.	V21	Psychographic Variables	2.280	0.722
18.	V35	Cyclical/Fashion Trends	2.268	0.740
19.	V23	Customer Service	2.265	0.740
20.	V1	Ethical	2.237	0.747
21.	V11	Principles of Design	2.233	0.735
22.	V17	Supervise Employee Perf.	2.232	0.726
23.	V89	Leadership Qualities	2.222	0.703
24.	V10	Visual Merch. Techniques	2.215	0.674
		Comprehension/Application	**1.70 - 2.21**	
1.	V15	Global Sourcing	2.217	0.714
2.	V44	Cultural Diversity	2.163	0.792
3.	V25	Stockturn	2.162	0.728
4.	V53	Theories of Fashion	2.160	0.766
5.	V70	Macroenvironmental Cond.	2.149	0.796
6.	V58	Apparel Terminology	2.146	0.765
7.	V5	Import/Export Reg.	2.134	0.732
8.	V67	Initiate and Close Sales	2.132	0.710
9.	V20	Global Interdependence	2.129	0.751
10.	V97	Entrepreneurship	2.110	0.738
11.	V24	Inventory Shrinkage	2.062	0.738
12.	V56	Elements of Design	2.056	0.783

TABLE IV (Continued)

		Comprehension/Application 1.70 - 2.21		
13.	V19	Vendor Terms	2.039	0.757
14.	V84	Color Concepts	2.028	0.776
15.	V33	Promotional Media	2.025	0.665
16.	V90	Computer Terminology	2.017	0.725
17.	V51	International App Mkts	2.014	0.712
18.	V47	Public Relations	1.992	0.657
19.	V46	Global Enviro. Concerns	1.986	0.777
20.	V85	Store Types	1.978	0.766
21.	V31	Environmentally Safe Wk	1.975	0.756
22.	V12	QR Techniques	1.963	0.749
23.	V30	Social Responsibilities	1.961	0.751
24.	V26	Push/Pull Strategies	1.950	0.720
25.	V62	Employee Training Prog.	1.938	0.753
26.	V102	Rec/Chk/Sto Merchandise	1.916	0.721
27.	V75	Branded vs. Private Label	1.907	0.744
28.	V81	Int Trading Agreements	1.905	0.750
29.	V72	Types of Retail Ads	1.891	0.704
30.	V66	Vertical Integration	1.890	0.710
31.	V93	Organizational Structures	1.882	0.764
32.	V71	Workplace Issues/Trends	1.877	0.787
33.	V73	Sales Promotion Approp.	1.876	0.677
34.	V83	Figure Analysis	1.868	0.786
35.	V64	Role of Purchase Orders	1.866	0.718
36.	V74	Care Labeling	1.865	0.773
37.	V77	Types of Orders	1.857	0.706
38.	V86	POP Displays	1.854	0.670
39.	V16	Garment Construction	1.851	0.772
40.	V13	Trade Publications	1.843	0.789
41.	V2	Fiber Production	1.837	0.748
42.	V8	Ind. Apparel Production	1.826	0.733
43.	V54	Fed. Legislation	1.803	0.770
44.	V92	Resident Buying Offices	1.801	0.693
45.	V57	Role of Apparel Mart	1.796	0.666
46.	V37	Production Automation	1.783	0.722
47.	V34	Fashion Show Production	1.781	0.717
48.	V91	Floor Plan Designs	1.773	0.704
49.	V3	Historic T & C	1.771	0.719
50.	V94	In-Store Special Events	1.766	0.702
51.	V69	Fabrication Methods	1.762	0.739
52.	V38	Forms/Business Ownership	1.742	0.726
53.	V22	Private Label Programs	1.737	0.680
54.	V43	Direct Mail Techniques	1.730	0.668
55.	V52	Mergers/Acquisitions	1.723	0.706
56.	V42	Designing - Mass Market	1.719	0.698
57.	V60	Fabric Finishes	1.716	0.693
58.	V7	Cooperative Advertising	1.709	0.661
59.	V63	Types of Display Settings	1.708	0.707

TABLE IV (Continued)

		Knowledge 1.20 - 1.69		
1.	V59	Non-Store Retailing	1.683	0.669
2.	V48	RTW Sizing Specifications	1.682	0.687
3.	V78	Garment Fitting/Alter	1.671	0.695
4.	V100	Activities/Comm. Events	1.597	0.632
5.	V61	Textile Testing Proc.	1.577	0.678
6.	V40	Layout/Design/Render Ads	1.573	0.649
7.	V55	Fashion Designers	1.546	0.672
8.	V68	Accessories Distribution	1.524	0.590
9.	V50	Yarn Types	1.520	0.669
10.	V101	Textile Dyeing/Printing	1.515	0.648
11.	V28	Made in the U.S.A.	1.490	0.621
12.	V79	Flat Pattern Techniques	1.488	0.688
13.	V14	Ind. Pattern Making Tech	1.460	0.648
14.	V98	Industry Associations	1.445	0.633
15.	V39	Fashion Sketching	1.428	0.586
16.	V4	Accessories Production	1.402	0.591
17.	V36	Fiber Processing Stages	1.393	0.594
18.	V96	Draping Techniques	1.333	0.607
19.	V99	Ind. Sewing Equipment	1.227	0.494

TABLE V

TABLE OF SPECIFICATIONS IN DESCENDING ORDER BY LEVEL OF IMPORTANCE

Factor/Concepts	Importance Mean	Inst./Cognitive Mean[a]		
		K	C/A	A/S/E
Factor 1: Merchandising				
Very Important				
Merchandise Buying	6.238			2.500
Price Merchandise	6.184			2.421
Forecasting Demand	6.173			2.571
Merchandise Assortments	6.156			2.494
Managing Open to Buy	6.127			2.507
Vendor Terms	6.000		2.039	
Stockturn	5.794		2.162	
Store Types	5.783		1.978	
Trade Publications	5.673		1.843	
Initiate & Close Sales	5.599		2.132	
Inventory Shrinkage	5.563		2.062	
Branded Vs. Private Label	5.452		1.907	
Important				
Resident Buying Offices	5.434		1.801	
Types of Orders	5.433		1.857	
Visual Merch. Techniques	5.406			2.215
Entrepreneurship	5.402		2.110	
Organizational Structures	5.394		1.882	
Promotional Media	5.393		2.025	
Role of Purchase Orders	5.370		1.866	
Rec/Chk/Sto Merchandise	5.345		1.916	
POP Displays	5.314		1.854	
Vertical Integration	5.312		1.890	
Types of Retail Ads	5.294		1.891	
Employee Training Prog.	5.272		1.938	
Role of Apparel Mart	5.271		1.796	
Forms/Business Ownership	5.246		1.742	
Public Relations	5.239		1.950	
Push/Pull Strategies	5.237		1.950	
Sales Promotion Approp.	5.236		1.876	
In-store Special Events	4.983		1.766	
Mergers/Acquisitions	4.950		1.723	
Direct Mail Techniques	4.905		1.730	
Floor Plan Designs	4.880		1.773	
Types of Display Settings	4.704		1.708	
Cooperative Advertising	4.656		1.709	
Least Important				
Activities/Comm. Events	4.447	1.597		
Accessories Distribution	4.370	1.524		
Fashion Show Production	4.304		1.781	

TABLE V (Continued)

Factor 2: Production				
Important				
Ind. Apparel Production	4.992		1.826	
Production Automation	4.849		1.783	
Garment Construction	4.575		1.851	
Least Important				
Designing - Mass Market	4.304		1.719	
Garment Fitting/Alter	4.228	1.671		
Ind. Pattern Making Tech	3.842	1.460		
Layout/Render/Design Ads	3.802	1.573		
Fashion Sketching	3.330	1.428		
Flat Pattern Techniques	3.144	1.488		
Industrial Sewing Equip.	3.080	1.227		
Draping Techniques	2.805	1.333		
Factor 3: Textiles				
Very Important				
Fabric Characteristics	5.955			2.304
Price/Quality Rel in App	5.913			2.399
Important				
Care Labeling	5.377		1.865	
Fiber Production	5.253		1.837	
Fabric Finishes	5.067		1.716	
Fabrication Methods	5.061		1.762	
Least Important				
Textile Testing Proc.	4.285	1.577		
Textile Dyeing/Printing	4.258	1.515		
Yarn Types	4.253	1.520		
Fiber Processing Stages	4.120	1.393		
Factor 4: Socio-Political				
Very Important				
Ethical	5.688			2.237
Global Interdependence	5.634		2.129	
Macroenvironmental Cond.	5.470		2.149	
Important				
Federal Legislation	5.421		1.803	
Environmentally Safe Wk	5.343		1.975	
Global Enviro. Concerns	5.312		1.986	
Social Responsibilities	5.182		1.961	
Workplace Issues/Trends	5.176		1.877	
Made in the USA	4.531	1.490		

TABLE V (Continued)

Factor 5: Communications				
Very Important				
Decision Making Skills	6.480			2.730
Personal Communications	6.411			2.609
Customer Service	5.850			2.265
Leadership Qualities	5.725			2.222
Personnel Management	5.647			2.353
Important				
Supervise Employee Perf	5.419			2.232
Factor 6: Global				
Very Important				
Global Sourcing	5.847		2.217	
Import/Export Reg	5.794		2.134	
International App Mkts	5.725		2.014	
Int Trading Agreements	5.598		1.905	
Important				
Industry Associations	4.620	1.445		
Factor 7: Design				
Very Important				
Apparel Terminology	6.285			2.146
Cyclical/Fashion Trends	5.745			2.268
Theories of Fashion	5.566		2.160	
Principles of Design	5.458			2.233
Important				
Elements of Design	5.318		2.056	
Fashion Designers	4.786	1.546		
Historic T & C	4.624		1.771	
Least Important				
Accessories Production	3.852	1.402		
Factor 8: Target Marketing				
Very Important				
Market Segmentation	6.096			2.403
Consumption Patterns	6.067			2.424
Consumer Decision Making	5.964			2.445
Demographic Variables	5.891			2.465
Psychographic Variables	5.696			2.279
Cultural Diversity	5.628		2.163	
Factor 9: Strategies				
Very Important				
Marketing Research	5.769			2.342
QR Techniques	5.525		1.963	
Important				
Private Label Programs	5.161		1.737	

TABLE V (Continued)

Factor 10: Fit				
Important				
Color Concepts	5.185		2.028	
RTW Sizing Specifications	4.978	1.682		
Figure Analysis	4.660		1.868	
Factor 11: Technology				
Very Important				
Computers/Retail Buying	6.274			2.394
Computer Terminology	5.755		2.017	
Important				
Non-Store Retailing	5.162	1.683		

[a] K = Knowledge, C/A = Comprehension/Application and A/S/E = Analysis/Synthesis/Evaluation

TABLE VI

TABLE OF SPECIFICATIONS WEIGHTING BASED ON THE FACTOR ANALYSIS

Level of Importance and Instructional/Cognitive Weighting[a]	
Factor	Weighting
Factor 1: Merchandising	38.10
Factor 2: Production	7.14
Factor 3: Textiles	8.57
Factor 4: Socio-Political	8.57
Factor 5: Communications	8.57
Factor 6: Global	4.28
Factor 7: Design	8.10
Factor 8: Target Marketing	8.10
Factor 9: Strategies	3.33
Factor 10: Fit	2.38
Factor 11: Technology	2.86
	100.00

[a] The weighting of concepts was based on a percentage using the following formula: Very Important - 3, Important - 2, and Least Important - 1.

CHAPTER V

THE LEVEL OF IMPORTANCE OF SELECT APPAREL MERCHANDISING CURRICULUM CONCEPTS BASED ON INSTITUTIONAL AND PERSONNEL DIMENSIONS

MANUSCRIPT II FOR PUBLICATION

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THE LEVEL OF IMPORTANCE OF SELECT APPAREL MERCHANDISING CURRICULUM CONCEPTS BASED ON INSTITUTIONAL AND PERSONNEL DIMENSIONS

Abstract

Within an increasingly competitive higher education environment, institutions are being asked to substantiate what and how they teach and ultimately what students learn. As a result, institutions are evaluating programs and developing/refocusing curriculum to capitalize on institutional strengths. The study was undertaken to examine the level of importance of select apparel merchandising curriculum concepts based on both institutional and personnel dimensions. The institutional variables within the study included type (two-year and four-year) and size (based on number of students and faculty) of the institution. Variables reflected within the personnel dimension included the respondent's age, number of years employed in a higher education position, academic rank and experience outside of higher education. Three hundred sixty-one Association of College Professors of Textiles and Clothing active members completed the questionnaire containing 102 curriculum concepts. The level of importance was analyzed through the use of nonparametric statistical procedures (two sample Wilcoxon tests and the Kruskal-Wallis one-way ANOVA) using the Statistical Analysis System (SAS). The results of the study highlight differences among respondent groups based on both institutional and personnel dimensions.

Introduction

In an era of increased accountability within higher education, institutions are continually being asked to substantiate what/how they teach and ultimately what students learn. To date, all institutions, departments, and programs are feeling pressure from the assessment movement. At times, the pressure to implement assessment procedures may be slight or it may be mandated. In recent years, several states (California, Florida, Missouri,

Tennessee, Texas and Virginia) have mandated assessment procedures at the undergraduate level (Ewell, 1987).

Increasingly, institutions/programs are evaluating institutional and personnel dimensions to find their niche within a competitive higher education environment. Institutional factors such as the mission/purpose (two-year or four-year), size (number of students or faculty), and funding orientation (private or public) all have an impact on assessment decisions. In addition to the institutional dimensions, personnel dimensions (faculty experience, age, number of years employed in higher education and rank) also indirectly impact the student's learning experience.

Within higher education, every college, curriculum and student body is unique in some respects (Pace, 1985). Therefore, it is imperative that faculty within each institution develop an assessment initiative adapted for their individual institutional goals and mission. However, faculty must be proactive and examine curriculum content in light of competencies most relevant for the future.

One of the most long-standing principles in creating curricula for educational programs is that planners must first decide upon the outcomes/competencies being sought by the educational experience. Faculty must also establish the level of importance of concepts within the curriculum. Rogers and Gentemann (1989) agreed that the first step toward the development of assessment procedures is to define expected outcomes; however, in a study of 167 higher

education institutions only 44% of the responding institutions indicated that educational outcomes had been identified at their institutions.

Apparel Merchandising Curriculum

Since the 1960s when the Home Economics in Business direction was identified for inclusion within the undergraduate curriculum (Greenwood, 1981), the option of fashion merchandising (apparel merchandising, apparel marketing, retailing) has grown dramatically. According to a recent study (Lind, 1989), the largest percentage of clothing and textiles undergraduates were majoring in fashion merchandising. Green (1989) indicated that if the growth in this subject-matter area continues according to straight-line projections, forty-one percent of all home economics majors in the next decade will major in clothing, textiles and related arts, with the greatest preponderance of those in apparel merchandising.

With this increased student emphasis in the apparel merchandising subject-matter area, continual research is needed which addresses curriculum content in undergraduate apparel merchandising programs. The study was designed to assess the level of importance of select apparel merchandising curriculum concepts in relation to relevant institutional and personnel dimensions.

Institutional Dimensions

One fundamental difference among institutions relates to the mission/purpose of the institution. Since World War II, the number of two-year colleges has increased dramatically in the United States. As a result, the curricula offered in two-year institutions has become quite competitive with the course offerings in four-year institutions. In the early 1980s, Dickerson and Clowes (1982) traced the movement of curriculum from four-year to two-year institutions and determined that the clothing and textiles field was one of the most popular areas of home economics to be offered within two-year colleges. Dickerson and Clowes (1982) found that two-year programs often exhibited many similarities to four-year programs in curriculum.

The size of the institution (as determined by the number of faculty and/or students) also has a direct impact on curricular offerings. Lind (1989) examined textiles and clothing departments through a nationwide study to determine future faculty needs (hires, retires etc.), enrollment trends and curricular changes. Lind (1989) found that larger departments have different characteristics and needs than smaller departments.

Personnel Dimensions

To provide students with exposure to on-the-job experiences, increasingly institutions are looking for individuals who have merchandising or industry experience. Personnel dimensions such as faculty experience outside of higher education may be considered as one possible variable ultimately impacting the assessment movement. In a recent study evaluating the qualifications needed by apparel and textiles faculty in the future, Lind (1989) found the qualification most commonly lacking in faculty hires was a doctor of philosophy degree, followed closely by a deficiency of merchandising or industry experience.

Other personnel dimensions such as a faculty members age, number of years employed in a higher education position and academic rank are additional variables impacting an institution's strength. Although a number of researchers have studied the importance of curriculum concepts, little attention has been focused on the impact of various personnel dimensions.

Research Questions

The role of institutional and personnel dimensions as they relate to the assessment movement provided the impetus for the study. The research was guided by the following research questions:

1. Do educators in 2-year and 4-year educational institutions consider the same concepts important for undergraduate apparel merchandising majors?
2. Does the importance rating of curriculum concepts within a 4-year educational institution vary depending upon the size of the apparel merchandising program as indicated by the number of faculty teaching in the area and the number of graduates each year?
3. Do educators who have merchandising experience outside of academe rate the importance of select curriculum concepts differently than educators who have no merchandising experience?
4. Do other factors such as a respondent's age, number of years employed in a higher education position and academic rank affect the level of importance of select concepts within the curriculum?

Methodology

To determine relevant concepts/competencies for apparel merchandising graduates in today's society, a literature survey methodology was employed. A content analysis of a number of previous studies was performed to identify essential underlying curriculum concepts.

Used in conjunction with the concepts identified through the clothing and textiles literature were a number

of concepts delineated through business trade publications. These concepts had not yet been fully researched by clothing and textiles professionals and composed less than ten percent of the survey instrument.

Instrument Development

The concepts identified through the content analysis procedure were aggregated to facilitate in the development of the survey instrument. A total of 102 concepts were included on the final survey instrument (following input from a pilot test using a panel of experts similar in experience and educational background to the respondents).

The entire instrument was composed of two sections. Section I asked respondents to identify both the level of importance and instructional/cognitive level of select apparel merchandising curriculum concepts.

For level of importance a 7-point forced choice asymmetrical numeric scale was used, ranging from 1 - not important to 7 - extremely important. Seven levels were utilized since Anderson (1990) indicated that a larger number of response options reflects a method for increasing the internal consistency of the scale by increasing the number of total response opportunities given to the respondent.

For instructional/cognitive level, a numeric scale with three levels was selected. Bloom's Taxonomy of Educational Objectives (1956) served as the basis for the

levels of response. The taxonomy was condensed into three levels (Level 1 - Knowledge, Level 2 - Comprehension/ Application, and Level 3 - Analysis/Synthesis/Evaluation).

Section II of the questionnaire contained ten multiple-choice type demographic questions. The demographic questions were developed to collect information relevant to both institutional and personnel dimensions. Institutional questions included the type of institution (two year or four year), number of full-time faculty who teach merchandising courses and the average number of students that graduate each year. Questions relevant to the individual respondent included age, gender, and employment (number of years employed in higher education, rank, employment outside of education, and whether they teach a merchandising course).

Survey Population

The population of interest was that of educators within higher education institutions in the United States and Canada. The sample was selected from the active membership list of the Association of College Professors of Textiles and Clothing (ACPTC). The listing included the names and addresses of 616 individuals. Of the total, two individuals were from Japan and seven were Oklahoma State University faculty. Due to limited time constraints for responses or a conflict of interest (participants in the pilot study), those nine individuals were discarded from

the frame. A census procedure was utilized for the study; therefore, the overall sample size was 607.

Administration of the Questionnaire

Each individual was mailed an initial cover letter explaining the purpose of the study and soliciting participation, a copy of the questionnaire, and a self-addressed stamped envelope. Two follow-up mailings were utilized to increase the response rate.

A final tabulation revealed that out of the 607 questionnaires mailed, a total of 425 were returned for a 70% overall response rate. Of the 425 returned, 64 were deemed not usable because the respondents were not employed full-time, were Cooperative Extension Specialists, did not have a merchandising program at their institution, or chose not to participate in the study. Subsequently, 361 responses were usable for a 59% usable response rate.

A telephone follow-up of non-respondents (using a random sample) was undertaken to identify differences between respondents and non-respondents. From the data collected, it was determined that the non-respondents were similar demographically to the respondents.

Data Analysis

The data analysis utilized both descriptive and nonparametric statistical methods using the Statistical Analysis System (SAS). The level of importance of select

curriculum concepts was analyzed through the use of two-sample Wilcoxon tests and the Kruskal-Wallis one-way ANOVA. According to Marascuilo and McSweeney (1977), nonparametric procedures should be employed when the assumptions for classical tests cannot be satisfied. Since the concepts were identified from previous literature through a content analysis procedure, only those concepts identified the most frequently were included in the survey instrument. Subsequently, the normality assumption paramount for parametric procedures was in question (visual analysis of the data revealed the distribution to be skewed). In addition, the level of measurement employed within the study (ordinal scaling) also contributed to the decision to utilize nonparametric techniques.

Two-sample Wilcoxon tests (also referred to as the Mann-Whitney test) were used to compare the means of two groups. The groups that were compared included respondents within 2-year and 4-year institutions, and individuals who had merchandising experience outside of education with those who had no merchandising experience.

The nonparametric Kruskal-Wallis one-way ANOVA (H) was utilized to examine differences in relation to age, number of years employed in a higher education position, academic rank and the size of institutions (based on number of full-time faculty and average number of graduates per year). As a follow-up procedure to the Kruskal-Wallis, multiple pairwise comparisons were calculated to determine which

pairs of populations differed. The procedure identified in Conover (1980, p. 231) was repeated for all pairs of populations.

Sample Characteristics - Respondents

A demographic profile of respondents revealed that over 96% of the educators were female and 78.7% indicated they currently taught a merchandising or merchandising related course. Almost 63% indicated they had been employed in a merchandising position; 66.8% were employed for less than three years.

From an institutional standpoint, more than 88% of the respondents were employed in a four-year educational institution, a large percentage (83.2%) in departments with less than five full-time faculty. More than half of the institutions (62.7%) graduate fewer than 40 students each year.

Findings

To address the research questions posed prior to the implementation of the study, the level of importance was analyzed relative to several institutional and personnel dimensions. The findings related to the research questions are presented to facilitate in understanding the influence these factors ultimately have on undergraduate apparel merchandising curriculum.

From an institutional standpoint, differences were examined in the level of importance of select curriculum concepts among four-year and two-year institutions. Significant differences ($p \leq .01$) were found for six of the curriculum concepts (See Table VII). The concepts found to be significantly different among faculty within two-year and four-year institutions included global interdependence, fashion show production, mergers and acquisitions, non-store retailing, individual figure analysis in relation to apparel selection and color concepts.

Insert Table VII about here

The findings of the study would seem to substantiate the conclusions outlined by Dickerson and Clowes (1982) in a comparison of curriculum between two-year and four-year institutions. The level of importance of select curriculum concepts was found to be very similar between both types of institutions with less than six percent of the concepts found to be statistically different.

From an institutional standpoint, the size of the respondent's institution was explored using both the number of faculty and average number of graduates per year as indicators. Differences among the four response categories for both faculty and students were analyzed using the nonparametric version of the analysis of variance procedure, known as the Kruskal-Wallis test.

In relation to the number of faculty who teach one or more merchandising courses, a significant difference was found for six of the curriculum concepts (See Table VIII). The concepts identified as significantly different included accessories production, fashion show production, layout/design/rendering for advertising, fashion designers, types of display settings and entrepreneurship.

Insert Table VIII about here

Further analysis, related to the number faculty within academic departments, through pairwise comparisons revealed that some faculty groups were significantly different for each of the concepts as indicated in Table IX. The table presents the means of each group as a point of reference. The rank sum used to compute the pairwise comparisons is also included. The brackets point to rank sums which indicate statistically different groups.

Of primary interest is the difference between institutions with 1 - 2 faculty members and those with 6 or more full-time faculty teaching a merchandising course. For each of the six concepts, significant differences were found between small departments (1 - 2 faculty) and large departments (either 6 - 8 faculty or 9 or more faculty).

Insert Table IX about here

Similarly, the size of an institution was assessed by examining the level of importance of select concepts in relation to the average number of graduates per year. The largest number of concepts (14, 13.7% of the total number of concepts) were identified as significantly different using the Kruskal-Wallis procedure (See Table VIII). The concepts that were significantly different included accessories production, visual merchandising display techniques, principles of design, fashion show production, public relations/publicity, theories of fashion, fashion designers, elements of design, apparel terminology, types of display settings, care labeling, garment fitting/ alterations, individual figure analysis in relation to apparel selection, and color concepts.

Further analysis (pairwise comparisons) of the 14 significant curriculum concepts reveals significant differences among groups. Table X presents the means and rank sums of each group with brackets pointing to the rank sums which were significantly different.

The institutions graduating the smallest number of students (less than 20) were significantly different from the institutions graduating the largest number of students (more than 60) for all concepts. In addition, a number of other significant differences may be identified among respondent groups; however, those differences are concept specific and not indicative of all concepts. Although the study by Lind (1989) focused on several relevant trends in

higher education, the results of this study tend to parallel the finding that larger departments (based on the number of full-time faculty and average number of students who graduate each year) have different characteristics and needs than smaller departments.

Insert Table X about here

In addition to the institutional dimensions, the personnel dimensions examined within the framework of the study included the respondents age, number of years employed in a higher education position, academic rank and experience outside of higher education. The Kruskal-Wallis procedure was used to analyze age, number of years employed in higher education and academic rank. In relation to age, only one curriculum concept (industrial sewing equipment) was found to be significantly different among all respondents (See Table VIII). Table XI indicates the results of pairwise comparisons among the five respondent categories.

Insert Table XI about here

Using the Kruskal-Wallis procedure, the 102 curriculum concepts were also examined based on the number of years employed in a higher education position. Only three curriculum concepts (ethical responsibilities, textile

testing procedures, and leadership qualities) were found to be significantly different (See Table VIII).

Further analysis of the data related to the number of years the respondents were employed in a higher education position was conducted. Pairwise comparisons among the five response categories revealed significant differences among certain groups (See Table XII). The two groups with the greatest impact on the pairwise comparison results fell at both extremes (employed fewer than two years or 15 years and over).

The greatest number of significant differences for a single concept were found for variable 61 (textile testing procedures). The respondents who had been employed for less than two years were significantly different from each of the other four groups (2 - 4 years, 5 - 9 years, 10 - 14 years and 15 years or over).

Insert Table XII about here

For academic rank, six possible response options were provided (lecturer, instructor, assistant professor, associate professor, professor, and other). The level of importance of three curriculum concepts were identified as significantly different. The concepts that were significantly different at the .01 level were ethical responsibilities, color concepts, and floor plan designs (See Table VIII).

Table XIII presents the means and rank sum of each group. The brackets point to the sums that were significantly different. Pairwise comparisons were computed for all pairs related to each of the six response categories. In relation to the groups that were identified as significantly different, no common patterns were found for the three concepts.

Insert Table XIII about here

Finally, the last personnel dimension examined within the framework of the study revolved around the variable focusing on merchandising or industry experience outside of higher education. The two-sample Wilcoxon procedure was used to analyze two groups (individuals with merchandising experience and individuals with no merchandising experience). The results of the study revealed that two concepts were significantly different ($p < .01$). The concepts identified as significantly different were merchandise assortments and textile testing procedures (See Table VII).

Discussion

What impact do institutional and personnel dimensions have on apparel merchandising curriculum content? From program to program, the concepts which make up an institution's apparel merchandising curriculum are many and

varied. According to Pace (1985) there are no identical twins in relation to higher education programs. Since institutions attempt to capitalize on institutional strengths, both institutional and personnel dimensions ultimately have an effect on curriculum decisions.

The study was designed to assess the level of importance of select apparel merchandising curriculum concepts based on both institutional and personnel dimensions. At the outset of the study, relevant concepts identified from previous literature were included on the data-gathering instrument. It should be noted that fundamental underlying concepts were included; however, the listing of concepts is not intended to be all-inclusive. Rather it serves as an initial guide in studying the diverse outcomes/competencies within the field of apparel merchandising.

The results of the study identify significant differences in the level of importance of curriculum concepts among various groups of respondents. However, for a large percentage of the concepts, there were no significant difference among respondent groups. One natural conclusion from the study would be to identify the most important concepts to be included within the undergraduate curriculum and advocate that those concepts be included within the curriculum. However, it is not the intent of the researchers to prescribe curriculum concepts in an attempt to "clone" apparel merchandising programs.

The intent of the study was to provide institutions with a mechanism to assess institutional and personnel strengths in relation to curriculum development. As we approach the 21st century, and the higher education environment becomes increasingly more competitive, it is essential that programs identify their strengths and take a proactive stance to curriculum development.

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TABLE VII

SIGNIFICANT CURRICULUM CONCEPTS BASED ON THE WILCOXON PROCEDURE

ID	Variable	x^2	p Value[a]
Type of Institution[b]			
V20	Global Interdependence	7.0823	0.0078
V34	Fashion Show Production	8.8567	0.0029
V52	Mergers & Acquisitions	10.9280	0.0009
V59	Non-Store Retailing	9.1218	0.0025
V83	Figure Analysis	11.2720	0.0008
V84	Color Concepts	8.8269	0.0030
Merchandsing Experience Outside of Higher Education[c]			
V32	Merchandise Assortments	7.5823	0.0059
V61	Textile Testing Proc.	8.5259	0.0035

[a] $p < .01$

[b] Respondents were from two-year and four-year institutions (df = 1).

[c] Respondents were categorized as either having merchandising/industry experience outside of higher education or not having industry experience (df = 1).

TABLE VIII

SIGNIFICANT CURRICULUM CONCEPTS BASED ON THE KRUSKAL-WALLIS PROCEDURE

ID	Variable	x^2	p Value[a]
Institutional Dimension - Number of Faculty[b]			
V4	Accessories Production	16.0580	0.0011
V34	Fashion Show Production	13.6350	0.0034
V40	Layout & Design for Ads	14.1710	0.0027
V55	Fashion Designers	16.4900	0.0009
V63	Types of Display Settings	22.3210	0.0001
V97	Entrepreneurship	11.9830	0.0074
Institutional Dimension - Number of Students[c]			
V4	Accessories Production	21.9170	0.0001
V10	Visual Merch. Techniques	23.5660	0.0001
V11	Principles of Design	13.3280	0.0040
V34	Fashion Show Production	25.5590	0.0001
V47	Public Relations	11.8040	0.0081
V53	Theories of Fashion	14.0180	0.0029
V55	Fashion Designers	15.3160	0.0016
V56	Elements of Design	14.4660	0.0023
V58	Apparel Terminology	14.4290	0.0024
V63	Types of Display Settings	23.3470	0.0001
V74	Care Labeling	14.0580	0.0028
V78	Garment Fitting/Alt.	13.9740	0.0029
V83	Figure Analysis	26.8300	0.0001
V84	Color Concepts	20.4730	0.0001
Personnel Dimension - Age of Respondents[d]			
V99	Ind. Sewing Equipment	13.8600	0.0078
Personnel Dimension - Number of Years Employed[e]			
V1	Ethical Resp. of Firms	13.3930	0.0095
V61	Textile Testing Proc.	16.0750	0.0029
V89	Leadership Qualities	13.3530	0.0097
Personnel Dimension - Academic Rank[f]			
V1	Ethical Resp. of Firms	16.4350	0.0057*
V84	Color Concepts	16.8570	0.0048*
V91	Floor Plan Designs	17.3110	0.0039*

[a] $p < .01$

[b] The number of faculty in each institution were divided into four categories (1 - 2 faculty, 3 - 5 faculty, 6 - 8 faculty and institutions with over 9 faculty) (df = 3).

[c] The average number of students who graduate each year from an institution were divided into four categories (1 - 20 students, 21 - 40 students, 41 - 60 students and those institutions who graduate over 60 students) (df = 3).

[d] The age of respondents were divided into five categories (30 years or younger, 31 - 40, 41 - 50, 51 - 60, 61 or older) (df = 4).

[e] The number of years employed in a higher education institution were divided into five categories (under 2 years, 2 - 4, 5 - 9, 10 - 14, and over 15 years) (df = 4).

[f] Six academic rank categories were provided on the questionnaire (Lecturer, Instructor, Assistant Professor, Associate Professor, Professor and other) (df = 5).

TABLE IX

PAIRWISE COMPARISONS BASED ON THE NUMBER OF FULL-TIME FACULTY WHO TEACH A MERCHANDISING COURSE

Number	Variable		N	Mean	Rank Sum[a]
V4	Accessories Production				
		R1[b]	108	4.1574	195.9907
		R2	180	3.7111	164.8556
		R3	40	4.0000	186.6250
		R4	19	2.9473	109.0526
V34	Fashion Show Production				
		R1	110	4.7091	202.4864
		R2	180	4.1611	165.9000
		R3	40	3.8250	146.3625
		R4	19	4.1579	162.2684
V40	Layout/Design/Render Ads				
		R1	110	4.2727	203.9682
		R2	180	3.5944	161.9222
		R3	40	3.5250	155.2500
		R4	19	3.7895	172.7368
V55	Fashion Designers				
		R1	111	5.1802	204.0315
		R2	179	4.6872	167.0112
		R3	40	4.3000	145.8750
		R4	19	4.2632	141.9474
V63	Types of Display Settings				
		R1	111	5.1261	204.5360
		R2	178	4.6461	169.7725
		R3	40	4.1500	138.8875
		R4	19	3.9474	118.2895

TABLE IX (Continued)

V97	Entrepreneurship				
		R1	108	5.5926	191.9213
		R2	181	5.3702	171.2320
		R3	40	5.3500	172.9750
		R4	19	4.4737	109.8158

[a] The brackets point to the significantly different groups.

[b] R1 = 1 - 2 Faculty Members, R2 = 3 - 5, R3 = 6 - 8, R4 = 9 or More Faculty Members.

TABLE X

PAIRWISE COMPARISONS BASED ON THE NUMBER OF STUDENTS WHO GRADUATE FROM A MERCHANDISING PROGRAM EACH YEAR

Number	Variable		N	Mean	Rank Sum[a]
V4	Accessories Production				
		R1[b]	102	4.2255	197.9265
		R2	112	3.9911	179.5268
		R3	76	3.5526	150.1118
		R4	51	3.1961	129.5490
V10	Visual Merchandising Techniques				
		R1	102	5.7157	194.7206
		R2	113	5.6283	189.1283
		R3	77	5.0390	145.6299
		R4	52	4.7885	132.5673
V11	Principles of Design				
		R1	103	5.8058	194.9320
		R2	112	5.5268	176.7500
		R3	77	5.2597	158.2402
		R4	52	4.9038	140.0288
V34	Fashion Show Production				
		R1	102	4.7059	198.1225
		R2	112	4.5357	185.9866
		R3	77	3.8831	147.2013
		R4	52	3.5192	127.3558
V47	Public Relations				
		R1	101	5.3465	179.1733
		R2	111	5.4324	186.0856
		R3	77	5.0909	159.8052
		R4	51	4.7647	135.5490
V53	Theories of Fashion				
		R1	102	5.8039	187.5000
		R2	112	5.5714	174.0446
		R3	76	5.5658	173.8355
		R4	51	4.9216	127.0882

TABLE X (Continued)

V55	Fashion Designers				
		R1	103	5.1845	199.3398
		R2	112	4.7678	169.5491
		R3	77	4.6139	161.0390
		R4	51	4.1568	138.7157
V56	Elements of Design				
		R1	103	5.6796	195.0485
		R2	112	5.2768	169.0268
		R3	77	5.3377	171.6818
		R4	51	4.6078	132.4608
V58	Apparel Terminology				
		R1	103	6.5534	193.6942
		R2	112	6.2678	169.3304
		R3	76	6.2105	167.6908
		R4	51	5.7843	137.1176
V63	Types of Display Settings				
		R1	103	5.0777	197.8592
		R2	112	4.8661	183.3884
		R3	76	4.3158	141.5526
		R4	51	4.1176	136.7843
V74	Care Labeling				
		R1	102	5.5098	182.5539
		R2	112	5.5178	181.5446
		R3	77	5.3506	172.5454
		R4	51	4.6471	125.7549
V78	Garment Fitting/Alteration				
		R1	103	4.6214	196.4854
		R2	112	4.1964	169.1830
		R3	77	4.1299	167.7468
		R4	51	3.5294	135.1569
V83	Figure Analysis				
		R1	103	5.1650	203.5243
		R2	112	4.6964	176.4509
		R3	76	4.3289	157.6645
		R4	52	3.6923	120.9231

TABLE X (Continued)

V84	Color Concepts				
	R1	103	5.5534	195.2767	┐ ┐
	R2	112	5.2946	179.8080	┘ ┐ ┐
	R3	75	4.9067	154.7467	┘ ┘
	R4	51	4.3725	126.5294	┘

[a] The brackets point to the significantly different groups.

[b] R1 = 1 - 20 Students, R2 = 21 - 40, R3 = 41 - 60, R4 = 61 or More.

TABLE XI

PAIRWISE COMPARISONS BASED ON AGE

Number	Variable		N	Mean	Rank Sum[a]
V99	Ind. Sewing Equipment				
		R1[b]	14	4.1428	252.2500
		R2	105	3.0667	177.6476
		R3	139	2.7842	162.2698
		R4	79	3.4051	197.1266
		R5	19	2.9474	170.1579

[a] The brackets point to the significantly different groups.

[b] R1 = 30 Years or Younger, R2 = 31 - 40, R3 = 41 - 50, R4 = 51 - 60, R5 = 61 or Older.

TABLE XII

PAIRWISE COMPARISONS BASED ON THE NUMBER OF YEARS EMPLOYED IN A HIGHER EDUCATION INSTITUTION

Number	Variable		N	Mean	Rank Sum[a]
V1	Ethical Responsibilities				
		R1[b]	9	4.7778	125.5500
		R2	36	5.6389	171.4200
		R3	69	5.4058	156.0145
		R4	80	5.4875	163.2400
		R5	158	5.9960	196.2200
V61	Textile Testing Procedures				
		R1	9	5.8888	290.0556
		R2	37	4.1891	171.2703
		R3	70	3.8857	153.4428
		R4	80	4.4500	186.5688
		R5	158	4.3038	178.6139
V89	Leadership Qualities				
		R1	9	5.0000	130.5000
		R2	36	5.6111	164.6667
		R3	68	5.5294	160.6544
		R4	80	5.4750	160.1062
		R5	159	5.9811	196.8082

[a] The brackets point to the significantly different groups.

[b] R1 = Under Two Years, R2 = 2 - 4 Years, R3 = 5 - 9, R4 = 10 - 14, R5 = 15 Years or Over.

TABLE XIII

PAIRWISE COMPARISONS BASED ON ACADEMIC RANK

Number	Variable		N	Mean	Rank Sum[a]
V1	Ethical Responsibilities				
		R1[b]	11	4.9090	140.9545
		R2	41	5.3902	149.9756
		R3	130	5.6385	170.3231
		R4	101	5.6733	172.1485
		R5	55	6.2727	219.8091
		R6	11	5.4545	159.7273
V84	Color Concepts				
		R1	11	4.9090	151.2273
		R2	42	5.4286	191.4762
		R3	132	4.9318	160.8939
		R4	100	5.0800	167.1000
		R5	54	5.5185	206.6389
		R6	12	6.1667	246.8333
V91	Floor Plan Designs				
		R1	11	5.5454	226.2727
		R2	42	5.2619	207.6667
		R3	133	4.6917	160.4850
		R4	100	4.8300	173.2950
		R5	54	4.7778	171.1944
		R6	12	5.7500	249.8750

[a] The brackets point to the significantly different groups.

[b] R1 = Lecturer, R2 = Instructor, R3 = Assistant Professor, R4 = Associate Professor, R5 = Professor, R6 = Other.

CHAPTER VI

THE INSTRUCTIONAL/COGNITIVE LEVEL OF SELECT APPAREL MERCHANDISING CURRICULUM CONCEPTS: ROLE, RELEVANCE AND REFLECTION

MANUSCRIPT III FOR PUBLICATION

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THE INSTRUCTIONAL/COGNITIVE LEVEL OF SELECT APPAREL MERCHANDISING CURRICULUM CONCEPTS: ROLE, RELEVANCE AND REFLECTION

Abstract

In recent years, the undergraduate curriculum in the United States has become more narrowed and fragmented. As a result of this transformation, home economics students are increasingly majoring in more specialized subject-matter areas. Within clothing and textiles, enrollment trends indicate that a large proportion of undergraduate students are now majoring in apparel merchandising (Lind, 1990). Therefore, continual research is needed which evaluates curriculum content within apparel merchandising programs across the country. The study was undertaken to examine the instructional/cognitive level of select apparel merchandising curriculum concepts in relation to a number of demographic variables. Bloom's (1956) Taxonomy of Educational Objectives provided the framework for assessing the instructional/cognitive level of each concept. Three hundred sixty-one Association of College Professors of Textiles and Clothing active members completed the questionnaire containing 102 curriculum concepts. The instructional/cognitive level was analyzed through the use of nonparametric statistical procedures (two sample Wilcoxon tests and the Kruskal-Wallis one-way ANOVA) using the Statistical Analysis System (SAS). The results of the study highlight differences among respondent groups based on select demographic variables.

Introduction

Within higher education today, a movement toward increased narrowing and fragmentation is occurring within much of the undergraduate curriculum. As a result, many undergraduate programs prepare students for a future career and are considered career-oriented. Today, nearly two-thirds of all baccalaureate degrees are awarded in career-oriented curricula (Elman & Lynton, 1986).

Narrowing and fragmentation have also been apparent within home economics as the push for increased specialization began in the 1950s. Since that time, the apparel merchandising option has grown dramatically in higher education institutions around the country. According to Lind (1989), the largest percentage of clothing and textiles undergraduates are currently majoring in the fashion merchandising area. In addition, Green (1989) projected enrollment trends into the future and she projects that forty-one percent of all home economics majors in the next decade will major in clothing, textiles and related arts with the greatest preponderance of students in the apparel merchandising field. With this increased student emphasis in the apparel merchandising subject-matter area, continual research is needed to evaluate curriculum content in undergraduate apparel merchandising programs.

Curriculum Evaluation/Assessment

Coupled with the issues related to curricula trends has been a movement in higher education toward increased accountability/assessment. Although career-oriented educational programs are often criticized for becoming too vocationally oriented, colleges and universities must also address the question of assessment within these specialized subject matter areas. Student outcomes/competencies must continually be assessed in career-oriented programs to

determine the approach and content necessary to provide students with an adequate background relevant to our modern ever-changing society. This trend is referred to as "curriculum-embedded assessment" and it has become a viable option for many institutions/departments (Ewell, 1991, p. 104).

In the past, a number of clothing and textiles researchers have evaluated apparel merchandising curriculum from either a broad all-encompassing perspective or on a course by course basis. The primary groups (survey populations) utilized in previous studies have included graduates, employers and/or educators. Within these studies, the main objective has been to identify those concepts/elements/competencies of importance in the apparel merchandising curriculum or to identify relevant concepts/competencies used in a merchandising position (entry level or mid-management). In general, the results of previous studies have eluded to a number of concepts/ competencies/elements which should be included or deleted from the apparel merchandising curriculum.

To date, no definitive studies appear to exist which examine select apparel merchandising curriculum concepts in relation to the instructional/cognitive level at which those concepts should be taught. According to Grossman (1988), comparatively few campuses have undertaken a hard look at what and how they teach as well as how students learn. Understanding which concepts are important within

the curriculum provides relevant information; however, a more holistic perspective encompassing an assessment orientation would be to evaluate the level of importance of concepts in combination with the instructional/cognitive level.

To evaluate the instructional/cognitive level of curriculum concepts, a taxonomy of cognitive/mental processes must be identified to provide a framework to study the cognitive domain. The literature is replete with various educational tools to study the cognitive domain such as Guilford's Structure of Intellect Model, The Gagne-Merrill Taxonomy, Gerlach and Sullivan's Taxonomy or DeBlock's Taxonomy (De Landsheere, 1990). However, Bloom's Taxonomy of Educational Objectives (1956) was identified as the most widely utilized taxonomy of the cognitive domain. Bloom's (1956) taxonomy provides a mechanism which may be utilized to classify and evaluate the instructional/ cognitive level of educational concepts.

Taxonomy of Educational Objectives

According to Bloom (1956), there are six main categories of objectives in the taxonomy for the cognitive domain (knowledge, comprehension, application, analysis, synthesis and evaluation). The cognitive domain deals with solving intellectual tasks, from simple recall of facts to original ways of combining, synthesizing and evaluating new ideas. The organizing principle for the cognitive domain

emphasizes the issue of complexity, such that each category in the taxonomy is assumed to involve cognitive skills more complex and abstract than the previous category.

The taxonomy as developed by Bloom (1956) allows nearly all cognitive objectives to be classified; thus the content validity of the taxonomy is considered adequate. However, within the literature there has been some controversy surrounding the hierarchical structure of Bloom's taxonomy. According to De Landsheere (1990), in a pure hierarchy there must be a direct link between adjacent levels and only between these two levels.

In evaluating the hierarchical structure of Bloom's (1956) taxonomy, Hill (1984) employed maximum likelihood estimation procedures and provided evidence to support the hierarchical structure between the hierarchical categories. Using a quantitative causal model, Madaus, Woods and Nuttal (1973) examined the strength of the direct links between preceding adjacent levels and found that knowledge, comprehension and application are well-hierarchized. However, the researchers found that as one moves higher up in the hierarchy, a branching takes place. On one side is analysis and on the other side are synthesis and evaluation.

Miller, Snowman and O'Hara (1979) took the work of Madaus, Woods and Nuttal (1973) one step further by using a number of analytic methods as a means of gaining a clearer conception of the causal relationships within the taxonomy.

By using communality analysis, stepwise regression, and factor analysis, the researchers found that all the techniques rejected a simple hierarchical interpretation in terms of the relationships among the six levels. Once again, the analysis suggested a branched model where the node of the branch was at application with analysis skills developing independently of synthesis and evaluation. Even with the controversy, the taxonomy developed by Bloom (1956) has been found to be a viable tool for educators.

Research Questions

The Taxonomy of Educational Objectives developed by Bloom (1956) provided the basis on which the instructional/cognitive level of select curriculum concepts was evaluated. Basic demographic questions provided a means of comparison among various groups of respondents. The research was guided by the following research questions:

1. Do educators in 2-year and 4-year educational institutions evaluate the instructional/cognitive level of select apparel merchandising curriculum concepts within the same cognitive category based on Bloom's (1956) taxonomy?

2. Does the instructional/cognitive level of select apparel merchandising curriculum concepts within a 4-year educational institution vary depending upon the size of the apparel merchandising program as indicated by the number of faculty teaching in the area and the number of graduates each year?

3. Do educators who have merchandising experience outside of academe evaluate the instructional/cognitive level of concepts differently?

4. Do other factors such as a respondent's age, academic rank, and years of experience in higher education affect the instructional/cognitive level of select curriculum concepts?

Methodology

To determine those concepts/competencies that are relevant for apparel merchandising graduates in today's society, a literature review process was employed. A content analysis procedure of a number of previous studies was performed to identify essential underlying curriculum concepts.

Used in conjunction with the concepts identified through the clothing and textiles literature were a number of concepts delineated through current business trade publications. These concepts had not yet been fully researched by clothing and textiles professionals and composed less than ten percent of the survey instrument.

Instrument Development

The concepts identified through the content analysis procedure were aggregated to facilitate in the development of the survey instrument. One hundred two concepts were included on the final survey instrument (following input

from a pilot test using a panel of experts similar in experience and educational background to the respondents).

The entire instrument was composed of two sections. In Section I, respondents were asked to identify both the level of importance and instructional/cognitive level of select apparel merchandising curriculum concepts. The concepts were written in such a way that an instructional/cognitive level was not implied by the researcher.

For level of importance a 7-point forced choice asymmetrical numeric scale was used ranging from 1 - not important to 7 - extremely important. Seven levels were utilized since Anderson (1990, p. 335) indicated that a larger number of response options reflects a method for increasing the internal consistency of the scale by increasing the number of total response opportunities given to the respondent.

For instructional/cognitive level, a numeric scale with three levels was selected. Bloom's Taxonomy of Educational Objectives (1956) served as the basis for the levels of response. The taxonomy was condensed into three levels (Level 1 - Knowledge, Level 2 - Comprehension/ Application, and Level 3 - Analysis/Synthesis/Evaluation) to facilitate in ease of understanding by respondents. The three-stage classification scheme used in the questionnaire was based on the work of Madaus, Woods and Nuttal (1973).

Since it was assumed that not all of the survey population would be familiar with the Taxonomy of Educational Objectives - Cognitive Domain, the directions outlined each of the six levels in hierarchical form. In addition, the natural progression of subject-matter complexity within an undergraduate program was considered and respondents were instructed to identify the "highest" instructional/cognitive level at which the concept should be taught within the curriculum.

Section II of the questionnaire contained ten multiple-choice type demographic questions. The demographic questions were developed to collect information relevant to both institutional and personnel dimensions. The responses to these questions provided the basis on which comparisons among various groups could be made in terms of the instructional/cognitive level of select apparel merchandising curriculum concepts.

Survey Population

The population of interest was educators within higher education institutions in the United States and Canada. The sample was selected from the active membership list of the Association of College Professors of Textiles and Clothing (ACPTC). The listing included the names and addresses of 616 individuals. Of the total, two individuals were from Japan and seven were Oklahoma State University faculty. Due to limited time constraints for

responses or a conflict of interest (used as participants in the pilot study), those nine individuals were discarded from the frame. A census procedure was utilized for the study; therefore, the overall sample size was 607.

Administration of the Questionnaire

Each individual was mailed an initial cover letter explaining the purpose of the study and soliciting participation, a copy of the questionnaire, and a self-addressed stamped envelope. Exactly one week after the initial mailing a reminder postcard was sent to all participants in the study. Approximately one month after the initial contact, a follow-up letter and another questionnaire were mailed to those who had not yet responded.

A final tabulation revealed that out of the 607 questionnaires mailed, a total of 425 were returned for a 70% overall response rate. Of the 425 returned, 64 were deemed not usable because the respondents were not employed full-time, were Cooperative Extension Specialists, did not have a merchandising program at their institution, or chose not to participate in the study. Subsequently, 361 responses were usable for a 59% usable response rate.

A telephone follow-up of non-respondents (using a random sample) was undertaken to identify differences between respondents and non-respondents. From the data

collected, it was determined that the non-respondents were similar demographically to the respondents.

Data Analysis

Data analysis utilized both descriptive and nonparametric statistical methods using the Statistical Analysis System (SAS). The instructional/cognitive level of select curriculum concepts was analyzed through the use of two-sample Wilcoxon tests and the Kruskal-Wallis one-way ANOVA. According to Marascuilo and McSweeney (1977), nonparametric procedures should be employed when the assumptions for classical tests cannot be satisfied. Since the concepts were identified from previous literature through a content analysis procedure, only those concepts identified the most frequently were included in the survey instrument. Subsequently, the normality assumption paramount for parametric procedures was in question. In addition, the level of measurement employed within the study (ordinal scaling) also contributed to the decision to utilize nonparametric techniques.

Two-sample Wilcoxon tests (also referred to as the Mann-Whitney test) were used to compare the means of two groups. The groups that were compared included respondents within 2-year and 4-year institutions, and individuals who had merchandising experience outside of education with those who had no merchandising experience.

The nonparametric Kruskal-Wallis one-way ANOVA (H) was utilized to examine differences in relation to age, number of years employed in a higher education position, academic rank and the size of institutions (based on number of full-time faculty and average number of graduates per year). As a follow-up procedure to the Kruskal-Wallis, multiple pairwise comparisons were calculated to determine which pairs of populations differed. The procedure identified in Conover (1980, p. 231) was repeated for all pairs of populations.

Sample Characteristics - Respondents

A demographic profile of respondents revealed that over 96% of the educators were female and 78.7% indicated they currently taught a merchandising or merchandising related course. In addition, almost 63% indicated they had been employed in a merchandising position, 66.8% were employed for less than three years.

Information collected on three institutional questions revealed that more than 88% of the respondents were employed in a four-year educational institution, a large percentage (83.2%) were employed in departments with less than five full-time faculty. In addition, 62.7% of the institutions graduate less than 40 students each year.

Findings

To address the research questions posed prior to the implementation of the study, the instructional/cognitive level was analyzed relative to several demographic variables. The findings related to each of the research questions are presented to facilitate in understanding the influence these factors ultimately have on undergraduate apparel merchandising curriculum.

Differences Between Two-Year and Four-Year Institutions

From an institutional standpoint, differences were examined in the level of importance attributed to select curriculum concepts by faculty in two-year and four-year institutions. Significant differences ($p \leq .01$) were found for only two of the curriculum concepts (See Table XIV). The concepts found to be significantly different among faculty within two-year and four-year institutions included individual figure analysis in relation to apparel selection and color concepts.

Insert Table XIV about here

Institutional Size Based on Two Indicators (Faculty & Students)

Differences in the instructional/cognitive level of select curriculum concepts were explored in relation to the size of the respondent's institution. Two demographic variables (the number of faculty and average number of graduates per year) were used as indicators. Differences among the four response categories for both faculty and students were analyzed using the nonparametric version of the analysis of variance procedure, known as the Kruskal-Wallis test.

In relation to the number of faculty who teach one or more merchandising courses, a significant difference was found for only two of the curriculum concepts (See Table XV). The concepts identified as significantly different included types of display settings and entrepreneurship.

Insert Table XV about here

Pairwise comparisons computed on the two significant curriculum concepts revealed that some faculty groups were significantly different as indicated in Table XVI. The table presents the means of each group as a point of reference for the reader. The rank sum used to compute the pairwise comparisons is also included. The brackets point to rank sums which indicate statistically different groups.

For each of the concepts, three pairs of respondent groups were found to be significantly different. For both concepts, significant differences were identified between the two categories representing the largest departments (6 - 8 faculty and 9 or more faculty).

Insert Table XVI about here

Similarly, there were differences in the instructional/cognitive level assigned to 13 concepts when institutions were compared based on the average number of graduates per year. Of all of the variables analyzed, the largest number of concepts (13, 12.7% of the total number of concepts) were identified as significantly different using the Kruskal-Wallis procedure (See Table XV). The concepts that were significantly different included accessories production, visual merchandising display techniques, principles of design, fabric characteristics, fashion show production, cyclical fashion trends, price/quality relationship, elements of design, types of display settings, care labeling, individual figure analysis in relation to apparel selection, color concepts and floor plan designs.

Further analysis (pairwise comparisons) of the 13 concepts ($p \leq .01$) revealed a number of differences among respondent groups. Table XVII presents the means and rank sums of each group with brackets pointing to the rank sums

which were significantly different from each other. For many (11) of the concepts the institutions graduating the smallest number of students (less than 20 students) were significantly different from the institutions graduating the next largest category (21 - 40 students). For eight of the concepts, significant differences were found between institutions with the smallest number of graduates (1 - 20) and those institutions graduating between 41 - 60 students each year. Other pairs of respondents were significantly different; however, no prevalent pattern was identified.

Insert Table XVII about here

Differences Based on Experience Outside Higher Education

Research question three examined differences in the instructional/cognitive level of select curriculum concepts based on the respondent's experience outside higher education. The two-sample Wilcoxon procedure was used to analyze data from two groups of respondents (individuals with merchandising experience outside of higher education and individuals with no merchandising experience outside of higher education).

The results of the study revealed that there were significant differences ($p < .01$) in regard to seven concepts. The concepts identified as significantly

different were historic textiles/costume, visual merchandising display techniques, forecasting demand, stockturn, merchandise assortments, fashion show production, and floor plan designs (See Table XIV).

Demographic Variables and Their Impact on the Instructional/ Cognitive Level

Differences in the instructional/cognitive level of select apparel merchandising curriculum concepts were examined by evaluating several demographic dimensions such as the respondent's age, number of years employed in a higher education position, and academic rank. The Kruskal-Wallis ANOVA procedure was used to analyze all three remaining demographic variables.

In relation to age, only one curriculum concept (consumption patterns) was found to be significantly different among respondent age groups (See Table XV). Table XVIII indicates the results of pairwise comparisons among the five respondent categories. Two pairs were found to be significantly different (30 years and under vs. 41 - 50 and 41 - 50 vs. 61 and older, as indicated by the brackets).

Insert Table XVIII about here

Using the Kruskal-Wallis procedure, the 102 curriculum

concepts were also examined in relation to the number of years the respondents were employed in a higher education position. The instructional/cognitive level was found to be significantly different for three of the curriculum concepts which included mergers & acquisitions, workplace issues & trends, and industrial sewing equipment (See Table XV).

Further analysis of the data related to the number of years the respondents were employed in a higher education position was conducted. Pairwise comparisons among the five response categories revealed significant differences among respondent groups (See Table XIX). For variable 99 (industrial sewing equipment) the pairwise comparisons indicated that the respondents who had been employed for less than two years were significantly different from all of the other respondent categories.

Insert Table XIX about here

Finally, the last demographic variable examined for differences among respondents in relation to the instructional/cognitive level was academic rank. For academic rank, six possible response options were provided (lecturer, instructor, assistant professor, associate professor, professor, and other). Two significant differences were identified. The concepts about which faculty at various levels of academic rank differ

significantly were workplace issues and trends and industrial sewing equipment (See Table XV).

Table XX presents the mean and rank sum for each group. Pairwise comparisons were computed for all pairs related to each of the six response categories. The brackets point to the rank sums that were significantly different. For both concepts, significant differences were identified between the lecturer vs. professor category and the lecturer vs. other category. For each of the concepts other differences were found between groups of respondents; however, the results would indicate that the differences are concept specific.

Insert Table XX about here

Discussion

From program to program, the concepts which make up an institution's apparel merchandising curriculum are many and varied. Historically, a number of researchers have evaluated the concepts/competencies/elements relevant to the apparel merchandising curriculum and have made recommendations concerning those concepts which should be emphasized or deleted from the curriculum. According to Pace (1985) there are no identical twins in relation to the courses which constitute a given program within a higher education institution. Therefore, each institution must

evaluate its individual curriculum and develop a program unique to its institutional mission and vision.

The study was designed to look beyond the level of importance of concepts and to evaluate the instructional/ cognitive level of select apparel merchandising curriculum concepts based on various demographic variables. The evaluation of curriculum concepts with respect to instructional/cognitive level emphasize more of an assessment orientation. Data obtained through this type of survey instrument may be translated directly into an assessment instrument to assess educational outcomes.

At the outset of the study, relevant concepts identified from previous literature were included on the data gathering instrument. It should be noted that fundamental underlying concepts were included; however, the listing of concepts was not intended to be all-inclusive. Rather it served as an initial guide in studying the diverse outcomes/competencies within the field of apparel merchandising.

Bloom's Taxonomy of Educational Objectives (1956) provided the framework for evaluating the instructional/ cognitive level of curriculum concepts. Although not a perfect hierarchically ordered taxonomy of the cognitive domain, Bloom's (1956) taxonomy has been used extensively by educators for many years to identify and ultimately test educational objectives/outcomes.

The results of the study identify significant

differences in the instructional/cognitive level of curriculum concepts among various groups of respondents. However, for a large percentage of the concepts, there were no significant differences among respondent groups. Since no previous research has examined the instructional/ cognitive level of select curriculum concepts, it is not possible to compare the results of this study with previous studies.

One natural conclusion from the study would be to identify the instructional/cognitive level of concepts and to advocate that those concepts be included within the curriculum at the stated cognitive level (knowledge, comprehension, application, analysis, synthesis and evaluation). However, it is not the intent of the researchers to prescribe an optimum cognitive level at which concepts must be included in the curriculum as a mechanism to "clone" apparel merchandising programs.

The intent of the study was to provide institutions with a mechanism to evaluate the instructional/cognitive level at which concepts may be included within the curriculum. In addition, it is hoped that the results of the study will increase thought, discussion and reflection among educators as to the role instructional/cognitive information play in curriculum decisions and ultimately the assessment movement. McClain (1987) indicated that in a competitive higher education environment, those institutions with proof of student learning will have a

solid foundation to ensure future stability. Therefore, educators must not only be concerned with what they teach but also how they teach. Evaluation of both the level of importance and the instructional/cognitive level of select apparel merchandising curriculum concepts provides unique and relevant information.

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TABLE XIV

SIGNIFICANT CURRICULUM CONCEPTS BASED ON THE WILCOXON PROCEDURE

ID	Variable	x^2	p Value[a]
Type of Institution[b]			
V83	Figure Analysis	10.0360	0.0015
V84	Color Concepts	8.8652	0.0029
Merchandising Experience Outside of Higher Education[c]			
V3	Historic Tex/Costume	9.2650	0.0023
V10	Visual Merch. Techniques	8.0048	0.0047
V18	Forecasting Demand	8.5060	0.0035
V25	Stockturn	14.2140	0.0002
V32	Merchandise Assortments	12.1270	0.0005
V34	Fashion Show Production	7.9832	0.0047
V91	Floor Plan Designs	7.1761	0.0074

[a] $p < .01$

[b] Respondents were from two-year and four-year institutions (df = 1).

[c] Respondents were categorized as either having merchandising/industry experience outside of higher education or not having industry experience (df = 1).

TABLE XV

SIGNIFICANT CURRICULUM CONCEPTS BASED ON THE KRUSKAL-WALLIS PROCEDURE

ID	Variable	x^2	p Value[a]
Number of Faculty Who Teach a Merchandising Course[b]			
V63	Types of Display Settings	15.7340	0.0013
V97	Entrepreneurship	11.8720	0.0078
Average Number of Students Who Graduate[c]			
V4	Accessories Production	12.1060	0.0070
V10	Visual Merch. Techniques	22.2150	0.0001
V11	Principles of Design	13.5220	0.0036
V29	Fabric Characteristics	12.3920	0.0062
V34	Fashion Show Production	15.9880	0.0011
V35	Cyclical Fashion Trends	12.0440	0.0072
V41	Price-Quality Relationship	15.8980	0.0012
V56	Elements of Design	14.8570	0.0019
V63	Types of Display Settings	18.6380	0.0003
V74	Care Labeling	12.1370	0.0069
V83	Figure Analysis	22.3550	0.0001
V84	Color Concepts	22.1690	0.0001
V91	Floor Plan Designs	13.4620	0.0037
Age of Respondents[d]			
V87	Consumption Patterns	17.4710	0.0016
Number of Years Employed in Higher Education[e]			
V52	Mergers & Acquisitions	13.3090	0.0099
V71	Workplace Issues/Trends	16.3330	0.0026
V99	Ind. Sewing Equipment	17.0680	0.0019
Academic Rank[f]			
V71	Workplace Issues/Trends	19.5930	0.0015
V99	Ind. Sewing Equipment	17.4540	0.0037

[a] $p < .01$

[b] The number of faculty in each institution were divided into four categories (1 - 2 faculty, 3 - 5 faculty, 6 - 8 faculty and institutions with over 9 faculty) (df = 3).

[c] The average number of students who graduate each year from an institution were divided into four categories (1 - 20 students, 21 - 40 students, 41 - 60 students and those institutions who graduate over 60 students) (df = 3).

[d] The age of respondents were divided into five categories (30 years or younger, 31 - 40, 41 - 50, 51 - 60, 61 or older) (df = 4).

[e] The number of years employed in a higher education institution were divided into five categories (under 2 years, 2 - 4, 5 - 9, 10 - 14, and over 15 years) (df = 4).

[f] Six academic rank categories were provided on the questionnaire (Lecturer, Instructor, Assistant Professor, Associate Professor, Professor and other) (df = 5).

TABLE XVI

PAIRWISE COMPARISONS BASED ON THE NUMBER OF FULL-TIME FACULTY WHO TEACH A MERCHANDISING COURSE

Number	Variable		N	Mean	Rank Sum[a]
V63	Types of Display Settings				
		R1[b]	110	1.8818	197.3273
		R2	177	1.6780	169.2062
		R3	40	1.5250	149.9125
		R4	19	1.3684	125.2105
V97	Entrepreneurship				
		R1	106	2.1698	181.1509
		R2	180	2.1000	172.7000
		R3	40	2.2000	184.7500
		R4	19	1.5789	105.5210

[a] The brackets point to the significantly different groups.

[b] R1 = 1 - 2 Faculty Members, R2 = 3 - 5, R3 = 6 - 8, R4 = 9 or More Faculty Members.

TABLE XVII

PAIRWISE COMPARISONS BASED ON THE NUMBER OF STUDENTS WHO GRADUATE FROM A MERCHANDISING PROGRAM EACH YEAR

Number	Variable		N	Mean	Rank Sum[a]
V4	Accessories Production				
		R1[b]	101	1.5148	183.1040
		R2	112	1.4554	175.4598
		R3	75	1.2133	144.3133
		R4	47	1.2979	155.5638
V10	Visual Merchandising Techniques				
		R1	102	2.3137	186.4804
		R2	113	2.3540	191.0088
		R3	77	2.0649	152.8961
		R4	51	1.8824	129.7647
V11	Principles of Design				
		R1	101	2.3960	190.3564
		R2	112	2.2857	176.9955
		R3	76	2.1053	155.6118
		R4	51	1.9804	139.0980
V29	Fabric Characteristics				
		R1	102	2.4020	184.0000
		R2	113	2.3805	180.7788
		R3	77	2.2857	169.2468
		R4	51	1.9608	132.7059
V34	Fashion Show Production				
		R1	101	1.9604	192.4356
		R2	110	1.8091	173.3909
		R3	75	1.6533	152.6400
		R4	51	1.5294	137.1765
V35	Cyclical Fashion Trends				
		R1	100	2.4300	191.4900
		R2	112	2.2678	171.1116
		R3	76	2.1710	160.0066
		R4	51	2.0196	140.3137
V41	Price-Quality Relationship				
		R1	102	2.3824	170.3235
		R2	112	2.5446	194.0446
		R3	77	2.3377	167.0909
		R4	52	2.1154	135.0769

TABLE XVII (Continued)

V56	Elements of Design				
		R1	103	2.2524	195.2233
		R2	112	2.0536	171.6518
		R3	76	1.9474	159.4474
		R4	50	1.7600	137.2000
V63	Types of Display Settings				
		R1	102	1.8529	190.6422
		R2	112	1.8125	185.1027
		R3	77	1.5065	145.9545
		R4	51	1.4902	141.9118
V74	Care Labeling				
		R1	101	1.9820	184.5245
		R2	112	1.9464	180.3661
		R3	76	1.7500	157.5855
		R4	50	1.5800	136.3100
V83	Figure Analysis				
		R1	103	2.0777	198.2670
		R2	111	1.8469	174.1216
		R3	75	1.7067	155.8867
		R4	51	1.4706	128.0294
V84	Color Concepts				
		R1	103	2.2039	194.4029
		R2	112	2.1071	182.7188
		R3	76	1.8158	148.8386
		R4	50	1.6800	131.6300
V91	Floor Plan Designs				
		R1	102	1.8432	178.8480
		R2	112	1.9107	189.2009
		R3	77	1.6753	158.1883
		R4	51	1.5294	138.0294

[a] The brackets point to the significantly different groups.

[b] R1 = 1 - 20 Students, R2 = 21 - 40, R3 = 41 - 60, R4 = 61 or More.

TABLE XVIII

PAIRWISE COMPARISONS BASED ON AGE

Number	Variable		N	Mean	Rank Sum[a]
V87	Consumption Patterns				
		R1[b]	14	2.0000	117.9643
		R2	102	2.4412	179.7402
		R3	138	2.5580	193.9384
		R4	79	2.3164	163.3164
		R5	19	2.1053	130.3947

[a] The brackets point to the significantly different groups.

[b] R1 = 30 Years or Younger, R2 = 31 - 40, R3 = 41 - 50, R4 = 51 - 60, R5 = 61 or Older.

TABLE XIX

PAIRWISE COMPARISONS BASED ON THE NUMBER OF YEARS EMPLOYED IN A HIGHER EDUCATION INSTITUTION

Number	Variable		N	Mean	Rank Sum[a]
V52	Mergers & Acquisitions				
		R1[b]	9	2.3333	259.8333
		R2	37	1.9189	203.2037
		R3	69	1.7971	186.2319
		R4	80	1.6375	165.3186
		R5	158	1.6159	163.5981
V71	Workplace Issues/Trends				
		R1	9	2.0000	194.8889
		R2	36	1.5000	132.0833
		R3	70	2.0000	192.4428
		R4	80	1.7125	156.8750
		R5	158	1.9684	189.5633
V99	Ind. Sewing Equipment				
		R1	9	1.6667	253.0000
		R2	34	1.0882	151.8676
		R3	68	1.2941	180.5220
		R4	80	1.2500	179.6375
		R5	157	1.1911	169.6752

[a] The brackets point to the significantly different groups.

[b] R1 = Under Two Years, R2 = 2 - 4 Years, R3 = 5 - 9, R4 = 10 - 14, R5 = 15 Years or Over.

TABLE XX

PAIRWISE COMPARISONS BASED ON ACADEMIC RANK

Number	Variable		N	Mean	Rank Sum[a]
V71	Workplace Issues & Trends				
		R1[b]	11	1.4545	125.8182
		R2	42	1.8095	168.0476
		R3	132	1.9242	180.9242
		R4	100	1.6900	153.1050
		R5	54	2.1481	207.9722
		R6	11	2.3636	232.7272
V99	Ind. Sewing Equipment				
		R1	11	1.0910	154.6364
		R2	41	1.1219	156.5608
		R3	129	1.2173	178.4884
		R4	98	1.1633	165.3265
		R5	54	1.2407	174.6574
		R6	12	1.7500	242.2083

[a] The brackets point to the significantly different groups.

[b] R1 = Lecturer, R2 = Instructor, R3 = Assistant Professor, R4 = Associate Professor, R5 = Professor, R6 = Other.

CHAPTER VII

SUMMARY, IMPLICATIONS AND RECOMMENDATIONS

In recent years, educational institutions have increasingly been called upon to substantiate educational learning and outcomes. As a result, assessment activities arrived as a driving force in the arena of higher education. Due to this increased interest in assessment, continual research is needed which evaluates educational outcomes.

The purpose of the current study was to build upon the literature foundations related to higher education assessment in the United States by focusing on apparel merchandising curriculum. This chapter includes information relevant to the underlying ramifications of the study in today's higher education environment. The chapter is organized in three sections: a) summary of findings, b) implications of the study, and c) recommendations for future study. The first section includes a brief summary of the procedures of the study and findings highlighted in the previous three chapters. Section two takes a broad perspective in relation to apparel merchandising curriculum and assessment initiatives. Finally, the last section of the chapter will offer recommendations for future study.

Summary of Findings

A literature review methodology procedure was used to identify those concepts/competencies that are relevant for apparel merchandising graduates in today's society. One hundred two curriculum concepts were ultimately identified for inclusion on the final survey instrument. After a pilot test, the instrument was mailed to 607 active members of the Association of College Professors of Textiles and Clothing. Respondents were asked to identify the level of importance and instructional/cognitive level of each curriculum concept. Bloom's Taxonomy of Educational Objectives (1956) served as the basis for identification of the instructional/cognitive level of each concept. Usable data were received from 361 respondents.

The data were subsequently analyzed and presented in three chapters (four, five, and six). Each of the three chapters focused on a particular component of the research.

The development of a table of specifications based on both level of importance and instructional/cognitive level was the basic objective of chapter four. The 102 curriculum concepts were factor analyzed to provide a mechanism for classifying the concepts into a table of specifications. The table of specifications and weighting procedure were presented as a guide to assist faculty in developing summative assessment instruments.

Although a number of researchers have evaluated

apparel merchandising/clothing and textiles curriculum, no research to date has evaluated the instructional/cognitive level of select curriculum concepts. Therefore, the table of specifications may also stimulate additional discussion and study concerning the role of instructional/cognitive level data in higher education curriculum development and assessment.

Chapter five focused specifically on the level of importance component of the questionnaire. The results were analyzed using nonparametric statistical procedures (Wilcoxon and Kruskal-Wallis tests) whereby comparisons were made based on both institutional and personnel dimensions. A similar type of analysis was conducted for the instructional/cognitive level and the results were presented in chapter six.

Within chapters five and six, no attempt was made to compare the results obtained through the data gathering instrument (level of importance and instructional/cognitive level). Of interest to educators/administrators may be an examination of similarities found in the results. The concepts about which faculty at various institutions differ significantly are identified and summarized in Table XXI. Results from both the level of importance and instructional/cognitive level analysis are included in the table.

Various demographic variables (type of institution, experience outside of higher education, number of faculty

TABLE XXI

SUMMARY OF THE DIFFERENCES IN LEVEL OF IMPORTANCE AND INSTRUCTIONAL/COGNITIVE LEVEL OF CURRICULUM CONCEPTS BASED ON VARIOUS DEMOGRAPHIC VARIABLES

Differences in Level of Importance	Differences in Instructional/Cognitive Level
Type of Institution	
Figure Analysis*	Figure Analysis*
Color Concepts*	Color Concepts*
Global Interdependence	
Fashion Show Production	
Mergers and Acquisitions	
Non-Store Retailing	
Experience Outside of Higher Education	
Merchandise Assortments*	Merchandise Assortments*
Textile Testing Procedures	Historic Textiles/Costume
	Visual Merch. Techniques
	Forecasting Demand
	Stockturn
	Fashion Show Production
	Floor Plan Designs
Number of Faculty Teaching A Merchandising Course	
Types of Display Settings*	Types of Display Settings*
Entrepreneurship*	Entrepreneurship*
Fashion Show Production	
Layout/Design/Render Ads	
Fashion Designers	
Accessories Production	
Average Number of Graduates	
Accessories Production*	Accessories Production*
Visual Merchandising Tech.*	Visual Merchandising Tech.*
Principles of Design*	Principles of Design*
Fashion Show Production*	Fashion Show Production*
Elements of Design*	Elements of Design*
Types of Display Settings*	Types of Display Settings*
Care Labeling*	Care Labeling*
Figure Analysis*	Figure Analysis*
Color Concepts*	Color Concepts*
Public Relations	Fabric Characteristics
Theories of Fashion	Cyclical Fashion Trends
Fashion Designers	Price/Quality Relationship
Apparel Terminology	Floor Plan Designs
Garment Fitting/Alteration	

TABLE XXI (Continued)

Age of Respondents	
Ind. Sewing Equipment	Consumption Patterns
Number of Years Employed in Higher Education	
Ethical Resp. of Firms	Mergers and Acquisitions
Textile Testing Procedures	Workplace Issues & Trends
Leadership Qualities	Ind. Sewing Equipment
Academic Rank of Respondents	
Ethical Resp. of Firms	Workplace Issues & Trends
Color Concepts	Ind. Sewing Equipment
Floor Plan Designs	

* Significant concepts for both Level of Importance and Instructional/Cognitive Level.

teaching a merchandising course, average number of students who graduate each year, age of respondents, number of years employed in a higher education institution, and academic rank) were used as a means of identifying unique groups of respondents. Based on each of the demographic variables, the concepts about which faculty at various institutions differ significantly for both level of importance and instructional/cognitive level were identified on Table XXI with an asterisk (*).

A total of 14 curriculum concepts were included in the comparison. The concepts included were figure analysis, color concepts, merchandising assortments, types of display settings, entrepreneurship, visual merchandising display techniques, principles of design, fashion show production, and elements of design. Three of the concepts (individual figure analysis, color concepts, and types of display settings) were identified as being significant for more than one demographic variable.

Implications of the Study

In a time of increased accountability in higher education institutions, programs/departments are having to validate what and how they teach and ultimately what students learn. Higher education in general is often criticized for not challenging students toward higher levels of cognitive ability. The critics argue that far to often course materials are presented and evaluated at low

levels of cognitive capacity (knowledge and comprehension). If this is true, how can educational institutions/programs prepare students for the future? How can students become critical/creative thinkers?

The role of the current study was to raise the awareness level of educators toward the importance of educational outcomes and curriculum evaluation. The educational preparation of apparel merchandising students should not only focus on which concepts to include in the curriculum, but also at what instructional/cognitive level to include the concepts. With the natural progression of subject-matter, it would not be unusual for some concepts to be included within the curriculum at more than one cognitive level. However, as students are prepared for the future, educators must operationalize all levels of cognitive ability (knowledge, comprehension, application, synthesis, analysis and evaluation) in classroom preparation and evaluation procedures.

As the world evolves and individuals become increasingly entangled in a global marketplace, technological innovations, and the exploration of perennial social problems, individuals who can operate at high levels of cognitive competence will be in great demand. For apparel merchandising students to be viable into the 21st century, consideration must be afforded to the cognitive level at which concepts are taught within the curriculum.

Recommendations for Further Study

Based on the results of the study, a number of recommendations may be identified for further study:

1. In a recent study related to curriculum development, Fair, Hamilton & Norum (1990) identified the groups/individuals who have traditionally been the arbiters of curriculum direction in higher education programs. Although they cautioned surveying a particular client group with a short-term goal orientation and basing fundamental curriculum changes on the findings, the current study could be broadened to include additional populations (graduates, administrators and/or employers). Since no study to date has examined the instructional/cognitive level at which concepts are taught within the curriculum, a more expansive population base may be a viable research direction. If the study were broadened, the instructional/cognitive component of the questionnaire may need to be simplified to facilitate in the ease of understanding by respondents who may not be familiar with Bloom's (1956) taxonomy.

2. Due to the evaluative nature of the study, data must be collected periodically to develop a longitudinal foundation for undergraduate apparel merchandising curriculum to ensure that relevant concepts have been identified and assessed. Since the basic aim of an evaluation study is to determine the worth of a thing, the study should be replicated on a regular basis.

3. The table of specifications and weighting criteria developed in Chapter IV may be advanced to include the development of a summative assessment instrument based upon underlying curricula foundations. Although the development of summative assessment instruments may not be popular in some academic circles, the results of the study and other studies could be aggregated into an assessment instrument for apparel merchandising majors.

4. Although 102 concepts were identified from previous literature for inclusion within the study (the study was not intended to be all inclusive) additional concepts relevant to a particular campus may be viable for inclusion.

5. Bloom's (1956) Taxonomy of Educational Objectives was utilized within the confines of the study, however, other taxonomies of the cognitive domain could be evaluated in relation to apparel merchandising curriculum.

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APPENDICES

APPENDIX A

DRESSEL PROGRAM DEVELOPMENT MODEL

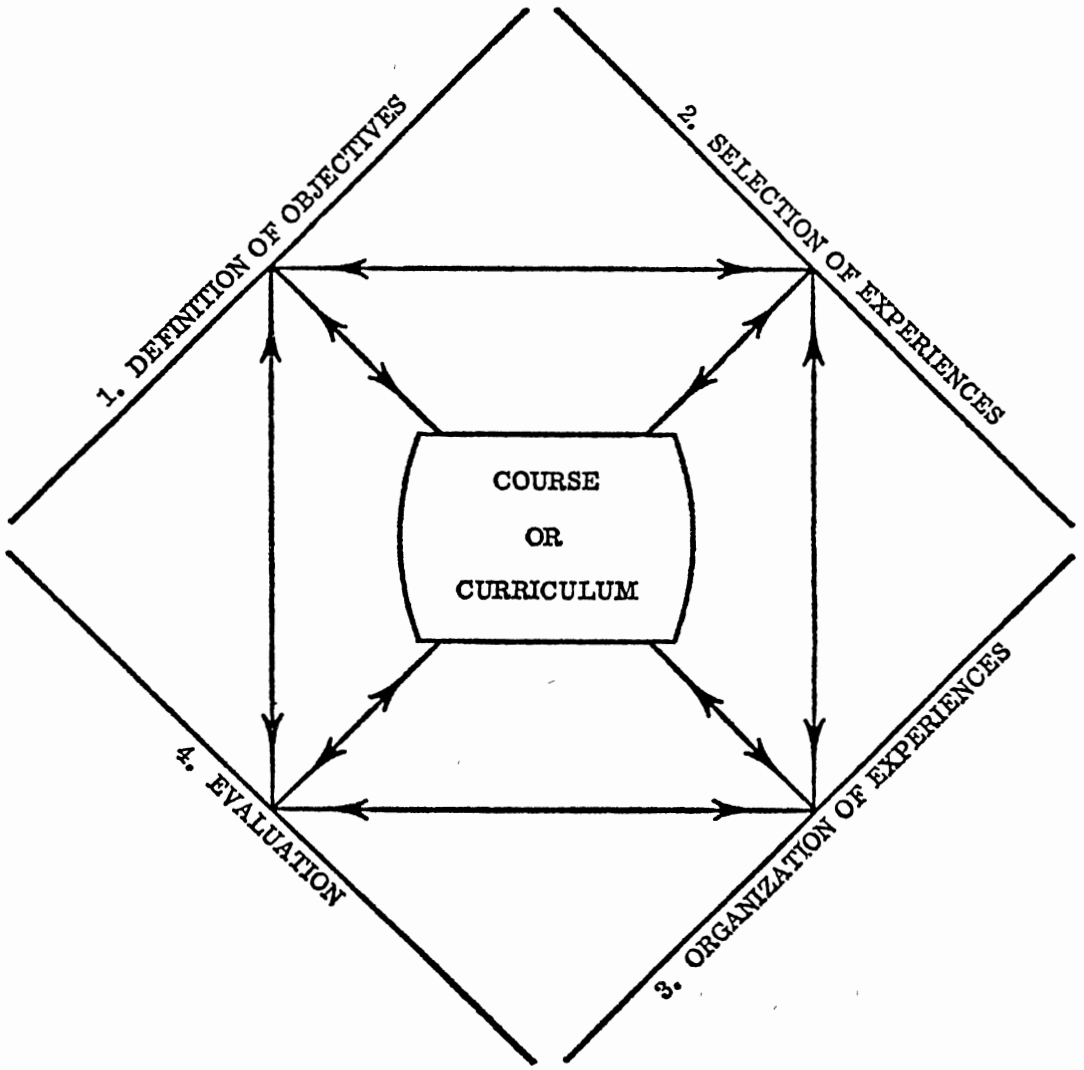


Figure 1

Dressel Program Development Model

APPENDIX B

BLOOM'S TAXONOMY OF EDUCATIONAL OBJECTIVES

The following outline is a condensed version of the taxonomy for the cognitive domain (Bloom, 1956):

1.00 Knowledge
...involves the recall of specifics and universals, the recall of methods and processes, or the recall of a pattern, structure, or setting.
1.10 Knowledge of specifics
1.11 Knowledge of terminology
1.12 Knowledge of specific facts
1.20 Knowledge of ways and means of dealing with specifics
1.21 Knowledge of conventions
1.22 Knowledge of trends and sequences
1.23 Knowledge of classifications and categories
1.24 Knowledge of criteria
1.25 Knowledge of methodology
1.30 Knowledge of the universals and abstractions in a field
1.31 Knowledge of principles and generalizations
1.32 Knowledge of theories and structure

2.00 Comprehension
...represents the lowest level of understanding
2.10 Translation
2.20 Interpretation
2.30 Extrapolation

3.00 Application
The use of abstractions in particular and concrete situation.

4.00 Analysis
The breakdown of a communication into its constituent elements or parts such that the relative hierarchy of
ideas expressed are made explicit.
4.10 Analysis of elements
4.20 Analysis of relationships
4.30 Analysis of organizational principles

5.00 Synthesis
The putting together of elements and parts so as to form a whole.
5.10 Production of a unique communication
5.20 Production of a plan, or proposed set of operations
5.30 Derivation of a set of abstract relations

6.00 Evaluation
Judgments about the values of material and methods for given purposes.
6.10 Judgments in terms of internal evidence
6.20 Judgments in terms of external criteria

APPENDIX C

QUESTIONNAIRE/CORRESPONDENCE

Initial Cover Letter

Oklahoma State University
DEPARTMENT OF DESIGN, HOUSING & MERCHANDISING
College of Home Economics

STILLWATER, OKLAHOMA 74078-0337
HOME ECONOMICS 431
(405) 744-5035

March 11, 1991

Dear Colleague:

As we approach the 21st century, higher education is faced with increasing challenges in maintaining student enrollments, securing adequate financing and sustaining quality programs. Educational accountability and assessment have become key issues and concerns in terms of the future impact of higher education upon society. By continually assessing and monitoring undergraduate curriculum, higher education institutions may be better prepared to meet the challenges of the 21st century. The Design, Housing and Merchandising Department at Oklahoma State University is conducting a study to: 1) determine the level of importance of concepts which should be taught within the undergraduate apparel merchandising* curriculum; and 2) indicate the desirable instructional/cognitive level for each curriculum concept.

You are among a small number of ACPTC members selected at random to participate in the study. In order that the results truly represent the ACPTC membership, it is important that each questionnaire be completed and returned. Please mark the appropriate response for each item and include any comments you may have. We estimate that it should take approximately 25 minutes of your time.

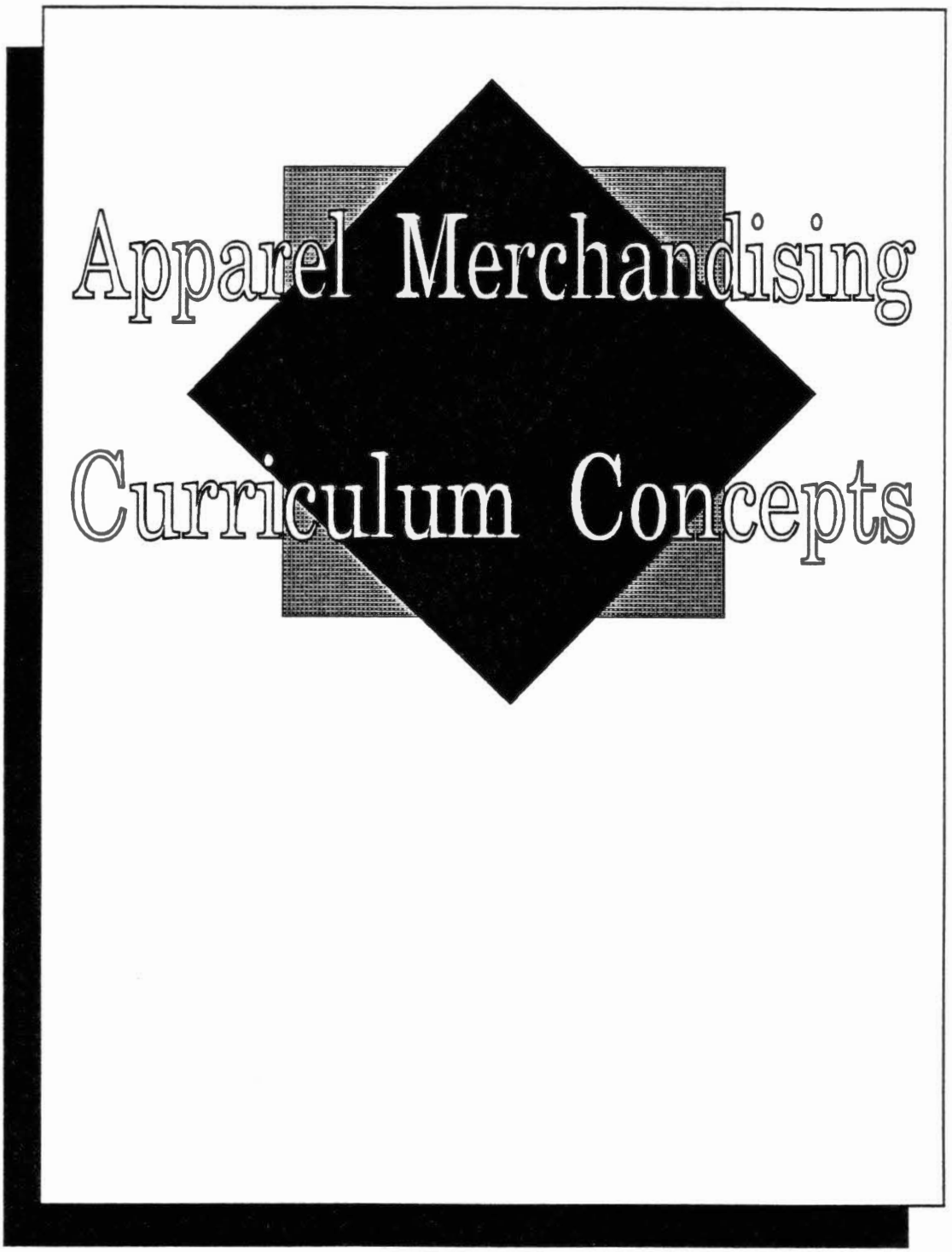
You may be assured of complete confidentiality. The questionnaire has been precoded to facilitate internal processing procedures. Please enclose the completed questionnaire in the self-addressed stamped envelope and return by March 28, 1991. The return of your completed questionnaire will constitute your informed consent to participate in the study. Thank you for your valuable time in assisting in this important venture.

Sincerely,

Karen L. Ringenberg, Graduate Associate Grovalynn Sisler, Professor and Head

*Includes programs with titles such as fashion merchandising, apparel marketing, apparel merchandising, apparel retailing, etc.

Questionnaire



Apparel Merchandising Curriculum Concepts

Are you currently employed full-time in a post secondary education position?

_____ yes (Please continue with instructions.)

_____ no (If no, please return the questionnaire in the enclosed envelope. Thank you for your time.)

Instructions

Following these instructions is a list of curriculum concepts which have been delineated from current literature. The concepts are randomly organized.

Please respond to each curriculum concept in two ways.

First, circle the number in the **left** column which reflects the "level of importance" you believe the concept should have within the undergraduate apparel merchandising curriculum. Responses range from 1 (not important) to 7 (extremely important).

Second, circle the number in the **right** column which reflects the highest "instructional/cognitive level" at which the concept should be taught.

Lowest Level 1 —— Knowledge - Involves the recall of specifics (specific facts, theories, principles, trends, terminology or categories).

2 — Comprehension - Represents the lowest level of understanding such as translation, interpretation or extrapolation.

2 — Application - Students would be capable of using abstractions in particular and concrete situations.

Highest Level 3 —— Analysis - The breakdown of communication into its constituent elements or parts.

3 — Synthesis - Pulling together of elements and parts so as to form a whole.

3 — Evaluation - Quantitative and qualitative judgements about which materials and methods satisfy criteria.

Level of Importance
Not Important 1 2 3 4 5 6 7 Extremely Important

Instructional/Cognitive Level
1 - Knowledge
2 - Comprehension/Application
3 - Analysis/Synthesis/Evaluation

1	2	3	4	5	6	7	1.	ethical responsibilities of firms	1 2 3
1	2	3	4	5	6	7	2.	production of natural and man-made fibers	1 2 3
1	2	3	4	5	6	7	3.	historic textiles/costume	1 2 3
1	2	3	4	5	6	7	4.	accessories production	1 2 3
1	2	3	4	5	6	7	5.	import/export regulations	1 2 3
1	2	3	4	5	6	7	6.	consumer demographic variables	1 2 3
1	2	3	4	5	6	7	7.	cooperative advertising	1 2 3
1	2	3	4	5	6	7	8.	industrial apparel production processes	1 2 3
1	2	3	4	5	6	7	9.	personnel management	1 2 3
1	2	3	4	5	6	7	10.	visual merchandising display techniques	1 2 3
1	2	3	4	5	6	7	11.	principles of design	1 2 3
1	2	3	4	5	6	7	12.	quick response techniques (JIT delivery, EDI, etc.)	1 2 3
1	2	3	4	5	6	7	13.	trade publications	1 2 3
1	2	3	4	5	6	7	14.	industry pattern making techniques	1 2 3
1	2	3	4	5	6	7	15.	global sourcing of merchandise	1 2 3
1	2	3	4	5	6	7	16.	basic garment construction techniques	1 2 3

Level of Importance Not Important 1 2 3 4 5 6 7 Extremely Important		**Instructional/Cognitive Level** 1 - Knowledge 2 - Comprehension/Application 3 - Analysis/Synthesis/Evaluation	
1 2 3 4 5 6 7	17.	supervise employee performance	1 2 3
1 2 3 4 5 6 7	18.	forecasting demand for merchandise	1 2 3
1 2 3 4 5 6 7	19.	vendor terms (discounts, dating and transportation)	1 2 3
1 2 3 4 5 6 7	20.	global interdependence	1 2 3
1 2 3 4 5 6 7	21.	consumer psychographic variables	1 2 3
1 2 3 4 5 6 7	22.	private label programs	1 2 3
1 2 3 4 5 6 7	23.	customer service	1 2 3
1 2 3 4 5 6 7	24.	inventory shrinkage control techniques	1 2 3
1 2 3 4 5 6 7	25.	stockturn	1 2 3
1 2 3 4 5 6 7	26.	push/pull strategies	1 2 3
1 2 3 4 5 6 7	27.	marketing research	1 2 3
1 2 3 4 5 6 7	28.	made in the USA campaign	1 2 3
1 2 3 4 5 6 7	29.	fabric characteristics (use and care)	1 2 3
1 2 3 4 5 6 7	30.	social responsibilities of firms	1 2 3
1 2 3 4 5 6 7	31.	providing an environmentally safe workplace	1 2 3
1 2 3 4 5 6 7	32.	merchandise assortments (basic & fashion goods) consistent with store image	1 2 3

Level of Importance Not Important 1 2 3 4 5 6 7 Extremely Important		**Instructional/Cognitive Level** 1 - Knowledge 2 - Comprehension/Application 3 - Analysis/Synthesis/Evaluation	
1 2 3 4 5 6 7	33.	promotional media	1 2 3
1 2 3 4 5 6 7	34.	fashion show production	1 2 3
1 2 3 4 5 6 7	35.	cyclical nature of fashion trends	1 2 3
1 2 3 4 5 6 7	36.	fiber processing stages	1 2 3
1 2 3 4 5 6 7	37.	production automation (CAD-CAM)	1 2 3
1 2 3 4 5 6 7	38.	forms of business ownership	1 2 3
1 2 3 4 5 6 7	39.	fashion sketching and illustration	1 2 3
1 2 3 4 5 6 7	40.	layout, design and rendering for advertising	1 2 3
1 2 3 4 5 6 7	41.	price-quality relationship in apparel construction	1 2 3
1 2 3 4 5 6 7	42.	designing for the mass market	1 2 3
1 2 3 4 5 6 7	43.	direct mail techniques (catalogs)	1 2 3
1 2 3 4 5 6 7	44.	cultural diversity	1 2 3
1 2 3 4 5 6 7	45.	computers in retail buying	1 2 3
1 2 3 4 5 6 7	46.	global environmental concerns	1 2 3
1 2 3 4 5 6 7	47.	public relations/publicity	1 2 3
1 2 3 4 5 6 7	48.	ready-to-wear sizing specifications	1 2 3
1 2 3 4 5 6 7	49.	consumer decision making process	1 2 3

Level of Importance
Not Important 1 2 3 4 5 6 7 Extremely Important

Instructional/Cognitive Level
1 - Knowledge
2 - Comprehension/Application
3 - Analysis/Synthesis/Evaluation

Level of Importance		Instructional/Cognitive Level
1 2 3 4 5 6 7	50. yarn types	1 2 3
1 2 3 4 5 6 7	51. international apparel markets	1 2 3
1 2 3 4 5 6 7	52. mergers and acquisitions	1 2 3
1 2 3 4 5 6 7	53. theories of fashion	1 2 3
1 2 3 4 5 6 7	54. federal legislation affecting the industry (Americans With Disabilities Act, minimum wage laws)	1 2 3
1 2 3 4 5 6 7	55. fashion designers	1 2 3
1 2 3 4 5 6 7	56. elements of design	1 2 3
1 2 3 4 5 6 7	57. role of the regional apparel mart as a service organization	1 2 3
1 2 3 4 5 6 7	58. apparel terminology (basic/fashion/ staple/seasonal)	1 2 3
1 2 3 4 5 6 7	59. non-store retailing (VCR, computer, vending machines)	1 2 3
1 2 3 4 5 6 7	60. fabric finishes	1 2 3
1 2 3 4 5 6 7	61. textile testing procedures	1 2 3
1 2 3 4 5 6 7	62. employee training programs	1 2 3
1 2 3 4 5 6 7	63. types of display settings (realistic, semirealistic, fantasy or abstract)	1 2 3
1 2 3 4 5 6 7	64. role of purchase orders	1 2 3

Level of Importance
Not Important 1 2 3 4 5 6 7 Extremely Important

Instructional/Cognitive Level
1 - Knowledge
2 - Comprehension/Application
3 - Analysis/Synthesis/Evaluation

Level of Importance		Instructional/Cognitive Level
1 2 3 4 5 6 7	65. managing open-to-buy based on sales and stock levels	1 2 3
1 2 3 4 5 6 7	66. vertical integration practices in business	1 2 3
1 2 3 4 5 6 7	67. initiate and close sales	1 2 3
1 2 3 4 5 6 7	68. accessories distribution	1 2 3
1 2 3 4 5 6 7	69. fabrication methods (weaving, knitting, braiding, etc.)	1 2 3
1 2 3 4 5 6 7	70. monitoring of macroenvironmental conditions (economic, political, legal, social, religious)	1 2 3
1 2 3 4 5 6 7	71. workplace issues/trends (AIDS, drugs, discrimination, etc.)	1 2 3
1 2 3 4 5 6 7	72. types of retail advertising (product, institutional)	1 2 3
1 2 3 4 5 6 7	73. sales promotion appropriation	1 2 3
1 2 3 4 5 6 7	74. care labeling	1 2 3
1 2 3 4 5 6 7	75. branded goods vs. private label goods	1 2 3
1 2 3 4 5 6 7	76. effective personal communication techniques	1 2 3
1 2 3 4 5 6 7	77. types of orders (regular, reorders, special)	1 2 3
1 2 3 4 5 6 7	78. garment fitting and alterations	1 2 3

Level of Importance Not Important 1 2 3 4 5 6 7 Extremely Important		**Instructional/Cognitive Level** 1 - Knowledge 2 - Comprehension/Application 3 - Analysis/Synthesis/Evaluation
1 2 3 4 5 6 7	79. flat pattern techniques	1 2 3
1 2 3 4 5 6 7	80. price merchandise (markup, markdown)	1 2 3
1 2 3 4 5 6 7	81. international trading agreements (GATT, MFA)	1 2 3
1 2 3 4 5 6 7	82. merchandise buying (breadth & depth)	1 2 3
1 2 3 4 5 6 7	83. individual figure analysis in relation to apparel selection	1 2 3
1 2 3 4 5 6 7	84. color concepts	1 2 3
1 2 3 4 5 6 7	85. store types (specialty, chain, department)	1 2 3
1 2 3 4 5 6 7	86. point of purchase displays	1 2 3
1 2 3 4 5 6 7	87. consumer consumption patterns	1 2 3
1 2 3 4 5 6 7	88. market segmentation/positioning strategies	1 2 3
1 2 3 4 5 6 7	89. leadership qualities/styles	1 2 3
1 2 3 4 5 6 7	90. computer terminology (modem, hardware, software, mainframe, CPU, DOS, etc.)	1 2 3
1 2 3 4 5 6 7	91. floor plan designs	1 2 3
1 2 3 4 5 6 7	92. role of resident buying offices	1 2 3

Level of Importance
Not Important 1 2 3 4 5 6 7 Extremely Important

Instructional/Cognitive Level
1 - Knowledge
2 -Comprehension/Application
3 - Analysis/Synthesis/Evaluation

1 2 3 4 5 6 7	93. organizational structures in small and large companies	1 2 3
1 2 3 4 5 6 7	94. in-store special events	1 2 3
1 2 3 4 5 6 7	95. decision making skills	1 2 3
1 2 3 4 5 6 7	96. draping techniques	1 2 3
1 2 3 4 5 6 7	97. entrepreneurship	1 2 3
1 2 3 4 5 6 7	98. industry associations (ANSI, FASLINC, SAFLINC, TALC, UCC, VICS)	1 2 3
1 2 3 4 5 6 7	99. industrial sewing equipment	1 2 3
1 2 3 4 5 6 7	100. business activities based on community events	1 2 3
1 2 3 4 5 6 7	101. textile dyeing and printing processes	1 2 3
1 2 3 4 5 6 7	102. procedures for receiving, checking and storing merchandise	1 2 3

Please indicate any additional concepts which should be included.

1 2 3 4 5 6 7	103. _____	1 2 3
1 2 3 4 5 6 7	104. _____	1 2 3
1 2 3 4 5 6 7	105. _____	1 2 3

Please answer the final 10 questions on the following page.

Please circle the number representing your answer.

1. How many years have you been employed in a higher education institutional setting?
   1. under 2 years
   2. 2 - 4 years
   3. 5 - 9 years
   4. 10 - 14 years
   5. over 15 years

2. What academic rank do you currently hold?
   1. lecturer
   2. instructor
   3. assistant professor
   4. associate professor
   5. professor
   6. other, please specify _____

3. Do you currently teach a merchandising or merchandising-related course?
   1. yes
   2. no

4. What is your gender?
   1. male
   2. female

5. What was your age as of January 1, 1991?
   1. 30 years or younger
   2. 31 - 40
   3. 41 - 50
   4. 51 - 60
   5. 61 or older

6. Have you been employed in the merchandising area outside of education?
   1. yes
   2. no (if no, please skip to question 8)

7. If yes, how many years were you employed in a merchandising position outside of education?
   1. under 2 years
   2. 3 - 4 years
   3. 5 - 6 years
   4. 7 - 8 years
   5. over 9 years

8. In what type of institution do you teach?
   1. 2 year
   2. 4 year
   3. other, please specify_____

9. How many full-time faculty teach one or more courses in the merchandising program?
   1. 1 - 2
   2. 3 - 5
   3. 6 - 8
   4. 9 or more

10. What is the average number of students that graduate from your merchandising program each year?

    1. 1 - 20
    2. 21 - 40
    3. 41 - 60
    4. 61 or more

Please add any additional comments:

THANK YOU FOR YOUR PARTICIPATION!!

Please return survey in the enclosed envelope to:

Karen L. Ringenberg
431 Home Economics West
Oklahoma State University
Stillwater, OK 74078-0337

_____ This number is for follow up purposes only.

Follow-Up Postcard

Oklahoma State University

DEPARTMENT OF DESIGN, HOUSING & MERCHANDISING
College of Home Economics

March 19, 1991

Dear Colleague,

Have you completed the questionnaire on **Apparel Merchandising Curriculum Concepts**? If you have returned it, your time and effort are appreciated. If you have not completed the questionnaire, please take a few minutes to complete and mail it today.

Your imput is vital since only selected ACPTC members were included. If you have misplaced your questionnaire, please call (405) 372-1429 and another one will be sent to you immediately. Thank you for your cooperation.

Sincerely,

Karen L. Ringenberg

Follow-Up Cover Letter

OSU

Oklahoma State University

DEPARTMENT OF DESIGN, HOUSING & MERCHANDISING
College of Home Economics

STILLWATER, OKLAHOMA 74078-0337
HOME ECONOMICS 431
(405) 744-5035

April 8, 1991

Dear Colleague,

Recently, we sent you a questionnaire concerning apparel merchandising curriculum concepts. In order for the results to be truly representative, we need your response.

We know you're busy with spring, outdoor planting, preparing taxes, and thoughts of summer vacation, but please take a few minutes to complete and return the questionnaire.

If you have already completed the questionnaire and our letters have crossed in the mail, we appreciate your response. If not, please return it in the stamped envelope by **April 24, 1991.** Once again, thank you for your time.

Sincerely,

Karen L. Ringenberg
Graduate Research Associate

Grovalynn Sisler
Professor and Head

APPENDIX D

TELEPHONE BRIEF FOR NON-RESPONDENTS

FOLLOW-UP INTERVIEW BRIEF FOR NON-RESPONDENTS

Is this _____ ?
(Individual's Name)

This is Karen Ringenberg from Oklahoma State University and I'm conducting a telephone follow-up to a questionnaire that was recently sent to you in the mail. It is estimated that the questions will take no more than five minutes of your time. Would you be willing to participate in this brief follow-up study based on select demographic information?

If NO - Thank you for your time.

If YES - Continue with the first question.

1. Are you currently employed full-time in a higher education position?

    1. Yes
    2. No - Thank you for your time. I am currently interested in those individuals who are employed full-time. Have a nice day.

2. How many years have you been employed in a higher education position?

    1. Under 2 years
    2. 2-4 years
    3. 5-9 years
    4. 10-14 years
    5. Over 15 years

3. What is your current academic rank?

    1. lecturer
    2. Instructor
    3. Assistant Professor
    4. Associate Professor
    5. Professor
    6. Other _____

4. Do you currently teach a merchandising or merchandising related course?

   1. Yes
   2. No

5. Have you been employed in a merchandising position outside of education?

   1. Yes (if yes, continue with question 6)
   2. No (If no, continue to question 7)

6. How many years were you employed in a merchandising position outside of education?

   1. Under 2 years
   2. 2-4 years
   3. 5-6 years
   4. 7-8 years
   5. over 9 years

7. In what type of institution do you currently teach?

   1. 2 year
   2. 4 year
   3. Other _____

8. How many full-time faculty teach one or more of the courses in the merchandising program?

   1. 1 - 2
   2. 3 - 5
   3. 6 - 8
   4. 9 or more

9. What is the average number of students that graduate from your merchandising program each year?

   1. 1 - 20
   2. 21 - 40
   3. 41 - 60
   4. 61 or more

10. Finally, which one of the following age categories do you fall into?

    1. 30 years or younger
    2. 31-40 years
    3. 41-50 years
    4. 51-60 years
    5. 61 or older

This concludes the questions that I would like to ask you. Do you have any questions for me? I appreciate your time and thank you for helping me complete my study.

APPENDIX E

VOLUNTARY RESPONSES TO OPEN ENDED QUESTION ON QUESTIONNAIRE

The questionnaire asked respondents to indicate any additional concepts which should be included in the undergraduate apparel merchandising curriculum. Following are the responses as listed by respondents to the open-ended question. They have been grouped into six broad categories:

Career/Professional Development/Personal Skills

- business etiquette
- business letters and memos
- career options/exploration
- changes in the industry
- creativity
- critical thinking skills
- fashion forecasting
- fashion writing skills
- field experience/internship to apply knowledge
- general product knowledge
- goal setting
- internship experience
- interview skills/professional development
- interviewing techniques
- personal evaluation
- portfolio building techniques
- professional image
- putting on style shows
- scheduling concepts
- speech/presentations
- supervisory skills
- trade organizations and associations
- women and leadership skills
- writing resumes
- writing skills

Computers/Technology

- basic computer skills
- CAD for public relations - layout
- computer applications for problem solving
- computer ordering
- computer pattern making, grading, marking
- computer sketching- electronic retailing
- hands on computer literacy
- use of computer software such as spreadsheets to analyze sales

Cultural/Social Aspects of Apparel/Consumer Influences/Historical

- cultural diversity in clothing
- determining consumer needs
- clothing and social cognition
- fashion trend research
- gender issues
- historical relevance of textile and retail industry development
- special markets/special needs - petites, larges sizes etc.
- socio/cultural basis for fashion
- social psychological aspects of clothing
- status of clothing labels (designer names)
- study of material culture
- symbolic interaction, attribution, person perception

International

- environmental concerns related to retail industry
- international buying
- international geography
- international retailing
- multi-national companies and global companies
- political astuteness

Planning/Buying/Negotiating/Vendor Relationships

- accounting procedures
- buyer-vendor relationships
- channels of distribution
- evaluation of results - season review
- financial analysis
- inventory procedures
- location decisions
- negotiations
- market and vendor negotiations
- math/statistics
- merchandise budget
- merging roles of retailers and manufacturers
- productivity ratios
- profit/loss
- retail math
- six month plans
- small business loans
- strategic business planning in retail
- types of financial backing
- unit/dollar consumption

Textiles/Design/Manufacturing

- basic style terminology (collars, necklines, sleeves etc.)
- determining product quality
- evaluating quality apparel
- experiences for creative innovations (in any area)
- inherent characteristics of fibers, yarns and fabrics
- predict end-use performance
- quality characteristics - construction
- quality characteristics - fabric
- quality control
- significance of textile testing results
- specifying materials and performance
- terminology of transitional patterns/motifs (paisley, madras, calico etc.)
- textile cost/quality
- textile properties
- trends in textile economy
- types of weaves and knits

APPENDIX F

DATA SUMMARY TABLES

TABLE XXII

FREQUENCY OF RESPONSES FOR THE LEVEL OF IMPORTANCE OF EACH CURRICULUM CONCEPT BASED ON THE FACTOR ANALYSIS RESULTS

Factor/Concept	Level of Importance[a]						
	1	2	3	4	5	6	7
Factor 1: Merchandising							
Very Important							
Merchandise Buying	0	2	3	15	52	101	184
Price Merchandise	2	2	2	21	52	96	184
Forecasting Demand	1	2	4	11	61	110	170
Merchandise Assortments	1	3	5	20	47	109	175
Managing Open-to-Buy	3	3	7	24	48	80	189
Vendor Terms	1	2	7	25	65	109	149
Stockturn	0	4	12	27	82	115	115
Store Types	1	8	9	39	62	114	126
Trade Publications	1	8	13	45	75	92	124
Initiate & Close Sales	2	7	12	52	76	97	111
Inventory Shrinkage	0	6	23	36	88	107	97
Branded vs. Private Labels	2	4	11	55	106	101	79
Important							
Resident Buying Offices	1	8	11	53	103	104	77
Types of Orders	1	4	22	58	89	95	89
Visual Merch. Techniques	5	4	15	58	94	102	82
Entrepreneurship	1	8	18	50	101	102	78
Organizational Structures1		5	24	52	95	102	79
Promotional Media	0	5	14	48	124	99	66
Role of Purchase Orders	5	7	22	55	79	106	83
Rec/Chk/Sto Merchandise	4	7	23	58	86	97	84
POP Displays	0	6	17	66	99	113	59
Vertical Integration	2	2	23	50	117	103	59
Types of Retail Ads	2	7	18	57	104	111	58
Employee Training Programs	0	11	30	56	81	112	67
Role of Apparel Mart	2	9	14	73	89	109	62
Forms of Bus Ownership	2	9	23	66	96	87	74
Public Relations	4	6	18	50	125	99	53
Push/Pull Strategies	5	4	16	66	96	92	59
Sales Promotion Approp.	1	7	20	63	102	114	49
In-Store Special Events	4	11	29	82	92	97	43
Mergers/Acquisitions	7	15	27	69	110	82	48
Direct Mail Techniques	3	14	29	73	117	91	30
Floor Plan Designs	5	15	22	94	97	92	34
Types of Display Settings	10	13	39	86	105	73	32
Cooperative Ads	3	12	39	102	125	49	28
Least Important							
Activities/Comm. Events	8	25	53	85	105	59	21
Accessories Dist.	17	19	47	96	102	54	19
Fashion Show Prod.	23	25	53	89	82	59	27

TABLE XXII (Continued)

Factor 2: Production							
Important							
Apparel Production	2	19	34	61	108	81	55
Production Automation	11	19	27	76	97	79	49
Garment Construction	19	30	43	73	77	64	54
Least Important							
Designing - Mass Market	21	33	46	79	104	45	30
Garment Fitting/Alt.	25	33	63	71	82	51	34
Pattern Making Tech.	30	47	77	76	78	30	22
Layout/Render/Design Advertising	24	60	58	93	78	34	11
Fashion Sketching	61	60	72	78	53	21	14
Flat Pattern Techniques	95	50	67	63	42	27	16
Ind. Sewing Equipment	87	66	56	70	56	13	12
Draping Techniques	114	56	69	64	31	12	13
Factor 3: Textiles							
Very Important							
Fabric Characteristics	4	3	9	26	66	90	161
Price/Quality Relation.	2	2	7	35	63	108	141
Important							
Care Labeling	2	12	22	55	80	96	91
Fiber Production	4	11	32	57	83	85	88
Fabric Finishes	5	12	36	53	101	97	54
Fabrication Methods	11	19	27	54	93	79	76
Least Important							
Textile Testing Proc.	19	37	56	71	82	72	21
Textile Dyeing/Printing	20	44	43	78	87	59	26
Yarn Types	17	44	54	69	96	49	30
Fiber Processing Stages	17	40	64	82	89	46	19
Factor 4: Socio-Political							
Very Important							
Ethical	3	6	14	46	62	101	124
Global Interdependence.	3	6	14	36	82	113	104
Macroenvironmental Cond.	3	7	18	56	76	98	97
Important							
Federal Legislation	3	4	16	60	89	102	82
Environmentally Safe Workplace	3	13	13	68	80	96	86
Global Enviro. Concerns	3	9	25	63	80	89	87
Social Responsibilities	4	9	20	73	92	97	62
Wkplace Issues/Trends	2	17	27	56	95	90	71
Made in the USA	12	25	44	80	107	57	33
Factor 5: Communications							
Very Important							
Decision Making Skills	1	0	4	16	27	63	249
Personal Communication	1	0	4	13	39	72	229
Customer Service	1	1	16	37	61	106	138
Leadership Qualities	1	4	15	33	84	101	118
Personnel Management	3	6	16	39	76	106	114
Important							
Supervise Employee Perf.	4	10	27	40	85	94	98

TABLE XXII (Continued)

Factor 6: Global							
Very Important							
Global Sourcing	0	4	7	32	83	104	129
Import/Export Regulation	2	2	10	27	84	122	112
International App. Mkts	1	2	9	37	82	128	98
International Trading Agreements	1	4	16	40	89	114	94
Important							
Industry Associations	14	26	33	76	106	59	41
Factor 7: Design							
Very Important							
Apparel Terminology	1	4	4	15	40	89	205
Cyclical/Fashion Trends	3	9	5	38	73	105	124
Theories of Fashion	7	5	11	42	87	101	104
Principles of Design	2	9	23	58	81	70	117
Important							
Elements of Design	7	12	24	62	67	86	101
Fashion Designers	10	19	33	72	113	66	46
Historic T & C	7	23	49	85	90	65	40
Least Important							
Accessories Production	22	40	71	106	82	26	10
Factor 8: Target Marketing							
Very Important							
Market Segmentation	0	4	2	25	58	103	164
Consumption Patterns	0	3	4	20	69	105	157
Consumer Decision Making	3	1	8	31	67	89	159
Demographic Variables	0	6	11	30	64	106	142
Psychographic Variables	2	5	10	43	84	93	121
Cultural Diversity	1	9	21	35	81	85	123
Factor 9: Strategies							
Very Important							
Marketing Research	0	4	6	29	99	113	108
QR Techniques	4	6	12	42	97	109	90
Important							
Private Label Programs	0	7	24	68	109	109	43
Factor 10: Fit							
Important							
Color Concepts	9	10	34	64	57	102	81
RTW Sizing Specification	8	9	48	55	97	78	62
Figure Analysis	20	26	43	64	82	62	62
Factor 11: Technology							
Very Important							
Computers/Retail Buying	1	0	4	12	49	104	188
Computer Terminology	1	1	20	32	75	110	120
Important							
Non-Store Retailing	4	12	19	59	112	97	55

[a] The level of importance utilized seven indicators (1 - Not Important through 7 - Extremely Important).

TABLE XXIII

FREQUENCY OF RESPONSES FOR THE INSTRUCTIONAL/COGNITIVE LEVEL OF EACH CURRICULUM CONCEPT BASED ON THE FACTOR ANALYSIS RESULTS

Factor/Concept	N	Inst./Cognitive Level[a] K	C/A	A/S/E
Factor 1: Merchandising				
Very Important				
Merchandise Buying	354	27	123	204
Price Merchandise	359	25	158	176
Forecasting Demand	357	25	103	229
Merchandise Assortments	360	29	124	207
Managing Open-to-Buy	351	32	109	210
Vendor Terms	356	95	152	109
Stockturn	352	69	157	126
Store Types	359	109	149	101
Trade Publications	356	143	126	87
Initiate & Close Sales	356	69	171	116
Inventory Shrinkage	355	86	161	108
Branded Vs. Private Label	355	116	156	83
Important				
Resident Buying Offices	357	128	172	57
Types of Orders	357	118	172	67
Visual Merch. Techniques	358	51	179	128
Entrepreneurship	355	71	174	110
Organizational Structures	356	127	144	85
Promotional Media	355	74	198	83
Role of Purchase Orders	357	119	167	71
Rec/Chk/Sto Merchandise	358	109	170	79
POP Displays	357	117	175	65
Vertical Integration	355	111	172	72
Types of Retail Ads	357	110	176	71
Employee Training Prog.	355	112	153	90
Role of Apparel Mart	357	123	184	50
Forms/Business Ownership	353	150	144	59
Public Relations	355	78	202	75
Push/Pull Strategies	337	96	162	79
Sales Promotion Approp.	356	106	188	62
In-store Special Events	359	140	163	56
Mergers/Acquisitions	357	152	152	53
Direct Mail Techniques	355	140	171	44
Floor Plan Designs	357	138	162	57
Types of Display Settings	356	156	148	52
Cooperative Advertising	357	145	171	41
Least Important				
Activities/Comm. Events	355	171	156	28
Accessories Distribution	349	183	149	17
Fashion Show Production	351	137	154	60

TABLE XXIII (Continued)

Factor 2: Production				
Important				
Ind. Apparel Production	357	132	155	70
Production Automation	355	139	154	62
Garment Construction	355	136	136	83
Least Important				
Designing - Mass Market	352	149	53	50
Garment Fitting/Alter	353	162	145	46
Ind. Pattern Making Tech	352	220	126	87
Layout/Render/Design Ads	354	182	141	31
Fashion Sketching	350	217	116	17
Flat Pattern Techniques	350	218	93	39
Industrial Sewing Equip.	352	284	56	12
Draping Techniques	345	255	65	25
Factor 3: Textiles				
Very Important				
Fabric Characteristics	359	59	132	168
Price/Quality Rel in App	358	38	139	181
Important				
Care Labeling	355	133	137	85
Fiber Production	356	133	148	75
Fabric Finishes	356	150	157	49
Fabrication Methods	358	150	143	65
Least Important				
Textile Testing Proc.	355	188	129	38
Textile Dyeing/Printing	355	202	123	30
Yarn Types	356	206	115	35
Fiber Processing Stages	354	235	99	20
Factor 4: Socio-Political				
Very Important				
Ethical	352	67	138	147
Global Interdependence	356	80	150	126
Macroenvironmental Cond.	356	90	123	143
Important				
Federal Legislation	356	147	132	77
Environmentally Safe Wk	359	107	154	98
Global Enviro. Concerns	357	110	142	105
Social Responsibilities	358	108	156	94
Workplace Issues/Trends	357	135	131	91
Made in the USA	357	106	127	24

TABLE XXIII (Continued)

Factor 5: Communications				
Very Important				
Decision Making Skills	359	16	65	278
Personal Communications	358	17	106	235
Customer Service	359	63	138	158
Leadership Qualities	356	57	163	136
Personnel Management	357	45	141	171
Important				
Supervise Employee Perf.	357	62	150	145
Factor 6: Global				
Very Important				
Global Sourcing	355	60	158	137
Import/Export Reg	358	75	160	123
International App Mkts	358	88	177	93
Int Trading Agreements	358	119	154	85
Important				
Industry Associations	355	224	104	27
Factor 7: Design				
Very Important				
Apparel Terminology	357	82	141	134
Cyclical/Fashion Trends	354	62	135	157
Theories of Fashion	355	80	138	137
Principles of Design	356	64	145	147
Important				
Elements of Design	355	99	137	119
Fashion Designers	355	197	122	36
Historic T & C	354	141	153	60
Least Important				
Accessories Production	351	229	103	19
Factor 8: Target Marketing				
Very Important				
Market Segmentation	357	44	125	188
Consumption Patterns	356	37	131	188
Consumer Decision Making	357	34	130	193
Demographic Variables	357	40	111	206
Psychographic Variables	358	57	144	157
Cultural Diversity	356	87	124	145
Factor 9: Strategies				
Very Important				
Marketing Research	357	43	149	165
QR Techniques	355	106	156	93
Important				
Private Label Programs	358	142	168	48

TABLE XXIII (Continued)

Factor 10: Fit				
Important				
Color Concepts	356	102	142	112
RTW Sizing Specifications	355	158	152	45
Figure Analysis	355	136	130	89
Factor 11: Technology				
Very Important				
Computers/Retail Buying	357	35	147	176
Computer Terminology	358	91	170	97
Important				
Non-Store Retailing	357	154	162	41

[a] K = Knowledge, C/A = Comprehension/Application and A/S/E = Analysis/Synthesis/Evaluation

TABLE XXIV

FACTOR ANALYSIS OF SELECT CURRICULUM CONCEPTS[a]

Factor/Curriculum Concepts	Factor Loadings	Percent Variance[b]
Factor 1 - Merchandising		
Price Merchandise	.7909	
Managing Open-to-Buy	.7534	
Types of Orders	.7250	
Role of Purchase Orders	.7109	
Rec/Chk/Sto Merchandise	.6932	
Merchandise Buying	.6875	
Sales Promotion Approp.	.6730	
In-Store Special Events	.6668	
Initiate & Close Sales	.6641	
Organizational Structures	.6635	
Resident Buying Office	.6605	
Types of Retail Ads	.6559	
Merchandise Assortment	.6402	
Store Types	.6320	
Stockturn	.6243	16.7816
Vertical Integration	.6210	
POP Displays	.6185	
Types of Display Settings	.5961	
Accessories Distribution	.5934	
Role of Apparel Mart	.5929	
Branded Vs. Private Label	.5619	
Forms/Business Ownership	.5591	
Vendor Terms	.5412	
Floor Plan Designs	.5384	
Promotional Media	.5248	
Direct Mail Techniques	.5103	
Push/Pull Strategies	.5021	
Employee Training Prog.	.5000	
Inventory Shrinkage	.4799	
Mergers/Acquisitions	.4706	
Entrepreneurship	.4566	
Visual Merch. Techniques	.4434	
Public Relations	.4279	
Cooperative Advertising	.4227	
Forecasting Demand	.4194	
Activities/Comm. Events	.4105	
Trade Publications	.3742	
Fashion Show Production	.3500	

TABLE XXIV (Continued)

Factor 2 - Production		
Draping Techniques	.8419	
Flat Pattern Tech.	.8406	
Pattern Making Tech.	.8259	
Ind. Sewing Equipment	.7621	
Fashion Sketching	.7514	
Designing - Mass Mkt.	.6102	7.7427
Production Automation	.6012	
Garment Fitting/Alter.	.5769	
Garment Construction	.5595	
Layout/Design/Render Ads	.5505	
Ind. Apparel Production	.5232	
Factor 3 - Textiles		
Fabrication Methods	.8259	
Fabric Finishes	.8159	
Yarn Types	.7821	
Textile Dyeing/Printing	.7565	
Fabric Characteristics	.7223	7.1875
Textile Testing Proc.	.6782	
Fiber Processing Stages	.6674	
Care Labeling	.6150	
Fiber Production	.6068	
Price/Quality Relation.	.3414	
Factor 4 - Socio-Political		
Environmentally Safe Wk.	.7072	
Workplace Issues/Trends	.6718	
Social Responsibilities	.6692	
Global Enviro. Concerns	.6469	6.0061
Global Interdependence	.5976	
Macroenvironmental Cond.	.5773	
Ethical	.5598	
Federal Legislation	.4605	
Made in the USA	.3672	
Factor 5 - Communications		
Supervise Employee Perf.	.6992	
Personnel Management	.6312	
Leadership Qualities	.5155	3.9627
Customer Service	.5039	
Personal Communications	.4548	
Decision Making Skills	.3594	
Factor 6 - Global		
International App. Mkts.	.5896	
Int. Trading Agreements	.5743	
Import/Export Reg.	.5480	3.8956
Global Sourcing	.4896	
Industry Associations	.4505	

TABLE XXIV (Continued)

Factor 7 - Design		
Cyclical/Fashion Trends	.5748	
Fashion Designers	.5368	
Historic T & C	.5204	
Theories of Fashion	.5159	3.7556
Elements of Design	.4952	
Apparel Terminology	.4794	
Principles of Design	.4454	
Accessories Production	.4238	
Factor 8 - Target Marketing		
Consumption Patterns	.6443	
Market Segmentation	.5541	
Cultural Diversity	.5267	3.3538
Consumer Decision Making	.5012	
Psychographic Variables	.4538	
Demographic Variables	.4484	
Factor 9 - Strategies		
Private Label Programs	.6077	
Marketing Research	.4263	3.3311
QR Techniques	.4026	
Factor 10 - Fit		
Figure Analysis	.6431	
Color Concepts	.5107	2.5053
RTW Sizing Specifications	.3199	
Factor 11 - Technology		
Computer Terminology	.6046	
Computers/Retail Buying	.4597	2.1574
Non-Store Retailing	.4401	

[a] Data reflects results of the Varimax rotation procedure.

[b] Final Communality Estimates: Total = 60.6794

TABLE XXV

LEVEL OF IMPORTANCE OF SELECT CURRICULUM CONCEPTS BASED ON TYPE OF INSTITUTION[a]

ID	Variable	x^2	p Value[b]
V1	Ethical Resp. of Firms	0.5765	0.4477
V2	Production of Fibers	1.2187	0.2696
V3	Historic Tex/Costume	1.6114	0.2043
V4	Accessories Production	1.7513	0.1857
V5	Import/Export Reg.	5.9772	0.0145
V6	Consumer Demographic Var.	0.0138	0.9066
V7	Cooperative Advertising	0.2386	0.6252
V8	Ind. App. Production Proc.	0.2063	0.6497
V9	Personnel Management	1.2656	0.2606
V10	Visual Merch. Techniques	0.9494	0.3299
V11	Principles of Design	1.0158	0.3135
V12	QR Techniques	0.4379	0.5081
V13	Trade Publications	0.6252	0.4291
V14	Ind. Pattern Making Tech.	1.5636	0.2111
V15	Global Sourcing - Merch.	0.2148	0.6430
V16	Garment Construct. Tech.	0.6711	0.4127
V17	Supervise Employee Perf.	3.7020	0.0543
V18	Forecasting Demand	2.6625	0.1027
V19	Vendor Terms	0.3377	0.5612
V20	Global Interdependence	7.0823	0.0078*
V21	Consumer Psychographic	0.0057	0.9397
V22	Private Label Programs	1.3755	0.2409
V23	Customer Service	2.8691	0.0903
V24	Inventory Shrinkage Control	0.6799	0.4096
V25	Stockturn	0.0107	0.9175
V26	Push/Pull Strategies	0.1392	0.7091
V27	Marketing Research	1.2874	0.2565
V28	Made in the USA Campaign	0.6740	0.4116
V29	Fabric Characteristics	0.6712	0.4284
V30	Social Resp. of Firms	0.0203	0.8866
V31	Environmentally Safe Wkplace	0.0468	0.8287
V32	Merchandise Assortments	2.2405	0.1344
V33	Promotional Media	1.1691	0.2796
V34	Fashion Show Production	8.8567	0.0029*
V35	Cyclical Fashion Trends	2.7834	0.0952
V36	Fiber Processing Stages	0.0556	0.8137
V37	Production Automation	0.0118	0.9136
V38	Forms of Bus. Ownership	0.9759	0.3232
V39	Fashion Sketching	0.0029	0.9570
V40	Layout & Design for Ads	0.2602	0.6100
V41	Price-Quality Relationship	0.0195	0.8888

TABLE XXV (Continued)

V42	Designing for the Mass Mkt.	0.0990	0.7530
V43	Direct Mail Techniques	0.4203	0.5168
V44	Cultural Diversity	0.2571	0.6121
V45	Computers in Buying	0.3180	0.5728
V46	Global Enviro. Concerns	1.2749	0.2589
V47	Public Relations	1.0167	0.3133
V48	RTW Sizing Specifications	0.0037	0.9514
V49	Consumer Decision Making	0.2084	0.6480
V50	Yarn Types	0.1014	0.7502
V51	International App. Mkts.	2.8445	0.0917
V52	Mergers & Acquisitions	10.9280	0.0009*
V53	Theories of Fashion	0.3242	0.5691
V54	Federal Legislation	0.5730	0.4491
V55	Fashion Designers	3.7292	0.0535
V56	Elements of Design	0.5710	0.4499
V57	Role of the App. Mart	0.7391	0.3923
V58	Apparel Terminology	0.8115	0.3677
V59	Non-Store Retailing	9.1218	0.0025*
V60	Fabric Finishes	0.5346	0.4647
V61	Textile Testing Proc.	1.8827	0.1700
V62	Employee Training Program	1.3258	0.2496
V63	Types of Display Settings	0.5799	0.4464
V64	Role of Purchase Orders	0.1335	0.7148
V65	Managing Open to Buy	0.1274	0.7211
V66	Vertical Integration	2.6370	0.1044
V67	Initiate & Close Sales	2.7441	0.0976
V68	Accessories Production	0.2870	0.5921
V69	Fabrication Methods	0.9356	0.3334
V70	Macroenvironmental Cond.	4.3034	0.0380
V71	Workplace Issues/Trends	0.8557	0.3549
V72	Types of Retail Ads	0.1519	0.6968
V73	Sales Promotion Appr.	0.0022	0.9629
V74	Care Labeling	0.0194	0.8883
V75	Branded Vs. Private Label	0.1085	0.7418
V76	Personal Communications	0.9820	0.3215
V77	Types of Orders	0.9622	0.3266
V78	Garment Fitting/Alt.	0.7480	0.3871
V79	Flat Pattern Techniques	0.4290	0.5125
V80	Price Merchandise	2.2712	0.1318
V81	International Trade Agree.	2.1709	0.1406
V82	Merchandise Buying	0.5623	0.4533
V83	Figure Analysis	11.2720	0.0008*
V84	Color Concepts	8.8269	0.0030*
V85	Store Types	0.3062	0.5800
V86	POP Displays	3.3638	0.0666
V87	Consumption Patterns	2.2645	0.1324
V88	Market Segmentation	0.0590	0.8081
V89	Leadership Qualities	0.9552	0.3284
V90	Computer Terminology	0.4787	0.4890

TABLE XXV (Continued)

V91	Floor Plan Designs	2.9176	0.0876
V92	Resident Buying Offices	0.0700	0.7913
V93	Company Organ. Structures	0.8872	0.3462
V94	In-Store Special Events	1.1286	0.2881
V95	Decision Making Skills	1.7861	0.1814
V96	Draping Techniques	0.2199	0.6391
V97	Entrepreneurship	0.4657	0.4950
V98	Industry Associations	1.3026	0.2537
V99	Ind. Sewing Equipment	0.0078	0.9294
V100	Bus. Activities - Events	0.1770	0.6739
V101	Textile Dyeing/Printing	0.0036	0.9848
V102	Receive/Chk/Sto Merchandise	0.0754	0.7836

[a] Respondents were from two-year and four-year institutions (df = 1).

[b] $p < .01$

TABLE XXVI

INSTRUCTIONAL/COGNITIVE LEVEL OF SELECT CURRICULUM CONCEPTS BASED ON TYPE OF INSTITUTION[a]

ID	Variable	x^2	p Value[b]
V1	Ethical Resp. of Firms	0.9612	0.3269
V2	Production of Fibers	0.8786	0.3486
V3	Historic Tex/Costume	0.2511	0.6163
V4	Accessories Production	0.0109	0.9169
V5	Import/Export Reg.	0.1059	0.7449
V6	Consumer Demographic Var.	0.0251	0.8742
V7	Cooperative Advertising	0.0350	0.8516
V8	Ind. Production Proc.	0.9608	0.3270
V9	Personnel Management	1.5300	0.2161
V10	Visual Merch. Techniques	6.4587	0.0110
V11	Principles of Design	3.1902	0.0741
V12	QR Techniques	0.1080	0.7425
V13	Trade Publications	0.4493	0.5027
V14	Ind. Pattern Making Tech.	0.0722	0.7882
V15	Global Sourcing - Merch.	0.0056	0.9450
V16	Garment Construct. Tech.	1.7690	0.1835
V17	Supervise Employee Perf.	1.5330	0.2157
V18	Forecasting Demand	1.5723	0.2099
V19	Vendor Terms	0.1072	0.7434
V20	Global Interdependence	2.3101	0.1285
V21	Consumer Psychographic	0.1814	0.6702
V22	Private Label Programs	0.0345	0.8527
V23	Customer Service	2.7806	0.0954
V24	Inventory Shrinkage Control	0.1676	0.6823
V25	Stockturn	0.0671	0.7957
V26	Push/Pull Strategies	0.0171	0.8960
V27	Marketing Research	0.5716	0.4496
V28	Made in the USA Campaign	0.1330	0.7153
V29	Fabric Characteristics	0.4569	0.4991
V30	Social Resp. of Firms	0.4725	0.4918
V31	Environmentally Safe Wkplace	0.2129	0.6445
V32	Merchandise Assortments	1.2880	0.2564
V33	Promotional Media	0.6041	0.4370
V34	Fashion Show Production	3.5570	0.0593
V35	Cyclical Fashion Trends	1.5066	0.2197
V36	Fiber Processing Stages	0.8245	0.3639
V37	Production Automation	0.1728	0.6777
V38	Forms of Bus. Ownership	0.7902	0.3740
V39	Fashion Sketching	0.5099	0.4752
V40	Layout & Design for Ads	1.5650	0.2109
V41	Price-Quality Relationship	0.5826	0.4453

TABLE XXVI (Continued)

V42	Designing for the Mass Mkt.	1.6694	0.1963
V43	Direct Mail Techniques	0.5260	0.4683
V44	Cultural Diversity	0.2739	0.6007
V45	Computers in Buying	0.0240	0.8768
V46	Global Enviro. Concerns	0.1679	0.6820
V47	Public Relations	4.3011	0.0381
V48	RTW Sizing Specifications	0.0065	0.9357
V49	Consumer Decision Making	1.7188	0.1899
V50	Yarn Types	0.3346	0.5630
V51	International App. Mkts.	1.2780	0.2566
V52	Mergers & Acquisitions	4.0823	0.0433
V53	Theories of Fashion	0.7430	0.3887
V54	Federal Legislation	0.4845	0.4864
V55	Fashion Designers	5.4525	0.0195
V56	Elements of Design	0.4092	0.5224
V57	Role of the App. Mart	1.9890	0.1584
V58	Apparel Terminology	0.6660	0.4145
V59	Non-Store Retailing	4.0150	0.0451
V60	Fabric Finishes	0.0748	0.7844
V61	Textile Testing Proc.	6.3418	0.0118
V62	Employee Training Program	0.5774	0.4473
V63	Types of Display Settings	0.5489	0.4588
V64	Role of Purchase Orders	0.3417	0.5588
V65	Managing Open to Buy	0.0725	0.7878
V66	Vertical Integration	0.0219	0.8845
V67	Initiate & Close Sales	5.1690	0.0230
V68	Accessories Production	0.0255	0.8730
V69	Fabrication Methods	0.0154	0.9013
V70	Macroenvironmental Cond.	2.2504	0.1336
V71	Workplace Issues/Trends	0.3689	0.5436
V72	Types of Retail Ads	0.3731	0.5413
V73	Sales Promotion Appr.	0.0029	0.9569
V74	Care Labeling	0.1380	0.7103
V75	Branded Vs. Private Label	0.2978	0.5853
V76	Personal Communications	5.4306	0.0198
V77	Types of Orders	0.2808	0.5962
V78	Garment Fitting/Alt.	2.7703	0.0960
V79	Flat Pattern Techniques	3.7801	0.0519
V80	Price Merchandise	3.4081	0.0649
V81	International Trade Agree.	1.9549	0.1621
V82	Merchandise Buying	0.1425	0.7058
V83	Figure Analysis	10.0360	0.0015*
V84	Color Concepts	8.8652	0.0029*
V85	Store Types	1.4755	0.2245
V86	POP Displays	1.5688	0.2104
V87	Consumption Patterns	0.1796	0.6717
V88	Market Segmentation	0.3079	0.5789
V89	Leadership Qualities	0.6862	0.4075
V90	Computer Terminology	3.0660	0.0799

TABLE XXVI (Continued)

V91	Floor Plan Designs	5.2558	0.0219
V92	Resident Buying Offices	0.0268	0.8699
V93	Company Organ. Structures	1.3968	0.2373
V94	In-Store Special Events	1.5112	0.2190
V95	Decision Making Skills	0.0715	0.7892
V96	Draping Techniques	0.2012	0.6538
V97	Entrepreneurship	0.0779	0.7801
V98	Industry Associations	0.0206	0.8859
V99	Ind. Sewing Equipment	0.0008	0.9774
V100	Bus. Activities - Events	1.1642	0.2806
V101	Textile Dyeing/Printing	0.0078	0.9295
V102	Receive/Chk/Sto Merchandise	1.7407	0.1917

[a] Respondents were from two-year and four-year institutions (df = 1).

[b] $p < .01$

TABLE XXVII

LEVEL OF IMPORTANCE OF SELECT CURRICULUM CONCEPTS BASED ON THE RESPONDENT'S EXPERIENCE OUTSIDE OF HIGHER EDUCATION[a]

ID	Variable	x^2	p Value[b]
V1	Ethical Resp. of Firms	0.8567	0.3541
V2	Production of Fibers	0.7656	0.3816
V3	Historic Tex/Costume	3.5931	0.0580
V4	Accessories Production	0.0527	0.8184
V5	Import/Export Reg.	2.0322	0.1540
V6	Consumer Demographic Var.	3.5387	0.0600
V7	Cooperative Advertising	0.0171	0.8959
V8	Ind. App. Production Proc.	0.0152	0.0919
V9	Personnel Management	0.7853	0.3755
V10	Visual Merch. Techniques	5.3128	0.0212
V11	Principles of Design	0.6517	0.4195
V12	QR Techniques	0.0171	0.8960
V13	Trade Publications	3.3213	0.0684
V14	Ind. Pattern Making Tech.	0.3436	0.5578
V15	Global Sourcing - Merch.	0.2857	0.5930
V16	Garment Construct. Tech.	0.2610	0.6094
V17	Supervise Employee Perf.	0.7104	0.3993
V18	Forecasting Demand	2.7848	0.0952
V19	Vendor Terms	2.6449	0.1039
V20	Global Interdependence	0.3405	0.5595
V21	Consumer Psychographic	2.1957	0.1384
V22	Private Label Programs	0.0561	0.8128
V23	Customer Service	0.6378	0.4245
V24	Inventory Shrinkage Control	0.8380	0.3600
V25	Stockturn	2.5970	0.1071
V26	Push/Pull Strategies	0.0132	0.9086
V27	Marketing Research	1.6341	0.2011
V28	Made in the USA Campaign	0.6838	0.4083
V29	Fabric Characteristics	0.4553	0.4998
V30	Social Resp. of Firms	0.5575	0.4553
V31	Environmentally Safe Wkplace	4.4375	0.0352
V32	Merchandise Assortments	7.5823	0.0059*
V33	Promotional Media	6.0412	0.0140
V34	Fashion Show Production	1.5257	0.2168
V35	Cyclical Fashion Trends	3.5961	0.0579
V36	Fiber Processing Stages	0.8826	0.3475
V37	Production Automation	0.5001	0.4794
V38	Forms of Bus. Ownership	1.0878	0.2970
V39	Fashion Sketching	0.0048	0.9446
V40	Layout & Design for Ads	0.1454	0.7029
V41	Price-Quality Relationship	0.1928	0.6606

TABLE XXVII (Continued)

V42	Designing for the Mass Mkt.	0.2368	0.6265
V43	Direct Mail Techniques	0.0038	0.9507
V44	Cultural Diversity	2.2285	0.1355
V45	Computers in Buying	1.8650	0.1721
V46	Global Enviro. Concerns	0.1816	0.6700
V47	Public Relations	0.7128	0.3985
V48	RTW Sizing Specifications	2.4865	0.1148
V49	Consumer Decision Making	1.8067	0.1789
V50	Yarn Types	2.6222	0.1054
V51	International App. Mkts.	0.8034	0.3701
V52	Mergers & Acquisitions	0.1264	0.7222
V53	Theories of Fashion	0.0294	0.8639
V54	Federal Legislation	0.6962	0.4041
V55	Fashion Designers	0.6852	0.4078
V56	Elements of Design	1.2961	0.2549
V57	Role of the App. Mart	0.1488	0.6997
V58	Apparel Terminology	2.6549	0.1032
V59	Non-Store Retailing	1.2336	0.2667
V60	Fabric Finishes	1.7665	0.1838
V61	Textile Testing Proc.	8.5259	0.0035*
V62	Employee Training Program	0.0609	0.8050
V63	Types of Display Settings	2.6773	0.1018
V64	Role of Purchase Orders	0.0270	0.8694
V65	Managing Open to Buy	2.1841	0.1394
V66	Vertical Integration	1.2928	0.2555
V67	Initiate & Close Sales	0.0003	0.9856
V68	Accessories Production	2.2001	0.1380
V69	Fabrication Methods	2.6396	0.1042
V70	Macroenvironmental Cond.	0.2329	0.6294
V71	Workplace Issues/Trends	0.0134	0.9077
V72	Types of Retail Ads	2.0624	0.1510
V73	Sales Promotion Appr.	0.0111	0.9160
V74	Care Labeling	4.6670	0.0370
V75	Branded Vs. Private Label	0.7137	0.3982
V76	Personal Communications	1.2594	0.2618
V77	Types of Orders	2.3273	0.1271
V78	Garment Fitting/Alt.	0.0448	0.8323
V79	Flat Pattern Techniques	1.0356	0.3088
V80	Price Merchandise	2.1342	0.1440
V81	International Trade Agree.	2.7551	0.0969
V82	Merchandise Buying	2.1002	0.1473
V83	Figure Analysis	0.5429	0.4612
V84	Color Concepts	2.4539	0.1172
V85	Store Types	0.2343	0.6283
V86	POP Displays	1.1528	0.2830
V87	Consumption Patterns	3.2083	0.0733
V88	Market Segmentation	2.0129	0.1560
V89	Leadership Qualities	0.8453	0.3579
V90	Computer Terminology	0.1814	0.6702

TABLE XXVII (Continued)

V91	Floor Plan Designs	3.8986	0.0483
V92	Resident Buying Offices	1.8193	0.1774
V93	Company Organ. Structures	0.0811	0.7758
V94	In-Store Special Events	0.4532	0.5008
V95	Decision Making Skills	1.6242	0.2025
V96	Draping Techniques	0.6600	0.4166
V97	Entrepreneurship	0.2574	0.6119
V98	Industry Associations	3.2346	0.0721
V99	Ind. Sewing Equipment	0.0419	0.8378
V100	Bus. Activities - Events	2.8253	0.0928
V101	Textile Dyeing/Printing	2.2421	0.1343
V102	Receive/Chk/Sto Merchandise	3.3200	0.0684

[a] Respondents were categorized as either having merchandising/industry experience outside of higher education or not having industry experience (df = 1).

[b] $p < .01$

TABLE XXVIII

INSTRUCTIONAL/COGNITIVE LEVEL OF SELECT CURRICULUM CONCEPTS BASED ON THE RESPONDENT'S EXPERIENCE OUTSIDE OF HIGHER EDUCATION[a]

ID	Variable	x^2	p Value[b]
V1	Ethical Resp. of Firms	0.7832	0.3762
V2	Production of Fibers	0.0230	0.8789
V3	Historic Tex/Costume	9.2650	0.0023*
V4	Accessories Production	2.9055	0.0883
V5	Import/Export Reg.	0.0013	0.9713
V6	Consumer Demographic Var.	1.7342	0.1879
V7	Cooperative Advertising	0.0934	0.7599
V8	Ind. App. Production Proc.	4.2765	0.0386
V9	Personnel Management	0.4384	0.5079
V10	Visual Merch. Techniques	8.0048	0.0047*
V11	Principles of Design	4.7185	0.0298
V12	QR Techniques	0.0916	0.7621
V13	Trade Publications	3.0853	0.0790
V14	Ind. Pattern Making Tech.	0.0058	0.9394
V15	Global Sourcing - Merch.	1.3005	0.2541
V16	Garment Construct. Tech.	1.0071	0.3156
V17	Supervise Employee Perf.	4.3875	0.0362
V18	Forecasting Demand	8.5060	0.0035*
V19	Vendor Terms	4.8501	0.0276
V20	Global Interdependence	0.3848	0.5350
V21	Consumer Psychographic	2.3362	0.1264
V22	Private Label Programs	0.6989	0.0386
V23	Customer Service	4.2770	0.0386
V24	Inventory Shrinkage Control	3.3869	0.0657
V25	Stockturn	14.2140	0.0002*
V26	Push/Pull Strategies	2.1355	0.1439
V27	Marketing Research	3.6752	0.0552
V28	Made in the USA Campaign	0.1637	0.6858
V29	Fabric Characteristics	0.0191	0.8901
V30	Social Resp. of Firms	0.2002	0.6546
V31	Environmentally Safe Wkplace	1.2621	0.2613
V32	Merchandise Assortments	12.1270	0.0005*
V33	Promotional Media	5.5393	0.0186
V34	Fashion Show Production	7.9832	0.0047*
V35	Cyclical Fashion Trends	3.3336	0.0679
V36	Fiber Processing Stages	0.3196	0.5719
V37	Production Automation	1.1427	0.2851
V38	Forms of Bus. Ownership	6.1911	0.0128
V39	Fashion Sketching	0.0468	0.8288
V40	Layout & Design for Ads	0.4467	0.5039
V41	Price-Quality Relationship	0.0358	0.8499

TABLE XXVIII (Continued)

V42	Designing for the Mass Mkt.	0.7041	0.4014
V43	Direct Mail Techniques	1.3624	0.2431
V44	Cultural Diversity	4.9369	0.0263
V45	Computers in Buying	1.8556	0.1731
V46	Global Enviro. Concerns	2.0990	0.1474
V47	Public Relations	0.8560	0.3549
V48	RTW Sizing Specifications	0.3052	0.5806
V49	Consumer Decision Making	1.0111	0.3146
V50	Yarn Types	1.8390	0.1751
V51	International App. Mkts.	0.7083	0.4000
V52	Mergers & Acquisitions	0.4816	0.4877
V53	Theories of Fashion	0.1572	0.6918
V54	Federal Legislation	0.3173	0.5732
V55	Fashion Designers	2.2527	0.1334
V56	Elements of Design	3.7448	0.0530
V57	Role of the App. Mart	1.2174	0.2699
V58	Apparel Terminology	1.1404	0.2856
V59	Non-Store Retailing	2.2445	0.1341
V60	Fabric Finishes	2.2645	0.1324
V61	Textile Testing Proc.	0.2686	0.6043
V62	Employee Training Program	0.1268	0.7218
V63	Types of Display Settings	6.4244	0.0113
V64	Role of Purchase Orders	0.0113	0.9153
V65	Managing Open to Buy	4.8449	0.0277
V66	Vertical Integration	0.1976	0.6566
V67	Initiate & Close Sales	2.2138	0.1368
V68	Accessories Production	0.0435	0.8347
V69	Fabrication Methods	0.3233	0.5696
V70	Macroenvironmental Cond.	0.6251	0.4291
V71	Workplace Issues/Trends	1.1655	0.2803
V72	Types of Retail Ads	1.5314	0.2159
V73	Sales Promotion Appr.	0.0251	0.8741
V74	Care Labeling	0.0140	0.9059
V75	Branded Vs. Private Label	0.0044	0.9473
V76	Personal Communications	0.6066	0.4361
V77	Types of Orders	0.0035	0.9526
V78	Garment Fitting/Alt.	2.1167	0.1457
V79	Flat Pattern Techniques	0.7344	0.3915
V80	Price Merchandise	2.9708	0.0848
V81	International Trade Agree.	0.5980	0.4394
V82	Merchandise Buying	1.9037	0.1677
V83	Figure Analysis	1.0545	0.3045
V84	Color Concepts	4.8983	0.0269
V85	Store Types	1.1232	0.2892
V86	POP Displays	2.0421	0.1530
V87	Consumption Patterns	1.4039	0.2361
V88	Market Segmentation	1.4019	0.2364
V89	Leadership Qualities	0.8261	0.3634
V90	Computer Terminology	4.1124	0.0426

TABLE XXVIII (Continued)

V91	Floor Plan Designs	7.1761	0.0074*
V92	Resident Buying Offices	0.5491	0.4587
V93	Company Organ. Structures	0.4623	0.4966
V94	In-Store Special Events	2.0219	0.1550
V95	Decision Making Skills	0.2754	0.5997
V96	Draping Techniques	0.0678	0.7946
V97	Entrepreneurship	1.4331	0.2313
V98	Industry Associations	0.0570	0.8113
V99	Sewing Equipment (I)	0.0222	0.8816
V100	Bus. Activities - Events	0.9396	0.3324
V101	Textile Dyeing/Printing	0.4897	0.4840
V102	Receive/Chk/Sto Merchandise	2.5452	0.1106

[a] Respondents were categorized as either having merchandising/industry experience outside of higher education or not having industry experience (df = 1).

[b] $p < .01$

TABLE XXIX

LEVEL OF IMPORTANCE OF SELECT CURRICULUM CONCEPTS BASED ON AGE OF RESPONDENTS[a]

ID	Variable	x^2	p Value[b]
V1	Ethical Resp. of Firms	7.9932	0.0918
V2	Production of Fibers	4.6529	0.3248
V3	Historic Tex/Costume	2.3446	0.6727
V4	Accessories Production	9.0935	0.0588
V5	Import/Export Reg.	3.2712	0.5135
V6	Consumer Demographic Var.	9.0743	0.0593
V7	Cooperative Advertising	10.5920	0.0316
V8	Ind. App. Production Proc.	1.7694	0.7781
V9	Personnel Management	5.1776	0.2696
V10	Visual Merch. Techniques	3.9856	0.4080
V11	Principles of Design	6.4298	0.1693
V12	QR Techniques	5.9923	0.1997
V13	Trade Publications	5.6006	0.2310
V14	Ind. Pattern Making Tech.	3.8797	0.4225
V15	Global Sourcing - Merch.	9.7836	0.0442
V16	Garment Construct. Tech.	5.5466	0.2357
V17	Supervise Employee Perf.	6.0743	0.1937
V18	Forecasting Demand	4.1291	0.3888
V19	Vendor Terms	3.1798	0.4453
V20	Global Interdependence	3.1915	0.5263
V21	Consumer Psychographic	4.1344	0.3881
V22	Private Label Programs	2.3526	0.6712
V23	Customer Service	2.7230	0.6052
V24	Inventory Shrinkage Control	1.7519	0.7813
V25	Stockturn	5.3379	0.2543
V26	Push/Pull Strategies	5.4319	0.2458
V27	Marketing Research	2.8996	0.5748
V28	Made in the USA Campaign	2.0679	0.7233
V29	Fabric Characteristics	5.2006	0.2673
V30	Social Resp. of Firms	4.2377	0.3748
V31	Environmentally Safe Wkplace	4.5779	0.3334
V32	Merchandise Assortments	3.2046	0.5242
V33	Promotional Media	2.8991	0.5749
V34	Fashion Show Production	2.8234	0.5878
V35	Cyclical Fashion Trends	3.9088	0.4185
V36	Fiber Processing Stages	1.5620	0.8156
V37	Production Automation	1.9137	0.7516
V38	Forms of Bus. Ownership	8.3929	0.0782
V39	Fashion Sketching	5.0670	0.2805
V40	Layout & Design for Ads	10.8770	0.0280
V41	Price-Quality Relationship	0.4662	0.9767

TABLE XXIX (Continued)

V42	Designing for the Mass Mkt.	8.0310	0.0905
V43	Direct Mail Techniques	8.3098	0.0809
V44	Cultural Diversity	4.6582	0.3242
V45	Computers in Buying	5.0979	0.2774
V46	Global Enviro. Concerns	1.4772	0.8307
V47	Public Relations	11.3090	0.0233
V48	RTW Sizing Specifications	5.9328	0.2042
V49	Consumer Decision Making	7.4918	0.1121
V50	Yarn Types	0.7910	0.9142
V51	International App. Mkts.	5.0755	0.2796
V52	Mergers & Acquisitions	3.9451	0.4135
V53	Theories of Fashion	2.6219	0.6230
V54	Federal Legislation	1.5457	0.8185
V55	Fashion Designers	2.1333	0.7112
V56	Elements of Design	5.4981	0.2399
V57	Role of the App. Mart	1.2283	0.8734
V58	Apparel Terminology	2.6185	0.6235
V59	Non-Store Retailing	2.1897	0.7009
V60	Fabric Finishes	6.0742	0.1937
V61	Textile Testing Proc.	3.6907	0.4495
V62	Employee Training Program	5.1202	0.2752
V63	Types of Display Settings	1.5443	0.8188
V64	Role of Purchase Orders	3.5103	0.4763
V65	Managing Open to Buy	6.4108	0.1705
V66	Vertical Integration	1.3481	0.8532
V67	Initiate & Close Sales	9.2620	0.0549
V68	Accessories Production	3.3481	0.5013
V69	Fabrication Methods	2.7443	0.6015
V70	Macroenvironmental Cond.	1.9153	0.7513
V71	Workplace Issues/Trends	3.6106	0.4613
V72	Types of Retail Ads	1.1894	0.8798
V73	Sales Promotion Appr.	2.7812	0.5951
V74	Care Labeling	7.2971	0.1210
V75	Branded Vs. Private Label	4.0416	0.4004
V76	Personal Communications	5.7673	0.2172
V77	Types of Orders	6.4561	0.1676
V78	Garment Fitting/Alt.	3.5757	0.4665
V79	Flat Pattern Techniques	8.7537	0.0676
V80	Price Merchandise	10.7450	0.0296
V81	International Trade Agree.	4.3193	0.3645
V82	Merchandise Buying	7.6109	0.1069
V83	Figure Analysis	4.9686	0.2905
V84	Color Concepts	8.8597	0.0647
V85	Store Types	3.8572	0.4257
V86	POP Displays	1.9083	0.7526
V87	Consumption Patterns	7.5617	0.1090
V88	Market Segmentation	11.1130	0.0253
V89	Leadership Qualities	8.7464	0.0678
V90	Computer Terminology	4.2344	0.3752

TABLE XXIX (Continued)

V91	Floor Plan Designs	1.0689	0.8992
V92	Resident Buying Offices	5.3007	0.2578
V93	Company Organ. Structures	1.2054	0.8722
V94	In-Store Special Events	1.3419	0.8542
V95	Decision Making Skills	3.3342	0.5035
V96	Draping Techniques	7.4449	0.1142
V97	Entrepreneurship	4.3742	0.3579
V98	Industry Associations	2.5202	0.6410
V99	Ind. Sewing Equipment	13.8600	0.0078*
V100	Bus. Activities - Events	3.2829	0.5116
V101	Textile Dyeing/Printing	4.5861	0.3325
V102	Receive/Chk/Sto Merchandise	3.0358	0.5519

[a] The age of respondents were divided into five categories (30 years or younger, 31 - 40, 41 - 50, 51 - 60, 61 or older) (df = 4).

[b] $p < .01$

TABLE XXX

INSTRUCTIONAL/COGNITIVE LEVEL OF SELECT CURRICULUM CONCEPTS BASED ON AGE OF RESPONDENTS[a]

ID	Variable	x^2	p Value[b]
V1	Ethical Resp. of Firms	0.9859	0.9119
V2	Production of Fibers	2.7873	0.5940
V3	Historic Tex/Costume	0.9626	0.9154
V4	Accessories Production	1.9481	0.7453
V5	Import/Export Reg.	7.8832	0.0960
V6	Consumer Demographic Var.	8.7348	0.0681
V7	Cooperative Advertising	4.8869	0.2991
V8	Ind. App. Production Proc.	1.2124	0.8760
V9	Personnel Management	2.9378	0.5683
V10	Visual Merch. Techniques	3.0199	0.5545
V11	Principles of Design	4.8343	0.3047
V12	QR Techniques	4.5864	0.3324
V13	Trade Publications	4.9606	0.2914
V14	Ind. Pattern Making Tech.	3.3207	0.5057
V15	Global Sourcing - Merch.	6.8019	0.1467
V16	Garment Construct. Tech.	5.1202	0.2752
V17	Supervise Employee Perf.	6.7056	0.1523
V18	Forecasting Demand	9.1253	0.0580
V19	Vendor Terms	5.7145	0.2215
V20	Global Interdependence	2.6456	0.6188
V21	Consumer Psychographic	5.8526	0.2104
V22	Private Label Programs	4.3495	0.3608
V23	Customer Service	3.3796	0.4964
V24	Inventory Shrinkage Control	3.3945	0.4941
V25	Stockturn	6.2392	0.1820
V26	Push/Pull Strategies	1.9683	0.7416
V27	Marketing Research	3.9502	0.4128
V28	Made in the USA Campaign	4.3824	0.3567
V29	Fabric Characteristics	6.1434	0.1887
V30	Social Resp. of Firms	3.6015	0.4626
V31	Environmentally Safe Wkplace	4.9057	0.2971
V32	Merchandise Assortments	5.8040	0.2143
V33	Promotional Media	3.0408	0.5510
V34	Fashion Show Production	1.7068	0.7895
V35	Cyclical Fashion Trends	1.0924	0.8955
V36	Fiber Processing Stages	2.0916	0.7189
V37	Production Automation	7.7667	0.1005
V38	Forms of Bus. Ownership	7.1486	0.1282
V39	Fashion Sketching	0.2278	0.9940
V40	Layout & Design for Ads	8.8673	0.0645
V41	Price-Quality Relationship	1.0798	0.8975

TABLE XXX (Continued)

V42	Designing for the Mass Mkt.	3.1735	0.4462
V43	Direct Mail Techniques	5.8399	0.2114
V44	Cultural Diversity	3.6659	0.4531
V45	Computers in Buying	8.6725	0.0698
V46	Global Enviro. Concerns	4.5486	0.3368
V47	Public Relations	7.4742	0.1129
V48	RTW Sizing Specifications	5.6741	0.2248
V49	Consumer Decision Making	7.9577	0.0931
V50	Yarn Types	3.2686	0.5139
V51	International App. Mkts.	3.4602	0.4840
V52	Mergers & Acquisitions	10.2530	0.0364
V53	Theories of Fashion	4.9954	0.2878
V54	Federal Legislation	2.3378	0.6739
V55	Fashion Designers	3.9695	0.4101
V56	Elements of Design	2.8527	0.5828
V57	Role of the App. Mart	4.2342	0.3752
V58	Apparel Terminology	3.8564	0.4258
V59	Non-Store Retailing	0.9123	0.9228
V60	Fabric Finishes	4.7157	0.3177
V61	Textile Testing Proc.	1.7706	0.7779
V62	Employee Training Program	1.3783	0.8480
V63	Types of Display Settings	0.6549	0.9568
V64	Role of Purchase Orders	5.1361	0.2736
V65	Managing Open to Buy	8.4966	0.0750
V66	Vertical Integration	1.2095	0.8765
V67	Initiate & Close Sales	4.2652	0.3713
V68	Accessories Production	0.9803	0.9128
V69	Fabrication Methods	2.6338	0.6209
V70	Macroenvironmental Cond.	1.0582	0.9008
V71	Workplace Issues/Trends	3.8783	0.4227
V72	Types of Retail Ads	1.2606	0.8680
V73	Sales Promotion Appr.	3.3301	0.5042
V74	Care Labeling	11.7930	0.0190
V75	Branded Vs. Private Label	2.1343	0.7111
V76	Personal Communications	4.6746	0.3223
V77	Types of Orders	7.5386	0.1100
V78	Garment Fitting/Alt.	1.7353	0.7843
V79	Flat Pattern Techniques	0.8375	0.9333
V80	Price Merchandise	8.9412	0.0626
V81	International Trade Agree.	2.0881	0.7196
V82	Merchandise Buying	3.0134	0.5556
V83	Figure Analysis	17.1810	0.0161
V84	Color Concepts	5.8042	0.2143
V85	Store Types	3.1212	0.5378
V86	POP Displays	3.6161	0.4604
V87	Consumption Patterns	17.4710	0.0016*
V88	Market Segmentation	12.4320	0.0144
V89	Leadership Qualities	6.3213	0.1764
V90	Computer Terminology	0.8949	0.9253

TABLE XXX (Continued)

V91	Floor Plan Designs	0.9826	0.9124
V92	Resident Buying Offices	6.6391	0.1562
V93	Company Organ. Structures	1.5545	0.8169
V94	In-Store Special Events	3.1859	0.5272
V95	Decision Making Skills	1.9566	0.7437
V96	Draping Techniques	1.6909	0.7924
V97	Entrepreneurship	2.0004	0.7357
V98	Industry Associations	1.4483	0.8358
V99	Ind. Sewing Equipment	0.7051	0.9507
V100	Bus. Activities - Events	1.5518	0.8174
V101	Textile Dyeing/Printing	9.4759	0.0502
V102	Receive/Chk/Sto Merchandise	2.0983	0.7177

[a] The age of respondents were divided into five categories (30 years or younger, 31 - 40, 41 - 50, 51 - 60, 61 or older) (df = 4).

[b] $p < .01$

TABLE XXXI

LEVEL OF IMPORTANCE OF SELECT CURRICULUM CONCEPTS BASED ON THE NUMBER OF YEARS EMPLOYED IN A HIGHER EDUCATION INSTITUTION[a]

ID	Variable	x^2	p Value[b]
V1	Ethical Resp. of Firms	13.3930	0.0095*
V2	Production of Fibers	6.6823	0.1537
V3	Historic Tex/Costume	2.7644	0.5980
V4	Accessories Production	2.6610	0.6160
V5	Import/Export Reg.	6.6597	0.1550
V6	Consumer Demographic Var.	0.5195	0.9716
V7	Cooperative Advertising	2.3357	0.6743
V8	Ind. App. Production Proc.	10.3340	0.0352
V9	Personnel Management	3.5640	0.4682
V10	Visual Merch. Techniques	1.0722	0.8987
V11	Principles of Design	7.1748	0.1269
V12	QR Techniques	2.0228	0.7316
V13	Trade Publications	1.6933	0.7919
V14	Ind. Pattern Making Tech.	3.7452	0.4416
V15	Global Sourcing - Merch.	2.5152	0.6419
V16	Garment Construct. Tech.	4.5395	0.3379
V17	Supervise Employee Perf.	9.9166	0.0419
V18	Forecasting Demand	9.7088	0.0456
V19	Vendor Terms	2.0538	0.7259
V20	Global Interdependence	2.9038	0.5741
V21	Consumer Psychographic	0.5525	0.9682
V22	Private Label Programs	6.8722	0.1428
V23	Customer Service	4.9601	0.2914
V24	Inventory Shrinkage Control	2.1098	0.7156
V25	Stockturn	3.2411	0.5183
V26	Push/Pull Strategies	1.4922	0.8280
V27	Marketing Research	2.0021	0.7354
V28	Made in the USA Campaign	1.2297	0.8732
V29	Fabric Characteristics	12.4270	0.0144
V30	Social Resp. of Firms	1.2802	0.8647
V31	Environmentally Safe Wkplace	4.9513	0.2923
V32	Merchandise Assortments	2.0559	0.7255
V33	Promotional Media	1.8676	0.7601
V34	Fashion Show Production	1.3109	0.8595
V35	Cyclical Fashion Trends	9.8721	0.0426
V36	Fiber Processing Stages	8.3653	0.0791
V37	Production Automation	3.4366	0.4876
V38	Forms of Bus. Ownership	5.2605	0.2616
V39	Fashion Sketching	1.3148	0.8589
V40	Layout & Design for Ads	2.8544	0.5825
V41	Price-Quality Relationship	3.6690	0.4527

TABLE XXXI (Continued)

V42	Designing for the Mass Mkt.	8.9528	0.0623
V43	Direct Mail Techniques	5.2875	0.2590
V44	Cultural Diversity	5.1573	0.2715
V45	Computers in Buying	0.3080	0.9893
V46	Global Enviro. Concerns	0.4807	0.9753
V47	Public Relations	3.1672	0.5302
V48	RTW Sizing Specifications	3.2079	0.5237
V49	Consumer Decision Making	5.0852	0.2787
V50	Yarn Types	9.3408	0.0531
V51	International App. Mkts.	6.6513	0.1555
V52	Mergers & Acquisitions	3.0168	0.5550
V53	Theories of Fashion	7.4143	0.1156
V54	Federal Legislation	2.0881	0.7196
V55	Fashion Designers	10.6240	0.0311
V56	Elements of Design	4.7149	0.3178
V57	Role of the App. Mart	1.7044	0.7899
V58	Apparel Terminology	0.7164	0.9493
V59	Non-Store Retailing	5.7527	0.2184
V60	Fabric Finishes	10.1120	0.0386
V61	Textile Testing Proc.	16.0750	0.0029*
V62	Employee Training Program	3.0164	0.5551
V63	Types of Display Settings	3.8044	0.4331
V64	Role of Purchase Orders	2.5963	0.6275
V65	Managing Open to Buy	1.4613	0.8335
V66	Vertical Integration	3.2041	0.5243
V67	Initiate & Close Sales	8.7574	0.0675
V68	Accessories Production	1.7743	0.7772
V69	Fabrication Methods	7.9285	0.0942
V70	Macroenvironmental Cond.	2.9464	0.5668
V71	Workplace Issues/Trends	4.0114	0.4045
V72	Types of Retail Ads	1.0119	0.9080
V73	Sales Promotion Appr.	0.4386	0.9792
V74	Care Labeling	7.8269	0.0981
V75	Branded Vs. Private Label	5.6099	0.2302
V76	Personal Communications	3.3438	0.5020
V77	Types of Orders	2.6938	0.6103
V78	Garment Fitting/Alt.	2.2913	0.6824
V79	Flat Pattern Techniques	4.4462	0.3490
V80	Price Merchandise	2.7422	0.6019
V81	International Trade Agree.	2.7712	0.5968
V82	Merchandise Buying	0.5471	0.9688
V83	Figure Analysis	1.3538	0.8522
V84	Color Concepts	7.5562	0.1093
V85	Store Types	2.5252	0.6401
V86	POP Displays	1.5066	0.9011
V87	Consumption Patterns	3.0547	0.5487
V88	Market Segmentation	3.4055	0.4924
V89	Leadership Qualities	13.3530	0.0097*
V90	Computer Terminology	0.9379	0.9191

TABLE XXXI (Continued)

V91	Floor Plan Designs	1.9454	0.7458
V92	Resident Buying Offices	1.5388	0.8197
V93	Company Organ. Structures	1.8142	0.7699
V94	In-Store Special Events	2.8789	0.5783
V95	Decision Making Skills	11.5890	0.0207
V96	Draping Techniques	3.4856	0.4801
V97	Entrepreneurship	2.9567	0.5651
V98	Industry Associations	0.9789	0.9130
V99	Ind. Sewing Equipment	3.5730	0.4669
V100	Bus. Activities - Events	2.6644	0.6155
V101	Textile Dyeing/Printing	9.4735	0.0503
V102	Receive/Chk/Sto Merchandise	1.6221	0.8048

[a] The number of years employed in a higher education institution were divided into five categories (under 2 years, 2 - 4, 5 - 9, 10 - 14, and over 15 years) (df = 4).

[b] $p < .01$

TABLE XXXII

INSTRUCTIONAL/COGNITIVE LEVEL OF SELECT CURRICULUM CONCEPTS BASED ON THE NUMBER OF YEARS EMPLOYED IN A HIGHER EDUCATION INSTITUTION[a]

ID	Variable	x^2	p Value[b]
V1	Ethical Resp. of Firms	7.3669	0.1177
V2	Production of Fibers	4.2436	0.3740
V3	Historic Tex/Costume	1.3520	0.8525
V4	Accessories Production	5.0090	0.2863
V5	Import/Export Reg.	1.0261	0.9058
V6	Consumer Demographic Var.	2.1609	0.7062
V7	Cooperative Advertising	3.9969	0.4064
V8	Ind. App. Production Proc.	7.3058	0.1206
V9	Personnel Management	5.2614	0.2615
V10	Visual Merch. Techniques	2.8422	0.5846
V11	Principles of Design	5.4151	0.2473
V12	QR Techniques	4.9924	0.2881
V13	Trade Publications	1.0701	0.8990
V14	Ind. Pattern Making Tech.	2.1187	0.7139
V15	Global Sourcing - Merch.	5.3553	0.2527
V16	Garment Construct. Tech.	3.6316	0.4582
V17	Supervise Employee Perf.	3.2372	0.5189
V18	Forecasting Demand	5.8057	0.2141
V19	Vendor Terms	5.2695	0.2607
V20	Global Interdependence	0.9055	0.9238
V21	Consumer Psychographic	0.5401	0.9695
V22	Private Label Programs	7.4531	0.1138
V23	Customer Service	5.8492	0.2107
V24	Inventory Shrinkage Control	4.0029	0.4056
V25	Stockturn	4.2404	0.3744
V26	Push/Pull Strategies	1.0050	0.9090
V27	Marketing Research	3.0527	0.5491
V28	Made in the USA Campaign	2.6538	0.6173
V29	Fabric Characteristics	6.9005	0.1412
V30	Social Resp. of Firms	1.0029	0.9094
V31	Environmentally Safe Wkplace	1.5483	0.8181
V32	Merchandise Assortments	3.2320	0.5198
V33	Promotional Media	2.8152	0.5892
V34	Fashion Show Production	4.3774	0.3573
V35	Cyclical Fashion Trends	4.1011	0.3925
V36	Fiber Processing Stages	9.4885	0.0500
V37	Production Automation	2.8931	0.5759
V38	Forms of Bus. Ownership	4.6242	0.3281
V39	Fashion Sketching	1.9243	0.7497
V40	Layout & Design for Ads	4.4859	0.3442
V41	Price-Quality Relationship	2.1253	0.7127

TABLE XXXII (Continued)

V42	Designing for the Mass Mkt.	2.8016	0.5916
V43	Direct Mail Techniques	2.4074	0.6612
V44	Cultural Diversity	2.9713	0.5626
V45	Computers in Buying	3.7541	0.4403
V46	Global Enviro. Concerns	1.5368	0.8201
V47	Public Relations	2.0984	0.7177
V48	RTW Sizing Specifications	1.8934	0.7554
V49	Consumer Decision Making	3.7035	0.4476
V50	Yarn Types	3.0173	0.5549
V51	International App. Mkts.	5.2501	0.2626
V52	Mergers & Acquisitions	13.3090	0.0099*
V53	Theories of Fashion	2.3896	0.6645
V54	Federal Legislation	3.4700	0.4824
V55	Fashion Designers	1.8029	0.7719
V56	Elements of Design	3.3712	0.4977
V57	Role of the App. Mart	3.8644	0.4247
V58	Apparel Terminology	1.5423	0.8191
V59	Non-Store Retailing	3.3265	0.5047
V60	Fabric Finishes	8.0104	0.0912
V61	Textile Testing Proc.	9.6953	0.0459
V62	Employee Training Program	3.5509	0.4702
V63	Types of Display Settings	4.4689	0.3462
V64	Role of Purchase Orders	0.9810	0.9127
V65	Managing Open to Buy	2.8946	0.5756
V66	Vertical Integration	3.9212	0.4168
V67	Initiate & Close Sales	0.5400	0.9695
V68	Accessories Production	6.7730	0.1484
V69	Fabrication Methods	8.9176	0.0632
V70	Macroenvironmental Cond.	3.2513	0.5167
V71	Workplace Issues/Trends	16.3330	0.0026*
V72	Types of Retail Ads	4.8399	0.3041
V73	Sales Promotion Appr.	1.8988	0.7544
V74	Care Labeling	5.0513	0.2821
V75	Branded Vs. Private Label	2.3187	0.6774
V76	Personal Communications	5.8327	0.2120
V77	Types of Orders	6.5647	0.1608
V78	Garment Fitting/Alt.	2.3580	0.6702
V79	Flat Pattern Techniques	1.8062	0.7714
V80	Price Merchandise	3.2111	0.5231
V81	International Trade Agree.	2.9927	0.5590
V82	Merchandise Buying	4.1458	0.3866
V83	Figure Analysis	8.2982	0.0812
V84	Color Concepts	2.9561	0.5652
V85	Store Types	9.6514	0.0467
V86	POP Displays	1.4402	0.8372
V87	Consumption Patterns	1.2804	0.8647
V88	Market Segmentation	4.5744	0.3338
V89	Leadership Qualities	4.1255	0.3893
V90	Computer Terminology	8.6029	0.0718

TABLE XXXII (Continued)

V91	Floor Plan Designs	9.5432	0.0489
V92	Resident Buying Offices	4.6785	0.3219
V93	Company Organ. Structures	2.5937	0.6279
V94	In-Store Special Events	2.2979	0.6812
V95	Decision Making Skills	3.6006	0.4627
V96	Draping Techniques	3.8648	0.4246
V97	Entrepreneurship	1.9456	0.7458
V98	Industry Associations	6.7433	0.1501
V99	Ind. Sewing Equipment	17.0680	0.0019*
V100	Bus. Activities - Events	4.9174	0.2959
V101	Textile Dyeing/Printing	3.4428	0.4866
V102	Receive/Chk/Sto Merchandise	2.4240	0.6583

[a] The number of years employed in a higher education institution were divided into five categories (under 2 years, 2 - 4, 5 - 9, 10 - 14, and over 15 years) (df = 4).

[b] $p < .01$

TABLE XXXIII

LEVEL OF IMPORTANCE OF SELECT CURRICULUM CONCEPTS BASED ON THE RESPONDENT'S ACADEMIC RANK[a]

ID	Variable	x^2	p Value[b]
V1	Ethical Resp. of Firms	16.4350	0.0057*
V2	Production of Fibers	6.5793	0.2539
V3	Historic Tex/Costume	2.2177	0.8183
V4	Accessories Production	7.0443	0.2174
V5	Import/Export Reg.	5.0907	0.4049
V6	Consumer Demographic Var.	4.5378	0.4748
V7	Cooperative Advertising	2.8003	0.7307
V8	Ind. App. Production Proc.	8.2535	0.1428
V9	Personnel Management	7.9729	0.1577
V10	Visual Merch. Techniques	4.6734	0.4570
V11	Principles of Design	11.1040	0.0494
V12	QR Techniques	6.5610	0.2554
V13	Trade Publications	7.1481	0.2099
V14	Ind. Pattern Making Tech.	10.7510	0.0565
V15	Global Sourcing - Merch.	9.5267	0.0898
V16	Garment Construct. Tech.	5.5549	0.3520
V17	Supervise Employee Perf.	7.0697	0.2155
V18	Forecasting Demand	3.5631	0.6139
V19	Vendor Terms	6.9302	0.2259
V20	Global Interdependence	4.9807	0.4182
V21	Consumer Psychographic	2.9830	0.7026
V22	Private Label Programs	10.1790	0.0703
V23	Customer Service	2.9136	0.7133
V24	Inventory Shrinkage Control	4.9480	0.4223
V25	Stockturn	9.3139	0.0972
V26	Push/Pull Strategies	12.7870	0.0255
V27	Marketing Research	6.5024	0.2604
V28	Made in the USA Campaign	3.1422	0.6781
V29	Fabric Characteristics	9.1676	0.1026
V30	Social Resp. of Firms	4.7593	0.4460
V31	Environmentally Safe Wkplace	3.9090	0.5626
V32	Merchandise Assortments	3.5831	0.6108
V33	Promotional Media	9.3984	0.0942
V34	Fashion Show Production	2.5934	0.7624
V35	Cyclical Fashion Trends	1.6365	0.8968
V36	Fiber Processing Stages	8.2755	0.1417
V37	Production Automation	3.3211	0.6506
V38	Forms of Bus. Ownership	1.6485	0.8953
V39	Fashion Sketching	7.3055	0.1989
V40	Layout & Design for Ads	9.1550	0.1030
V41	Price-Quality Relationship	5.7306	0.0333

TABLE XXXIII (Continued)

V42	Designing for the Mass Mkt.	4.1131	0.5335
V43	Direct Mail Techniques	3.6888	0.5950
V44	Cultural Diversity	8.9261	0.1121
V45	Computers in Buying	14.5870	0.1023
V46	Global Enviro. Concerns	10.7400	0.0568
V47	Public Relations	6.7307	0.2415
V48	RTW Sizing Specifications	15.0420	0.0102
V49	Consumer Decision Making	3.2183	0.6664
V50	Yarn Types	6.3209	0.2762
V51	International App. Mkts.	6.1343	0.2934
V52	Mergers & Acquisitions	5.2624	0.3847
V53	Theories of Fashion	2.1676	0.8255
V54	Federal Legislation	3.7186	0.5906
V55	Fashion Designers	10.1640	0.0707
V56	Elements of Design	11.5820	0.0410
V57	Role of the App. Mart	4.7032	0.4532
V58	Apparel Terminology	12.0870	0.0336
V59	Non-Store Retailing	4.0782	0.5382
V60	Fabric Finishes	8.8392	0.1157
V61	Textile Testing Proc.	5.3738	0.3720
V62	Employee Training Program	10.7790	0.0559
V63	Types of Display Settings	14.8600	0.0110
V64	Role of Purchase Orders	4.6099	0.4653
V65	Managing Open to Buy	1.8561	0.8687
V66	Vertical Integration	7.3475	0.1961
V67	Initiate & Close Sales	5.8098	0.3252
V68	Accessories Production	3.1946	0.6700
V69	Fabrication Methods	5.6752	0.3391
V70	Macroenvironmental Cond.	3.3693	0.6432
V71	Workplace Issues/Trends	10.0100	0.0749
V72	Types of Retail Ads	4.4412	0.4878
V73	Sales Promotion Appr.	3.4951	0.6241
V74	Care Labeling	11.2740	0.0462
V75	Branded Vs. Private Label	5.9946	0.3067
V76	Personal Communications	2.9596	0.7062
V77	Types of Orders	3.7092	0.5920
V78	Garment Fitting/Alt.	11.3890	0.0442
V79	Flat Pattern Techniques	5.7384	0.3325
V80	Price Merchandise	5.0065	0.4151
V81	International Trade Agree.	9.2258	0.1004
V82	Merchandise Buying	3.8357	0.5733
V83	Figure Analysis	8.6902	0.1221
V84	Color Concepts	16.8570	0.0048*
V85	Store Types	8.5091	0.1303
V86	POP Displays	11.9590	0.0354
V87	Consumption Patterns	3.6936	0.5943
V88	Market Segmentation	4.3676	0.4978
V89	Leadership Qualities	9.2499	0.0995
V90	Computer Terminology	8.9352	0.1117

TABLE XXXIII (Continued)

V91	Floor Plan Designs	17.3110	0.0039*
V92	Resident Buying Offices	8.7054	0.1214
V93	Company Organ. Structures	0.9810	0.9641
V94	In-Store Special Events	6.6161	0.2508
V95	Decision Making Skills	5.2897	0.3816
V96	Draping Techniques	4.8383	0.4359
V97	Entrepreneurship	3.0226	0.6965
V98	Industry Associations	1.6355	0.8969
V99	Ind. Sewing Equipment	4.0629	0.5404
V100	Bus. Activities - Events	2.8324	0.7258
V101	Textile Dyeing/Printing	5.6548	0.3413
V102	Receive/Chk/Sto Merchandise	7.0828	0.2146

[a] Six academic rank categories were provided on the questionnaire (Lecturer, Instructor, Assistant Professor, Associate Professor, Professor and other) (df = 5).

[b] $p < .01$

TABLE XXXIV

INSTRUCTIONAL/COGNITIVE LEVEL OF SELECT CURRICULUM CONCEPTS BASED ON THE RESPONDENT'S ACADEMIC RANK[a]

ID	Variable	x^2	p Value[b]
V1	Ethical Resp. of Firms	14.8070	0.0112
V2	Production of Fibers	11.8610	0.0367
V3	Historic Tex/Costume	2.8358	0.7253
V4	Accessories Production	9.5370	0.0895
V5	Import/Export Reg.	0.4597	0.0035
V6	Consumer Demographic Var.	4.3143	0.5051
V7	Cooperative Advertising	6.4830	0.2620
V8	Ind. App. Production Proc.	4.5503	0.4732
V9	Personnel Management	6.7282	0.2417
V10	Visual Merch. Techniques	5.3723	0.3722
V11	Principles of Design	8.0792	0.1519
V12	QR Techniques	0.6180	0.9872
V13	Trade Publications	3.7027	0.5930
V14	Ind. Pattern Making Tech.	2.8967	0.7159
V15	Global Sourcing - Merch.	5.3602	0.3735
V16	Garment Construct. Tech.	2.2957	0.8069
V17	Supervise Employee Perf.	7.6987	0.1736
V18	Forecasting Demand	3.1868	0.6712
V19	Vendor Terms	1.7787	0.8788
V20	Global Interdependence	5.5174	0.3560
V21	Consumer Psychographic	3.6906	0.5948
V22	Private Label Programs	2.4938	0.7774
V23	Customer Service	7.2533	0.2025
V24	Inventory Shrinkage Control	3.9963	0.5499
V25	Stockturn	1.8706	0.8667
V26	Push/Pull Strategies	3.1063	0.6836
V27	Marketing Research	2.3811	0.7943
V28	Made in the USA Campaign	3.8955	0.5646
V29	Fabric Characteristics	6.3914	0.2700
V30	Social Resp. of Firms	4.8280	0.4372
V31	Environmentally Safe Wkplace	1.9782	0.8522
V32	Merchandise Assortments	3.4890	0.6250
V33	Promotional Media	7.2758	0.2009
V34	Fashion Show Production	0.5800	0.9889
V35	Cyclical Fashion Trends	3.5656	0.6135
V36	Fiber Processing Stages	9.8207	0.0805
V37	Production Automation	7.5782	0.1811
V38	Forms of Bus. Ownership	3.2136	0.6671
V39	Fashion Sketching	3.7355	0.5881
V40	Layout & Design for Ads	7.6743	0.1751
V41	Price-Quality Relationship	1.6217	0.8986

TABLE XXXIV (Continued)

V42	Designing for the Mass Mkt.	2.6047	0.7607
V43	Direct Mail Techniques	2.8553	0.7223
V44	Cultural Diversity	5.2830	0.3823
V45	Computers in Buying	4.8550	0.4338
V46	Global Enviro. Concerns	11.2720	0.0463
V47	Public Relations	7.4864	0.1869
V48	RTW Sizing Specifications	5.7956	0.3266
V49	Consumer Decision Making	1.9045	0.8622
V50	Yarn Types	6.8806	0.2297
V51	International App. Mkts.	8.0202	0.1551
V52	Mergers & Acquisitions	7.3511	0.1958
V53	Theories of Fashion	7.3218	0.1978
V54	Federal Legislation	6.6421	0.2486
V55	Fashion Designers	4.1805	0.5237
V56	Elements of Design	9.3345	0.0964
V57	Role of the App. Mart	10.0320	0.0743
V58	Apparel Terminology	7.9401	0.1596
V59	Non-Store Retailing	6.7523	0.2397
V60	Fabric Finishes	8.0369	0.1542
V61	Textile Testing Proc.	2.8863	0.7175
V62	Employee Training Program	6.9120	0.2273
V63	Types of Display Settings	14.5480	0.0125
V64	Role of Purchase Orders	2.5890	0.7630
V65	Managing Open to Buy	4.5762	0.4698
V66	Vertical Integration	4.4470	0.4870
V67	Initiate & Close Sales	5.6035	0.3467
V68	Accessories Production	2.5355	0.7711
V69	Fabrication Methods	7.3178	0.1981
V70	Macroenvironmental Cond.	2.1659	0.8257
V71	Workplace Issues/Trends	19.5930	0.0015*
V72	Types of Retail Ads	8.2996	0.1405
V73	Sales Promotion Appr.	3.1410	0.6783
V74	Care Labeling	4.3212	0.5042
V75	Branded Vs. Private Label	1.7121	0.8874
V76	Personal Communications	3.7653	0.5839
V77	Types of Orders	3.3732	0.6627
V78	Garment Fitting/Alt.	9.9532	0.0766
V79	Flat Pattern Techniques	2.8180	0.7780
V80	Price Merchandise	1.2772	0.9373
V81	International Trade Agree.	3.8433	0.5722
V82	Merchandise Buying	3.1701	0.6738
V83	Figure Analysis	9.2618	0.0991
V84	Color Concepts	12.8330	0.0250
V85	Store Types	4.5390	0.4747
V86	POP Displays	4.3480	0.5005
V87	Consumption Patterns	6.0682	0.2996
V88	Market Segmentation	8.2667	0.1421
V89	Leadership Qualities	12.4060	0.0296
V90	Computer Terminology	4.2317	0.5166

TABLE XXXIV (Continued)

V91	Floor Plan Designs	6.6962	0.2442
V92	Resident Buying Offices	3.2913	0.6552
V93	Company Organ. Structures	1.8716	0.8666
V94	In-Store Special Events	6.3893	0.2702
V95	Decision Making Skills	1.8587	0.8683
V96	Draping Techniques	3.9270	0.5600
V97	Entrepreneurship	2.3653	0.7966
V98	Industry Associations	13.8160	0.0168
V99	Ind. Sewing Equipment	17.4540	0.0037*
V100	Bus. Activities - Events	7.8995	0.1619
V101	Textile Dyeing/Printing	3.5097	0.6219
V102	Receive/Chk/Sto Merchandise	8.8287	0.1161

[a] Six academic rank categories were provided on the questionnaire (Lecturer, Instructor, Assistant Professor, Associate Professor, Professor and other) (df = 5).

[b] $p < .01$

TABLE XXXV

LEVEL OF IMPORTANCE OF SELECT CURRICULUM CONCEPTS BASED ON THE NUMBER OF FULL-TIME FACULTY TEACHING A MERCHANDISING COURSE[a]

ID	Variable	x^2	p Value[b]
V1	Ethical Resp. of Firms	4.2903	0.2318
V2	Production of Fibers	3.2003	0.3618
V3	Historic Tex/Costume	1.3279	0.7225
V4	Accessories Production	16.0580	0.0011*
V5	Import/Export Reg.	1.0285	0.7944
V6	Consumer Demographic Var.	4.1440	0.2463
V7	Cooperative Advertising	3.8809	0.2746
V8	Ind. App. Production Proc.	2.8158	0.4209
V9	Personnel Management	1.6351	0.6615
V10	Visual Merch. Techniques	5.3945	0.1451
V11	Principles of Design	4.1038	0.2505
V12	QR Techniques	2.2986	0.5128
V13	Trade Publications	4.4157	0.2199
V14	Ind. Pattern Making Tech.	5.7718	0.1233
V15	Global Sourcing - Merch.	4.4608	0.2158
V16	Garment Construct. Tech.	2.6106	0.4556
V17	Supervise Employee Perf.	3.9869	0.2629
V18	Forecasting Demand	10.5600	0.0144
V19	Vendor Terms	11.3220	0.0101
V20	Global Interdependence	1.6876	0.6397
V21	Consumer Psychographic	2.9625	0.3974
V22	Private Label Programs	0.8714	0.8323
V23	Customer Service	7.0289	0.0710
V24	Inventory Shrinkage Control	1.8930	0.5949
V25	Stockturn	1.2236	0.7474
V26	Push/Pull Strategies	2.3470	0.5036
V27	Marketing Research	5.4021	0.1446
V28	Made in the USA Campaign	9.5017	0.0233
V29	Fabric Characteristics	2.2047	0.5310
V30	Social Resp. of Firms	7.5023	0.0575
V31	Environmentally Safe Wkplace	5.0089	0.1711
V32	Merchandise Assortments	1.3058	0.7278
V33	Promotional Media	8.0576	0.0448
V34	Fashion Show Production	13.6350	0.0034*
V35	Cyclical Fashion Trends	7.4328	0.0593
V36	Fiber Processing Stages	4.6035	0.2032
V37	Production Automation	1.3442	0.7187
V38	Forms of Bus. Ownership	5.5156	0.1377
V39	Fashion Sketching	5.5089	0.1381
V40	Layout & Design for Ads	14.1710	0.0027*
V41	Price-Quality Relationship	0.4446	0.9309

TABLE XXXV (Continued)

V42	Designing for the Mass Mkt.	8.0537	0.0449
V43	Direct Mail Techniques	2.6937	0.4413
V44	Cultural Diversity	4.7636	0.1899
V45	Computers in Buying	1.9655	0.5796
V46	Global Enviro. Concerns	2.5254	0.4707
V47	Public Relations	7.4318	0.0593
V48	RTW Sizing Specifications	1.2186	0.7486
V49	Consumer Decision Making	2.7362	0.4341
V50	Yarn Types	2.9161	0.4047
V51	International App. Mkts.	3.6853	0.2975
V52	Mergers & Acquisitions	0.9810	0.8059
V53	Theories of Fashion	10.4560	0.0151
V54	Federal Legislation	4.9779	0.1734
V55	Fashion Designers	16.4900	0.0009*
V56	Elements of Design	6.3935	0.0940
V57	Role of the App. Mart	5.2346	0.1554
V58	Apparel Terminology	6.3018	0.0978
V59	Non-Store Retailing	0.7320	0.8656
V60	Fabric Finishes	1.1288	0.7701
V61	Textile Testing Proc.	3.1824	0.3643
V62	Employee Training Program	3.3554	0.3400
V63	Types of Display Settings	22.3210	0.0001*
V64	Role of Purchase Orders	6.5885	0.0862
V65	Managing Open to Buy	3.0312	0.3868
V66	Vertical Integration	2.0023	0.5719
V67	Initiate & Close Sales	2.2205	0.5279
V68	Accessories Production	7.2393	0.0646
V69	Fabrication Methods	3.1841	0.3641
V70	Macroenvironmental Cond.	1.6340	0.6517
V71	Workplace Issues/Trends	9.0641	0.0285
V72	Types of Retail Ads	7.2121	0.0654
V73	Sales Promotion Appr.	10.3170	0.0161
V74	Care Labeling	1.4396	0.6963
V75	Branded Vs. Private Label	9.4175	0.0242
V76	Personal Communications	1.6770	0.6421
V77	Types of Orders	5.1459	0.1614
V78	Garment Fitting/Alt.	1.5005	0.6821
V79	Flat Pattern Techniques	4.1375	0.2470
V80	Price Merchandise	2.8344	0.4179
V81	International Trade Agree.	1.9830	0.5760
V82	Merchandise Buying	2.9411	0.4008
V83	Figure Analysis	6.0761	0.1080
V84	Color Concepts	7.7462	0.0516
V85	Store Types	2.6336	0.4516
V86	POP Displays	10.2590	0.0165
V87	Consumption Patterns	3.6058	0.3073
V88	Market Segmentation	1.3787	0.7105
V89	Leadership Qualities	1.1145	0.7736
V90	Computer Terminology	0.2467	0.9697

TABLE XXXV (Continued)

V91	Floor Plan Designs	4.8606	0.1823
V92	Resident Buying Offices	2.9821	0.3944
V93	Company Organ. Structures	3.9561	0.2662
V94	In-Store Special Events	7.7838	0.0507
V95	Decision Making Skills	4.3289	0.2281
V96	Draping Techniques	4.5068	0.2117
V97	Entrepreneurship	11.9830	0.0074*
V98	Industry Associations	1.6383	0.6507
V99	Ind. Sewing Equipment	1.9661	0.5795
V100	Bus. Activities - Events	7.5024	0.0575
V101	Textile Dyeing/Printing	4.2475	0.2359
V102	Receive/Chk/Sto Merchandise	5.5008	0.1386

[a] The number of faculty in each institution were divided into four categories (1 - 2 faculty, 3 - 5 faculty, 6 - 8 faculty and institutions with over 9 faculty) (df = 3).

[b] $p < .01$

TABLE XXXVI

INSTRUCTIONAL/COGNITIVE LEVEL OF SELECT CURRICULUM CONCEPTS BASED ON THE NUMBER OF FULL-TIME FACULTY WHO TEACH A MERCHANDISING COURSE[a]

ID	Variable	x^2	p Value[b]
V1	Ethical Resp. of Firms	4.8136	0.1860
V2	Production of Fibers	4.6225	0.2016
V3	Historic Tex/Costume	3.0144	0.3894
V4	Accessories Production	3.3086	0.3464
V5	Import/Export Reg.	1.1560	0.7636
V6	Consumer Demographic Var.	5.5034	0.1384
V7	Cooperative Advertising	1.4928	0.6839
V8	Ind. App. Production Proc.	7.2669	0.0639
V9	Personnel Management	4.3121	0.2297
V10	Visual Merch. Techniques	2.8623	0.4133
V11	Principles of Design	2.8941	0.4082
V12	QR Techniques	1.5132	0.6792
V13	Trade Publications	4.5179	0.2107
V14	Ind. Pattern Making Tech.	3.1978	0.3621
V15	Global Sourcing - Merch.	2.6547	0.4480
V16	Garment Construct. Tech.	1.9436	0.5842
V17	Supervise Employee Perf.	6.7800	0.0792
V18	Forecasting Demand	2.2272	0.5266
V19	Vendor Terms	6.6712	0.0831
V20	Global Interdependence	3.1270	0.3725
V21	Consumer Psychographic	2.5563	0.4652
V22	Private Label Programs	4.5850	0.2048
V23	Customer Service	1.7540	0.6250
V24	Inventory Shrinkage Control	3.0773	0.3799
V25	Stockturn	3.4204	0.3312
V26	Push/Pull Strategies	4.6955	0.1955
V27	Marketing Research	4.0271	0.2585
V28	Made in the USA Campaign	2.8212	0.4200
V29	Fabric Characteristics	0.3213	0.9560
V30	Social Resp. of Firms	3.6228	0.3052
V31	Environmentally Safe Wkplace	3.3375	0.3425
V32	Merchandise Assortments	8.0854	0.0443
V33	Promotional Media	1.9705	0.5786
V34	Fashion Show Production	3.6249	0.3049
V35	Cyclical Fashion Trends	10.1570	0.0173
V36	Fiber Processing Stages	5.4336	0.1427
V37	Production Automation	4.3759	0.2236
V38	Forms of Bus. Ownership	1.6185	0.6552
V39	Fashion Sketching	0.3078	0.9586
V40	Layout & Design for Ads	6.1935	0.1026
V41	Price-Quality Relationship	1.2535	0.7402

TABLE XXXVI (Continued)

V42	Designing for the Mass Mkt.	2.3146	0.5097
V43	Direct Mail Techniques	2.7483	0.4321
V44	Cultural Diversity	2.7766	0.4274
V45	Computers in Buying	2.7655	0.4292
V46	Global Enviro. Concerns	0.6891	0.8758
V47	Public Relations	6.1906	0.1027
V48	RTW Sizing Specifications	5.3291	0.1492
V49	Consumer Decision Making	1.3602	0.7149
V50	Yarn Types	7.0349	0.0708
V51	International App. Mkts.	1.0982	0.7775
V52	Mergers & Acquisitions	2.1935	0.5332
V53	Theories of Fashion	5.9391	0.1146
V54	Federal Legislation	4.4607	0.2158
V55	Fashion Designers	5.5749	0.1342
V56	Elements of Design	4.9046	0.1789
V57	Role of the App. Mart	0.4101	0.9382
V58	Apparel Terminology	2.0808	0.5558
V59	Non-Store Retailing	1.5329	0.6747
V60	Fabric Finishes	1.6742	0.6427
V61	Textile Testing Proc.	1.9688	0.5789
V62	Employee Training Program	0.4218	0.9357
V63	Types of Display Settings	15.7340	0.0013*
V64	Role of Purchase Orders	7.3367	0.0619
V65	Managing Open to Buy	2.2804	0.5163
V66	Vertical Integration	1.0722	0.7838
V67	Initiate & Close Sales	3.3560	0.3399
V68	Accessories Production	4.2277	0.2379
V69	Fabrication Methods	6.2336	0.1008
V70	Macroenvironmental Cond.	0.0759	0.9946
V71	Workplace Issues/Trends	1.8370	0.6069
V72	Types of Retail Ads	7.5524	0.0562
V73	Sales Promotion Appr.	10.0450	0.0182
V74	Care Labeling	4.9338	0.1767
V75	Branded Vs. Private Label	4.5161	0.2109
V76	Personal Communications	2.2100	0.5300
V77	Types of Orders	2.1444	0.5430
V78	Garment Fitting/Alt.	0.1191	0.9894
V79	Flat Pattern Techniques	1.3353	0.7208
V80	Price Merchandise	1.5597	0.6686
V81	International Trade Agree.	2.4475	0.4849
V82	Merchandise Buying	1.9442	0.5841
V83	Figure Analysis	1.8354	0.6073
V84	Color Concepts	9.9174	0.0211
V85	Store Types	2.1217	0.5475
V86	POP Displays	3.4377	0.3289
V87	Consumption Patterns	0.3456	0.9512
V88	Market Segmentation	0.4142	0.9373
V89	Leadership Qualities	0.0439	0.9976
V90	Computer Terminology	4.2410	0.2366

TABLE XXXVI (Continued)

V91	Floor Plan Designs	2.9434	0.3996
V92	Resident Buying Offices	3.5931	0.3089
V93	Company Organ. Structures	2.5366	0.4687
V94	In-Store Special Events	2.7622	0.4298
V95	Decision Making Skills	4.1357	0.2472
V96	Draping Techniques	1.4615	0.6912
V97	Entrepreneurship	11.8720	0.0078*
V98	Industry Associations	3.8941	0.2731
V99	Ind. Sewing Equipment	0.5840	0.9001
V100	Bus. Activities - Events	3.2234	0.3584
V101	Textile Dyeing/Printing	6.7243	0.0812
V102	Receive/Chk/Sto Merchandise	5.9016	0.1165

[a] The number of faculty in each institution were divided into four categories (1 - 2 faculty, 3 - 5 faculty, 6 - 8 faculty and institutions with over 9 faculty) (df = 3).

[b] $p < .01$

TABLE XXXVII

LEVEL OF IMPORTANCE OF SELECT CURRICULUM CONCEPTS BASED ON THE AVERAGE NUMBER OF STUDENTS WHO GRADUATE EACH YEAR[a]

ID	Variable	x^2	p Value[b]
V1	Ethical Resp. of Firms	7.6928	0.0528
V2	Production of Fibers	5.0609	0.1674
V3	Historic Tex/Costume	4.7066	0.1946
V4	Accessories Production	21.9170	0.0001*
V5	Import/Export Reg.	1.9544	0.5819
V6	Consumer Demographic Var.	0.3821	0.9460
V7	Cooperative Advertising	5.0881	0.1655
V8	Ind. App. Production Proc.	1.9196	0.5893
V9	Personnel Management	0.0791	0.9942
V10	Visual Merch. Techniques	23.5660	0.0001*
V11	Principles of Design	13.3280	0.0040*
V12	QR Techniques	0.8538	0.8366
V13	Trade Publications	2.5557	0.4653
V14	Ind. Pattern Making Tech.	3.2491	0.3548
V15	Global Sourcing - Merch.	0.9255	0.8193
V16	Garment Construct. Tech.	5.9079	0.1162
V17	Supervise Employee Perf.	0.1455	0.9859
V18	Forecasting Demand	6.0110	0.1111
V19	Vendor Terms	2.2847	0.5155
V20	Global Interdependence	1.4012	0.7053
V21	Consumer Psychographic	0.4693	0.9256
V22	Private Label Programs	0.6557	0.8836
V23	Customer Service	2.4632	0.4820
V24	Inventory Shrinkage Control	1.4358	0.6972
V25	Stockturn	0.5010	0.9187
V26	Push/Pull Strategies	2.5811	0.4608
V27	Marketing Research	2.2226	0.5275
V28	Made in the USA Campaign	4.2695	0.2338
V29	Fabric Characteristics	7.1429	0.0675
V30	Social Resp. of Firms	10.0330	0.0183
V31	Environmentally Safe Wkplace	0.8791	0.8305
V32	Merchandise Assortments	2.3777	0.4978
V33	Promotional Media	4.5446	0.2083
V34	Fashion Show Production	25.5590	0.0001*
V35	Cyclical Fashion Trends	10.6550	0.0137
V36	Fiber Processing Stages	6.0479	0.1093
V37	Production Automation	1.1649	0.7614
V38	Forms of Bus. Ownership	2.6291	0.4524
V39	Fashion Sketching	3.4678	0.3250
V40	Layout & Design for Ads	3.0698	0.3810
V41	Price-Quality Relationship	9.0549	0.0286

TABLE XXXVII (Continued)

V42	Designing for the Mass Mkt.	2.3884	0.4958
V43	Direct Mail Techniques	1.7604	0.6236
V44	Cultural Diversity	4.9187	0.1779
V45	Computers in Buying	3.3540	0.3402
V46	Global Enviro. Concerns	1.3335	0.7212
V47	Public Relations	11.8040	0.0081*
V48	RTW Sizing Specifications	9.0573	0.0285
V49	Consumer Decision Making	5.5775	0.1341
V50	Yarn Types	6.4649	0.0911
V51	International App. Mkts.	3.1077	0.3753
V52	Mergers & Acquisitions	9.7792	0.0205
V53	Theories of Fashion	14.0180	0.0029*
V54	Federal Legislation	1.3732	0.7118
V55	Fashion Designers	15.3160	0.0016*
V56	Elements of Design	14.4660	0.0023*
V57	Role of the App. Mart	4.5466	0.2082
V58	Apparel Terminology	14.4290	0.0024*
V59	Non-Store Retailing	0.6499	0.8849
V60	Fabric Finishes	4.5244	0.2101
V61	Textile Testing Proc.	2.8721	0.4118
V62	Employee Training Program	3.4224	0.3310
V63	Types of Display Settings	23.3470	0.0001*
V64	Role of Purchase Orders	0.4805	0.9232
V65	Managing Open to Buy	0.2637	0.9667
V66	Vertical Integration	1.8621	0.6015
V67	Initiate & Close Sales	3.6422	0.3028
V68	Accessories Production	5.2600	0.1537
V69	Fabrication Methods	4.6881	0.1961
V70	Macroenvironmental Cond.	0.2369	0.9714
V71	Workplace Issues/Trends	3.2527	0.3543
V72	Types of Retail Ads	6.1329	0.1053
V73	Sales Promotion Appr.	2.8367	0.4175
V74	Care Labeling	14.0580	0.0028*
V75	Branded Vs. Private Label	3.2697	0.3519
V76	Personal Communications	4.4563	0.2162
V77	Types of Orders	2.5493	0.4664
V78	Garment Fitting/Alt.	13.9740	0.0029*
V79	Flat Pattern Techniques	4.0370	0.2575
V80	Price Merchandise	1.5600	0.6685
V81	International Trade Agree.	2.3169	0.5093
V82	Merchandise Buying	0.7674	0.8572
V83	Figure Analysis	26.8300	0.0001*
V84	Color Concepts	20.4730	0.0001*
V85	Store Types	1.9170	0.5898
V86	POP Displays	11.2210	0.0106
V87	Consumption Patterns	4.2865	0.2321
V88	Market Segmentation	5.2981	0.1512
V89	Leadership Qualities	2.2250	0.5270
V90	Computer Terminology	0.5889	0.8990

TABLE XXXVII (Continued)

V91	Floor Plan Designs	8.2988	0.0402
V92	Resident Buying Offices	2.6300	0.4523
V93	Company Organ. Structures	0.1131	0.9902
V94	In-Store Special Events	10.7750	0.0130
V95	Decision Making Skills	7.4275	0.0595
V96	Draping Techniques	1.9998	0.5724
V97	Entrepreneurship	1.5213	0.6774
V98	Industry Associations	0.3079	0.9585
V99	Ind. Sewing Equipment	1.0006	0.8011
V100	Bus. Activities - Events	1.9234	0.5885
V101	Textile Dyeing/Printing	6.8642	0.0764
V102	Receive/Chk/Sto Merchandise	1.7734	0.6207

[a] The average number of students who graduate each year from an institution were divided into four categories (1 - 20 students, 21 - 40 students, 41 - 60 students and those institutions who graduate over 60 students) (df = 3).

[b] $p < .01$

TABLE XXXVIII

INSTRUCTIONAL/COGNITIVE LEVEL OF SELECT CURRICULUM CONCEPTS BASED ON THE AVERAGE NUMBER OF STUDENTS WHO GRADUATE EACH YEAR[a]

ID	Variable	x^2	p Value[b]
V1	Ethical Resp. of Firms	2.8581	0.4140
V2	Production of Fibers	3.2588	0.3534
V3	Historic Tex/Costume	7.3181	0.0624
V4	Accessories Production	12.1060	0.0070*
V5	Import/Export Reg.	3.9686	0.2649
V6	Consumer Demographic Var.	3.1724	0.3658
V7	Cooperative Advertising	4.2222	0.2384
V8	Ind. App. Production Proc.	2.1060	0.5507
V9	Personnel Management	2.4467	0.4850
V10	Visual Merch. Techniques	22.2150	0.0001*
V11	Principles of Design	13.5220	0.0036*
V12	QR Techniques	0.1330	0.9876
V13	Trade Publications	2.0506	0.5620
V14	Ind. Pattern Making Tech.	1.7907	0.6170
V15	Global Sourcing - Merch.	3.4619	0.3257
V16	Garment Construct. Tech.	9.5102	0.0232
V17	Supervise Employee Perf.	0.6336	0.8887
V18	Forecasting Demand	8.2698	0.0408
V19	Vendor Terms	1.8426	0.6057
V20	Global Interdependence	0.8781	0.8307
V21	Consumer Psychographic	1.4728	0.6886
V22	Private Label Programs	0.6443	0.8862
V23	Customer Service	6.3986	0.0937
V24	Inventory Shrinkage Control	6.1566	0.1042
V25	Stockturn	2.8246	0.4195
V26	Push/Pull Strategies	0.4883	0.9215
V27	Marketing Research	2.1276	0.5463
V28	Made in the USA Campaign	10.1220	0.0176
V29	Fabric Characteristics	12.3920	0.0062*
V30	Social Resp. of Firms	7.0191	0.0713
V31	Environmentally Safe Wkplace	0.6724	0.8797
V32	Merchandise Assortments	1.2019	0.7525
V33	Promotional Media	2.7595	0.4302
V34	Fashion Show Production	15.9880	0.0011*
V35	Cyclical Fashion Trends	12.0440	0.0072*
V36	Fiber Processing Stages	2.7748	0.4277
V37	Production Automation	1.1507	0.7648
V38	Forms of Bus. Ownership	1.2552	0.7398
V39	Fashion Sketching	4.3340	0.2276
V40	Layout & Design for Ads	5.0605	0.1674
V41	Price-Quality Relationship	15.8980	0.0012*

TABLE XXXVIII (Continued)

V42	Designing for the Mass Mkt.	4.4140	0.2201
V43	Direct Mail Techniques	1.9809	0.5764
V44	Cultural Diversity	4.3354	0.2275
V45	Computers in Buying	0.5618	0.9051
V46	Global Enviro. Concerns	1.0095	0.7990
V47	Public Relations	7.4819	0.0580
V48	RTW Sizing Specifications	9.0284	0.0289
V49	Consumer Decision Making	7.1662	0.0668
V50	Yarn Types	10.5760	0.0143
V51	International App. Mkts.	2.3882	0.4958
V52	Mergers & Acquisitions	4.7205	0.1934
V53	Theories of Fashion	2.7681	0.4288
V54	Federal Legislation	3.8330	0.2801
V55	Fashion Designers	7.9633	0.0468
V56	Elements of Design	14.8570	0.0019*
V57	Role of the App. Mart	1.7674	0.6221
V58	Apparel Terminology	3.4105	0.3326
V59	Non-Store Retailing	0.5743	0.9023
V60	Fabric Finishes	5.2588	0.1538
V61	Textile Testing Proc.	10.7810	0.0130
V62	Employee Training Program	2.9255	0.4033
V63	Types of Display Settings	18.6380	0.0003*
V64	Role of Purchase Orders	2.1618	0.5395
V65	Managing Open to Buy	5.6191	0.1317
V66	Vertical Integration	2.0462	0.5629
V67	Initiate & Close Sales	2.9428	0.4005
V68	Accessories Production	10.9750	0.0119
V69	Fabrication Methods	8.5886	0.0353
V70	Macroenvironmental Cond.	2.4055	0.4926
V71	Workplace Issues/Trends	1.6407	0.6502
V72	Types of Retail Ads	8.5048	0.0367
V73	Sales Promotion Appr.	6.2567	0.0998
V74	Care Labeling	12.1370	0.0069*
V75	Branded Vs. Private Label	0.5907	0.8986
V76	Personal Communications	6.0679	0.1084
V77	Types of Orders	6.5998	0.0858
V78	Garment Fitting/Alt.	6.9093	0.0748
V79	Flat Pattern Techniques	3.8800	0.2747
V80	Price Merchandise	1.9826	0.5760
V81	International Trade Agree.	1.5861	0.6625
V82	Merchandise Buying	4.5525	0.2077
V83	Figure Analysis	22.3550	0.0001*
V84	Color Concepts	22.1690	0.0001*
V85	Store Types	2.7622	0.4298
V86	POP Displays	6.0278	0.1103
V87	Consumption Patterns	3.0356	0.3862
V88	Market Segmentation	4.6729	0.1974
V89	Leadership Qualities	0.5641	0.9046
V90	Computer Terminology	0.1150	0.9900

TABLE XXXVIII (Continued)

V91	Floor Plan Designs	13.4620	0.0037*
V92	Resident Buying Offices	4.0950	0.2514
V93	Company Organ. Structures	2.4593	0.4827
V94	In-Store Special Events	8.9551	0.0299
V95	Decision Making Skills	1.2424	0.7428
V96	Draping Techniques	0.8647	0.8339
V97	Entrepreneurship	0.8491	0.8377
V98	Industry Associations	2.2821	0.5160
V99	Ind. Sewing Equipment	1.7377	0.6286
V100	Bus. Activities - Events	2.7368	0.4340
V101	Textile Dyeing/Printing	1.3104	0.7267
V102	Receive/Chk/Sto Merchandise	1.9934	0.5738

[a] The average number of students who graduate each year from an institution were divided into four categories (1 - 20 students, 21 - 40 students, 41 - 60 students and those institutions who graduate over 60 students) (df = 3).

[b] $p < .01$

TABLE XXXIX

DEMOGRAPHIC CHARACTERISTICS OF NON-RESPONDENTS

Characteristics of Educators	N	%		N	%
Gender			**Teach a Merchandising Course**		
Males	1	6.7	Yes	5	55.5
Females	14	93.3	No	4	44.4
Total	15	100.0	Total	9	100.0
Age			**Employed Outside of Education**		
30 Years	0	0.0	Yes	5	62.5
31 - 40	2	22.2	No	3	37.5
41 - 50	6	66.6	Total	8	100.0
51 - 60	0	0.0			
61 or Older	1	11.1			
Total	357	100.0			
Number Years Teaching			**Years Employed Outside**		
Under 2 Yrs	1	11.1	Under 2 Yrs	1	14.3
2 - 4	0	0.0	2 - 4	3	42.8
5 - 9	3	33.3	5 - 6	3	42.8
10 - 14	1	11.1	7 - 8	0	0.0
15 or More	4	44.4	Over 9 Yrs	0	0.0
Total	9	100.0	Total	7	100.0
Academic Rank					
Lecturer	0	0.0			
Instructor	0	0.0			
Asst. Prof	3	33.3			
Asso. Prof	5	55.5			
Professor	0	0.0			
Other	1	11.1			
Total	9	100.0			

APPENDIX G

HISTOGRAMS

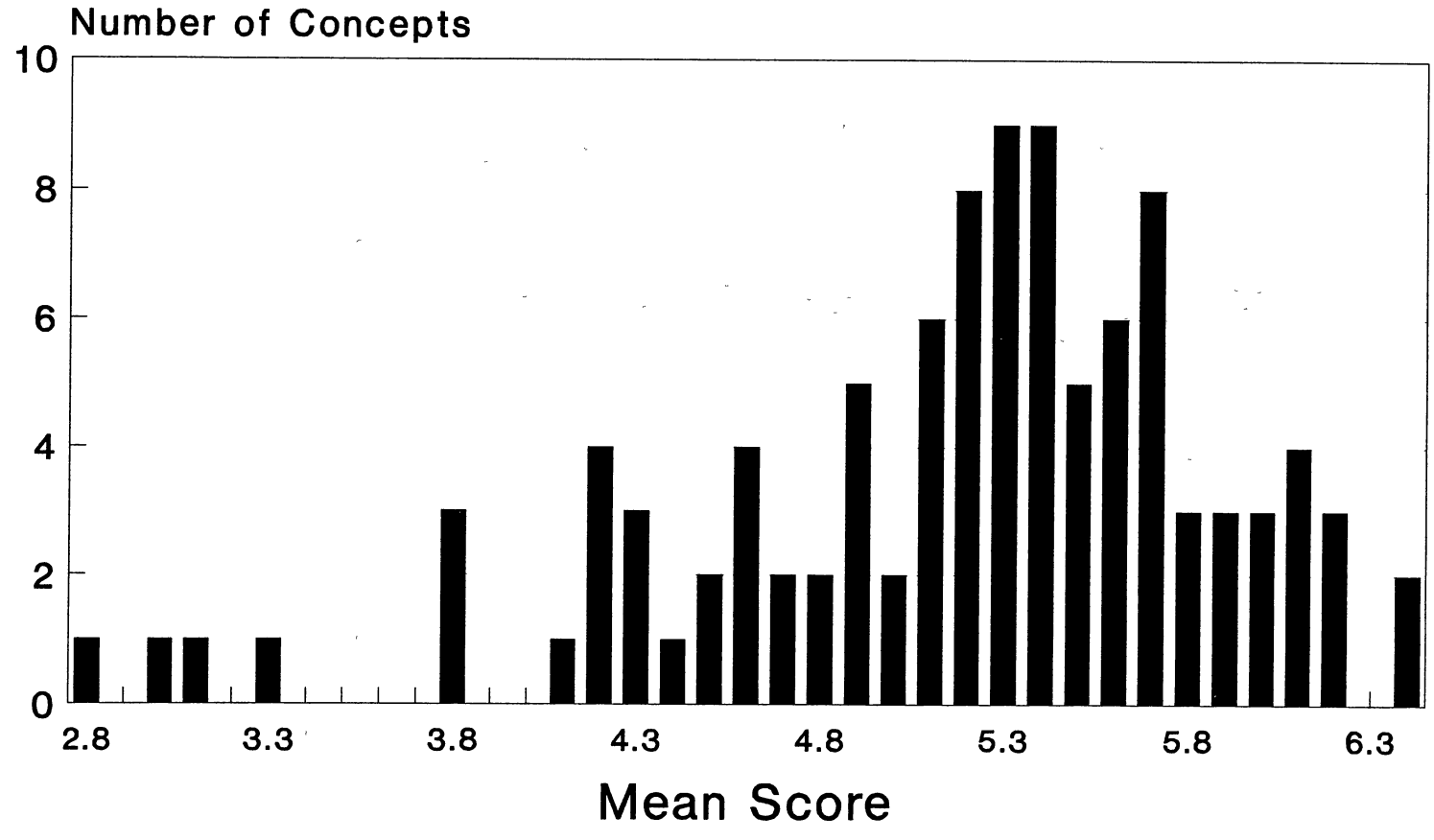

Level of Importance
Number of Concepts
10
8
6
4
2
0
2.8
3.3
3.8
4.3
4.8
5.3
5.8
6.3
Mean Score

Figure 2

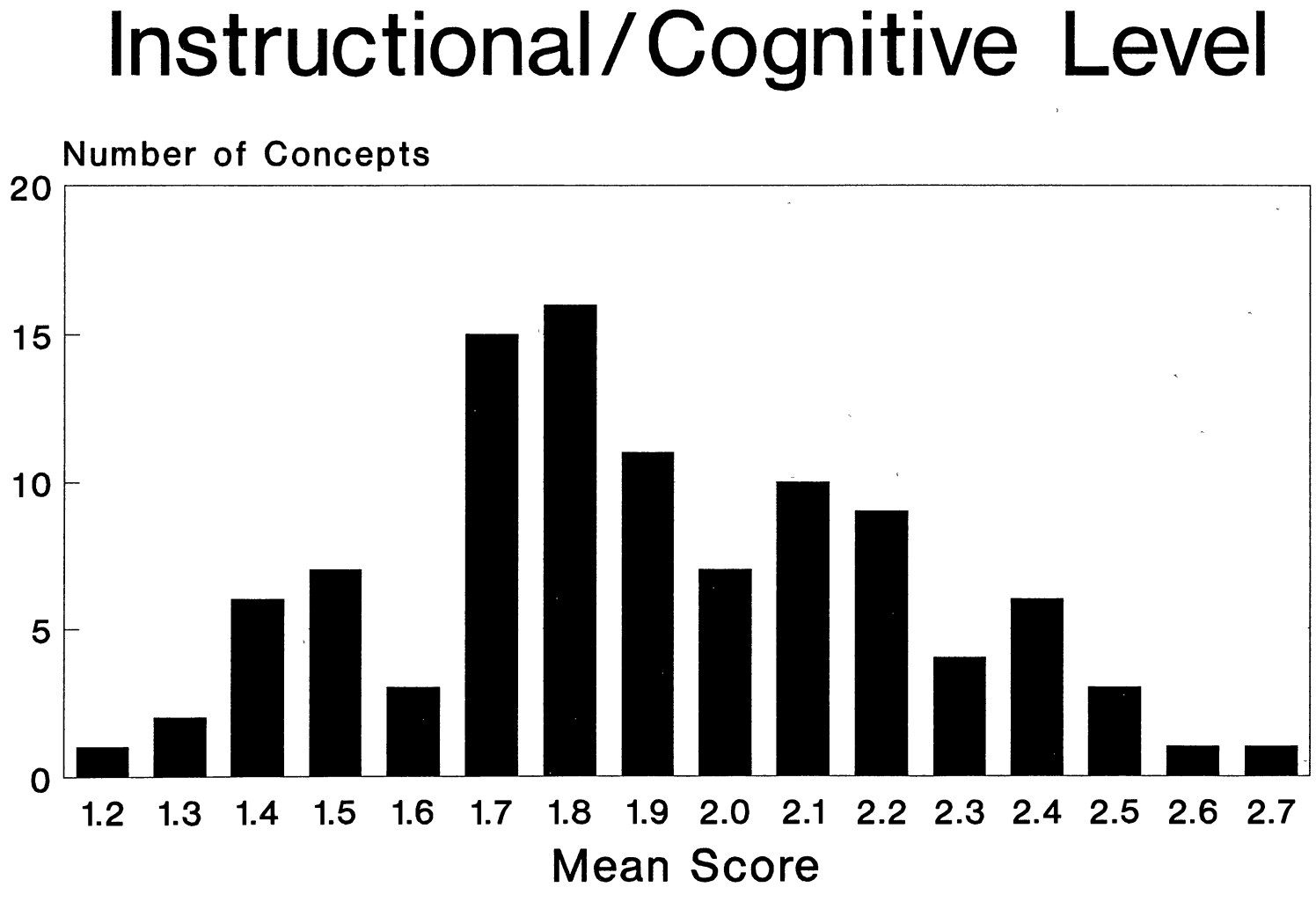

Instructional/Cognitive Level
Number of Concepts
20
15
10
5
0
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2.0
2.1
2.2
2.3
2.4
2.5
2.6
2.7
Mean Score

Figure 3

2

VITA

KAREN LYNETTE PEDERSEN RINGENBERG

Candidate for the Degree of

Doctor of Philosophy

Thesis: LEVEL OF IMPORTANCE AND INSTRUCTIONAL/COGNITIVE LEVEL OF SELECT APPAREL MERCHANDISING CURRICULUM CONCEPTS

Major Field: Home Economics

Area of Specialization: Design, Housing and Merchandising

Biographical:

Personal Data: Born in Broken Bow, Nebraska, February 24, 1962, daughter of William R. and Corrinne L. Pedersen. Married to Kurt Donald Ringenberg on August 19, 1984.

Education: Graduated from Broken Bow High School, Broken Bow, Nebraska, 1980; received Bachelor of Science degree in Textiles, Clothing and Design from the University of Nebraska-Lincoln in 1984; received Master of Science degree in Textiles, Clothing and Design from the University of Nebraska-Lincoln in 1986; completed the requirements for the Doctor of Philosophy Degree at Oklahoma State University in December, 1991.

Professional Experience: Apparel retail sales/management, 1981-1984; Graduate Research Assistantship, Textiles, Clothing and Design, University of Nebraska-Lincoln, 1984-1986; Instructor, Kearney State College, Family and Consumer Science Department, Kearney, Nebraska, 1987-1990; Graduate Administrative/Teaching Assistantship, Design, Housing and Merchandising Department, Oklahoma State University, 1990-1991; Assistant Professor, University of Nebraska-Kearney, 1991-1992.

Professional Affiliations: American Home Economics Association, Association of College Professors of Textiles and Clothing, Kappa Omicron Nu Home Economics Honor Society, Nebraska Home Economics Association, Phi Upsilon Omicron Home Economics Honorary.