

**THE IMPORTANCE OF TECHNICAL COMPETENCIES  
FOR BEGINNING SECONDARY BUSINESS**

**TEACHERS IN VIRGINIA**

**CHAPTER I**

**INTRODUCTION**

Throughout history, problems facing society eventually become the problems of the nation's schools. "Once Americans decide to call something a problem, we tend to turn to education with the assumption that every problem has a solution" (Grant, 1979, p. 24). Many problems have arisen in society with the change from an industrial society to an information society, and our educational systems are entangled in the process of change.

Much of the change we see in today's society has evolved from the rapid emergence of technology. Technology outdates itself everyday, taxpayers demand more accountability from schools, business and industry complain about the competence of high school graduates, and advocates for special populations and minorities lobby for greater inclusion and educational opportunities. In the center of this stage is the classroom teacher who is struggling to stay abreast of and cope with the numerous changes in order to maintain competency in all arenas (Vaughan, 1982).

To complicate this scenario, business teachers must be knowledgeable in the use of a wide variety of computer hardware and software. Business education is

composed of a myriad of courses ranging from middle school keyboarding to high school artificial intelligence courses (Schmidt, Finch, & Oliver, 1994). “Keeping curriculum content up to date in a rapidly changing technical area . . . is difficult, but it is a task that we as vocational educators must master if we are to continue to be a viable educational entity for society’s work force” (Flanders, 1988, p. 17).

Gist (1932) stated that “A good beginning is an important element in success” (p. 298). This study is being done in an effort to identify the curriculum competencies that are most important for beginning secondary business teachers. Teacher educators can use this information in redesigning curriculum for teacher preparation programs to better ensure that business teachers have “a good beginning.”

### Theoretical Framework

The focus of this study is on technical competencies that beginning business teachers should master in the teacher education program in order to help ensure successful performance in the classroom. The competencies are based on those identified in the *National Standards for Business Education* (NBEA, 1995). Each overall competency is designed developmentally with performance objectives that include elementary, middle school/junior high, secondary, and postsecondary levels.

This study is based on the theoretical framework of behaviorism. Two concepts--incremental learning and mastery learning--are emphasized in behavioral learning theory. The theory states that learning occurs in discrete, incremental units,

upon which other increments are built. Furthermore, since “an earlier step is prerequisite for a subsequent one, acceptable performance on each step is required before progressing to the next step in the sequence” (Borras, 1998). Vocational education follows this pattern as students are usually taught one task at a time, with each task being a building block for the next one that follows (Dobbins, 1999).

Incremental learning is a component of competency-based education (CBE), and the 1978-79 Virginia State Plan for Vocational Education mandated that all vocational education programs taught in state-accredited secondary or postsecondary schools must be competency-based. CBE is task-oriented and is based on occupational or role research and analysis of the duties and tasks performed by competent workers in a specific role or job. Instruction based on CBE enables students to master related skills, areas of knowledge, and behaviors (competencies) required of those workers (Virginia Vocational Curriculum and Resource Center, 1990).

Leaders within teacher education programs can benefit from describing instructional purposes in terms of behaviors students can readily understand. Once preservice teacher education skills (competencies) are stated as behaviorally defined goals, they can be powerful tools for course planning and revision. These behavioral goals focus attention on the future utility that such behaviors will provide to students (Cook, 1993). When the behaviors that students should be able to perform upon completion of a specified learning activity (course, text, field study practicum, etc.)

are specified in clear, quantifiable steps, they are less vague and more likely to be accomplished (Monjan & Gassner, 1979).

The focus of this research study is on determining the competencies essential for the successful performance of a beginning business teacher. The study utilizes the behavioral learning theory's concepts of incremental learning and mastery learning in applying the developmental concept of the *National Standards for Business Education* (NBEA, 1995). Results can be used to identify essential tasks that business teacher education programs need to strengthen the curriculum content for preservice business teachers.

#### Overview of the Study

As early as 1983, national reforms for education called for improvement in teacher education. *A Nation at Risk* in 1983, *A Nation Prepared: Teachers for the 21st Century* in 1985, and *Goals 2000* in 1989 either directly or indirectly reflected the intense criticism of the public school systems and of teacher preparation programs (Hartley, Mantle-Bromley, & Cobb, 1996).

Brower (1986) supported the need for teacher education reform by stating that teacher-education programs were producing teachers who were not prepared for the demanding role of teaching. He proposed that university presidents, corporate leaders, governors, and legislators agreed that problems confronting the nation's schools were caused by inadequate teacher education programs and that teacher education programs should be subject to rigorous scrutiny.

The calls for reform were based partly on our changing society. For quite sometime, the United States economy has been experiencing a shift from a long-established industrial manufacturing base to that of a service, information, and high-technology base (Meirhenry, 1981; Naisbitt and Aburdene, 1990).

Our society has changed, and education and training should reflect society (Dwyer, 1995). However, comments heard at professional conferences, in the press, and in casual conversations reflect the perception that our schools are inadequately preparing students for productive employment (Sormunen, Smith, & Lane, 1996). Bernstein (1992) reported that public schools, which train 56% of U.S. workers, have failed to keep pace with the higher education requirements of today's international economy.

In order to prepare students for the global marketplace, schools need to recruit top teacher candidates (McEwen & King, 1998). However, teachers are not being adequately prepared for the demanding role of teaching (Brower, 1986). Zehr (1998) stated that one of the reasons is due to the rapid advancement of changing technology. Universities and colleges have too much lag time in preparing teachers since technology is advancing so rapidly that teacher education programs are not able to keep up with the change.

To complicate the dilemma, business teacher education is a multifaceted discipline that involves much technology. Business teachers are expected to teach everything from middle school keyboarding to high school artificial intelligence

courses (Schmidt, Finch, and Oliver, 1994). Competence in these areas will be essential to instructors who must teach the skills identified as necessary for developing the knowledge workers of today's Information Age (Fruehling, Kerin, & Sebastian, 1997). White and Roach's (1997) research also supported the need for competence in these areas as the researchers described the subject competencies necessary for business teachers.

Beginning business teachers cannot be expected to be as proficient as an experienced classroom teacher in the many curriculum areas. Price (1969) acknowledged that an individual should not hope to be a success at everything in his or her first year of teaching. Heath-Camp and Camp (1990) reported that beginning teachers have too little time to prepare for the classroom experience. Unlike the extensive internship of a physician or even the apprenticeship of the plumber, teachers are expected to perform from the very beginning like seasoned veterans.

Since teacher education programs have only a limited time to prepare beginning teachers, it is imperative that teacher educators review curriculum on an ongoing basis for its relevance and currentness. Flanders (1988) described curriculum as the "life blood" of educational methodology and curriculum content as the basic building block of curriculum planning. Flanders further added that curriculum must be constantly monitored so it does not become stagnant, outdated, and ineffective. Bartholome (1997) supported this thought when he stated that "curriculum must always change to meet the needs of business" (p. 16).

The intent of this study was to provide information vital to the planning of business teacher curricula. Findings from this research provide information that educational institutions involved in preparing business teachers may use to update and revise curriculum for their teacher education programs.

#### Statement of the Problem

Calls for reform in teacher education to accommodate the constant workforce changes occurring during the Information Age indicate the need for continual reform in the business education curriculum. The National Business Education Association (NBEA) responded to the call by developing the *National Standards for Business Education* (NBEA, 1995). The developmental guidelines in the document delineate the curriculum standards for eleven subject content areas that kindergarten through postsecondary students should know about business.

Teacher educators should provide opportunities for preservice teachers to acquire necessary skills for their careers (McEwen & King, 1998). The *National Standards for Business Education* is designed to be used by curriculum planners at all levels of development to custom tailor instruction (NBEA, 1995).

Previous research findings and the professional literature definitely support the need for a study of the curriculum competencies needed by beginning business teachers. However, no recent study was found related to the curriculum competencies most important for preparing beginning secondary business teachers.

#### Purpose of the Study

The purpose of this study was to determine the degree of importance of each of the curriculum competencies in the *National Standards for Business Education* (NBEA, 1995) for the successful performance of beginning secondary business teachers in Virginia. Findings from this study should be valuable to universities, colleges, and community colleges in Virginia to use in redesigning the subject matter content areas in business teacher education programs. Therefore, the following research questions were formulated and investigated:

#### Research Questions

1. To what degree do experienced business teachers in Virginia perceive that beginning secondary business teachers in Virginia should possess each of the curriculum competencies identified in the *National Standards for Business Education*?
2. To what degree do inexperienced business teachers in Virginia perceive that beginning secondary business teachers in Virginia should possess each of the curriculum competencies identified in the *National Standards for Business Education*?
3. To what degree do experienced and inexperienced business teachers in Virginia differ in their perceptions of the importance of each of the eleven curriculum content areas in the *National Standards for Business Education* for beginning secondary business teachers in Virginia?

#### Significance of the Study



The rationale for this study is based on the premise that all business teacher education curricula need to be evaluated and/or revised on a regular basis. No other study was found to evaluate the business education curriculum competencies encompassed in the subject areas as identified in the *National Standards for Business Education* (NBEA, 1995). Findings from this study can be used to assist university/college teacher educators as well as community college educators in redesigning the business teacher education curriculum. Teacher educators will be able to use the research results to better prepare secondary business teachers with the essential skills necessary to prepare high school students to enter and succeed in the workforce.

#### Assumptions

1. The use of a five-point Likert Scale was an appropriate means for assessing the perceptions of experienced and inexperienced business teachers.
2. Both experienced teachers and inexperienced teachers possess the knowledge necessary to complete the questionnaire and to indicate the importance of each competency for beginning secondary business teachers.
3. The teacher education curriculum should be evaluated and revised periodically in order for it to remain relevant and meaningful.
4. The business teacher education curriculum should reflect the perceptions of business educators regarding competencies necessary for beginning business teachers to succeed in the classroom.

### Delimitations

1. The study was restricted to public schools with business education programs in Virginia that prepare students at Level 3 (Secondary, 9-12) as identified in the *National Standards for Business Education*.
2. This study was delimited to the opinions of experienced and inexperienced business teachers in Virginia.

### Limitations

1. Perceptions of importance are subject to change with changing technology. Therefore, the findings of this study are applicable for only a limited time.
2. The findings of this study will be based on each individual's perception of the degree of importance for each competency. Therefore, the findings may not be common to all educators in the respected areas.

### Definitions

The following definitions refer to terms as they are used in this study.

1. Beginning Business Teacher - An individual hired by a school system with the assignment to teach business courses in a high school (grades 9-12) business education department. The teacher has had no prior experience as a business education teacher in secondary schools.

2. Competencies - “Those tasks, skills, attitudes, values, and appreciations that are deemed critical to success in life and or in earning a living” (Finch & Crunkilton, 1993, p. 254).
3. Curriculum - A comprehensive plan that justifies and specifies that which is to be learned and the organization of that content (Schrag & Poland, 1987).
4. Curriculum Content Area - The part of the curriculum that focuses on technical skills (Copa & Plihal, 1996).
5. Experienced Business Teachers - Teachers who have more than three years of teaching experience.
6. Inexperienced Business Teachers - Teachers who have three or fewer years of teaching experience.
7. Secondary - The high school division of a school unit. It can be Grades 8-12, 9-12, or 10-12.
8. Standard - Something established for use as a rule or basis of comparison in measuring a value (Webster’s, 1973).
9. Teacher Educators - Professionals who serve as educators of the teaching profession. They specialize in an area and also demonstrate knowledge of and commitment to general teacher preparation. They also supervise students during early experiences and student teaching. They are members of professional education units (National Council for Accreditation of Teacher Education, 1987).

10. Technical Skills - The specialized tasks that enable workers to use their knowledge of the tools, techniques, and procedures that are specific to their particular field. These skills are usually trainable and can be taught to others (Lewis, Goodman, & Fandt, 1998).

### Organization of the Study

Chapter One is the Introduction. It includes the Theoretical Framework, Overview of the Study, Statement of the Problem, Purpose of the Study, Research Questions, Significance of the Study, Assumptions, Delimitations, Limitations, Definitions, and Organization of the Study.

Chapter Two contains the Literature Review. The review is presented in sections with Related Theoretical Literature, General Education Reform Efforts, Vocational Teacher Reform Efforts, Business and Industry Perspectives, Business Education Perspectives, Reform Calls and Standards, Importance of Content Area Skills, Beginning and Experienced Teachers, Related Studies, and Summary.

Chapter Three outlines the Research Methods. The chapter first restates the Purpose of the Study and the Research Questions. Next are the sections explaining Population, Instrumentation, Data Collection, and Data Analysis.

Chapter Four presents the Findings. The chapter restates the Research Questions and also includes Population, Importance of Competencies, Competency Findings by Content Areas, Importance of Content Areas, Nonrespondent Follow-up, and Summary.

Chapter Five interprets the findings of this study. Sections of this chapter are Summary of the Completed Study, Review of Findings and Related Studies, Conclusions, Discussion, and Recommendations for Further Research. Following Chapter Five are the References, Appendices, and my Vita.

## CHAPTER II

### LITERATURE REVIEW

“What should business teachers know and be able to do before they accept teaching assignments?” (White & Roach, 1997, p. 120). Research documents that this question applies not only to business teachers but also to all areas of teaching and has been addressed by groups and individuals in government, business, and education (Hartley, Mantley-Bromley, & Cobb, 1996; Frantz, 1997).

According to Denton (1994), the question applies to the teacher educators as well as to the teachers. Concerns about the quality of teachers and teacher preparation programs have prompted policymakers at federal, state, and local levels to examine programs and to initiate changes necessary for educational reform.

At the forefront of these initiatives lies the burden of colleges and universities to adequately and efficiently educate teachers who prepare the future workers. According to Carroll (1998), the curriculum of teacher preparation programs is critical in providing what teachers need to know upon graduation. Teacher preparation encompasses general studies, content studies, and professional education (Cruickshank & McCullough, 1996). Even though technical skills make up only one broad area of the curriculum for the entire program, they are still important (Copa and Plihal, 1996; Lynch, 1996) since they are the content of what one delivers as a teacher.

As a result of these educational concerns, teacher education in general is currently reacting to criticisms about the training of prospective teachers (Tyner, 1996). Specifically, the National Business Education Association (NBEA) has reacted with task forces and committees at national and state levels in seeking reform. NBEA (1995) developed the *National Standards for Business Education* “to provide a document which curriculum writers can use as a guide in developing superior programs in business education” (p. 8) (See Appendix A).

This literature review is divided into sections of Related Theoretical Literature, General Education Reform Efforts, Vocational Teacher Reform Efforts, Business and Industry Perspectives, Business Education Perspectives, Reform Calls and Standards, Importance of Content Area Skills, Beginning and Experienced Teachers, and Related Studies.

#### Related Theoretical Literature

The focus of this study is on technical competencies that beginning business teachers should master in the teacher education program in order to help ensure successful performance in the classroom. The competencies are based on those identified in the *National Standards for Business Education* (NBEA, 1995). Each overall competency is designed developmentally with performance objectives that include elementary, middle school/junior high, secondary, and postsecondary levels.

This study is based on the theoretical framework of behaviorism. Two concepts--incremental learning and mastery learning--are emphasized in behavioral

learning theory. The theory states that learning occurs in discrete, incremental units, upon which other increments are built. Furthermore, since “an earlier step is prerequisite for a subsequent one, acceptable performance on each step is required before progressing to the next step in the sequence” (Borras, 1998). Vocational education follows this pattern as students are usually taught one task at a time, with each task being a building block for the next one that follows (Dobbins, 1999).

Incremental learning is a component of competency-based education (CBE), and the 1978-79 Virginia State Plan for Vocational Education mandated that all vocational education programs taught in state-accredited secondary or postsecondary schools must be competency-based. CBE is task-oriented and is based on occupational or role research and analysis of the duties and tasks performed by competent workers in a specific role or job. Instruction based on CBE enables students to master related skills, areas of knowledge, and behaviors (competencies) required of those workers (Virginia Vocational Curriculum and Resource Center, 1990).

Behavioral learning theory derives its credibility from scientific knowledge about human behavior (Hansen, 1995). Behaviorists are concerned with analyses of observable and response events. These theorists believe that since they cannot examine the mind itself, they should study behavior through observation and measurement. The behaviorist perspective explains learning in terms of observable events, and behaviorists view mental activities such as thinking like any other



activity. They attempt to analyze behavior into its molecular elements (Hamilton & Ghatala, 1994).

Many of the learning experiments conducted by behaviorists used animals as subjects. Behaviorists believe that the basic mechanism of learning follows the same patterns and laws, regardless of species (Hamilton & Ghatala, 1994). Therefore, their findings from experiments with animals can be applied to human theories of learning. Four of the most prominent figures in behaviorism are Pavlov, Thorndike, Watson, and Skinner (Psychological Foundations, 1999).

Ivan Pavlov, a Russian physiologist, is credited with one of the major observations in the field of psychology (Hamilton & Ghatala, 1994). Pavlov's study of conditioned reflexes was the study of the laws of association of ideas (Schwartz, 1978). His observations with animals have been the basis for many formulations of learning.

One of Edward Thorndike's contributions to the theory is the Law of Exercise, which maintains that the bond between a response and a stimulus are strengthened by being exercised frequently, recently, and vigorously (Gagne' and Driscoll, 1988). According to Camp (1983), this process of reinforced repetitions is consistent with vocational education's competency-based education. This learning process is built on the identification of a "correct" procedure which is positively reinforced as an appropriate response to a specific stimulus.

John Watson drew heavily on Pavlov's classical conditioning model and extended it to explain human emotional learning (Hamilton & Ghatala, 1994). Watson is credited with being the founder of American behaviorism (Pinker, 1997). According to Watson, recency and frequency--what had occurred just before and how often--determined the behavior a person would emit to a particular stimulus (Gregory & Zangwill, 1997).

B. F. Skinner is the most widely known and influential behaviorist. Like Thorndike, he was very concerned with applying his theory to the educational realm (Hamilton & Ghatala, 1994). He believed that a person did not understand a behavior unless that person could train another organism to perform that behavior. "He believed most complex behaviors to be a sequence of responses, each response setting the context for the next. A complex behavior could be taught by beginning with the first step and teaching each element of the chain until the whole sequence was completed" (Anderson, 1995, p. 23).

Learning is a relatively permanent change in an individual's knowledge or behavior that results from previous experience (Hamilton & Ghatala, 1994). Learning, as a field in psychology, examines how lasting changes in behavior are caused by training, practice, or experience (World Book, 1997). Although each of the behaviorists just discussed differed in their individual procedures, each one was involved in a learning process that resulted from studying associations of behaviors.

Leaders within teacher education programs can enhance the learning process by describing instructional purposes in terms of behaviors students can readily understand. Once preservice teacher education skills (competencies) are stated as behaviorally defined goals, they can be powerful tools for course planning and revision. Behavioral goals stated in this format focus attention on the future utility that such behaviors will provide to students (Cook, 1993). When the behaviors that students should be able to perform upon completion of a specified learning activity (course, text, field study practicum, etc.) are specified in clear, quantifiable steps, they are less vague and more likely to be accomplished (Monjan & Gassner, 1979).

The focus of this research study is on determining the competencies essential for the successful performance of a beginning secondary business teacher. The study utilizes the behavioral learning theory's concepts of incremental learning and mastery learning as they apply to the developmental concept of the *National Standards for Business Education* (NBEA, 1995). Research results can be used to identify essential tasks that business teacher education programs need to strengthen within the curriculum content for preservice business teachers.

#### General Education Reform Efforts

A problem arises when change is evolving, and technology today is advancing very rapidly. Schools of education are currently reacting to remedy the necessary situations, but too much lag time is involved in adapting to the changes. One reason

for the gap is that technology is changing so rapidly that schools do not have adequate time to prepare teachers for the change (Zehr, 1998).

The thought of change was described by Toffler and Toffler (1995) as they gave a “wavefront” analysis of history. The First Wave was the agricultural revolution, and the Second Wave was the rise of industrial civilization. Our nation is now in the Third Wave, the information revolution. High-technology nations are reeling from the collision between the Third Wave and the obsolete, encrusted economies and institutions of the Second Wave.

Boyett and Boyett (1995) stated that the changing nature of the workplace for the 21st century would require adaptation from participants. Other futurists, including educators, businesspersons, and visionaries, agreed that education must change in order to train workers for the necessary skills (Lynch, 1997). One of the themes Lynch posited as a recommendation for reform included high standards related to curriculum development.

Necessary changes in education have been called for from both outside and inside academic settings. External criticisms are found in three national reform reports, *A Nation at Risk*, *A Nation Prepared*, and *Goals 2000*. These reports sent shockwaves throughout the educational system (Hartley, Mantle-Bromley, & Cobb, 1996). These demands for change criticized public school systems and, indirectly, teacher preparation programs.

The first of these reform reports was *A Nation at Risk* in 1983. The tone was imminent danger with threats to national security and declining competitive advantages (Hartley, Mantle-Bromley, & Cobb, 1996). Nation's well-known quote about "the rising tide of mediocrity" captured the attention of the states' legislative bodies (Lynch, 1997). The report was a devastating analysis of public education. The report's recommendations for improving teacher education was less publicized but still instrumental in initiating teacher education reforms.

In 1986, the Carnegie Forum on Education and the Economy presented *A Nation Prepared: Teachers for the 21st Century* (Hartley, Mantle-Bromley, & Cobb, 1996). This report focused specifically on the teaching force and described it as a dismal one whose academic preparation and test scores had declined substantially between 1974 and 1982.

The Forum concluded that the United States could remain competitive globally only by demanding greater performance from high school graduates. The Forum maintained that a profession of well-educated teachers was the key to success for greater performance from high school graduates and that reform could be achieved only by increasing the skills, aspirations, and capabilities of the nation's teachers (Carnegie Forum on Education and the Economy, 1986).

In 1989, *Goals 2000* sent down directives from a presidential level with the assistance of the nation's governors. The Educational Summit was an attempt to improve the schools by focusing on high standards for student performance (Hartley,

Mantley-Bromley, & Cobb, 1996). However, higher standards for student performance are dependent upon the standards for the teachers. In 1997, Dr. Jim Muyskens, senior vice chancellor of academic affairs for the University System of Georgia, addressed the Georgia Board of Regents Strategic Planning Committee. He stated that “if we want students to perform at high levels, then it is essential to assess what teachers know and what performance expectations they must meet to help students succeed” (“The System Supplement,” 1993, 1).

Critiques from outside the educational profession generally focus on the skills (or lack of skills) that workers bring to the profession. Internal criticism centers on issues of providing the best education to all children and to educating future teachers to better prepare them for their roles in public schools (Hartley, Mantle-Bromley, & Cobb, 1996).

*A Place Called School* (Goodlad, 1984) was an example of internal criticism. The book resulted from a massive study of teacher preparation programs across the United States. Goodlad agreed with others when he stated that most calls for reform were based on “reefs of ignorance.” The Holmes Group, another source of internal criticism, was a consortium composed of nearly 100 American research universities. One of the group’s goals was to make programs of teacher education more rigorous (Hartley, Mantle-Bromley, & Cobb, 1996).

Teacher education programs in general have long been the subject of much criticism (McCannon & Stitt-Gohdes, 1995). Reports in this section focused on both

external and internal criticisms from the nation's general reform efforts. These efforts alerted the nation to the impending crisis in our nation's schools and to the need for necessary action to change the system. Many of these reports included mandates to improve the curriculum for students. Others indicated that it is teachers who will be the key players in educational reform. Therefore, teacher preparation institutions in general have been charged to provide more rigorous programs and curriculum to support the changing workplace (Lynch, 1996).

#### Vocational Teacher Reform Efforts

In 1993, vocational educators began to take more seriously the task of teacher education reform. Several groups combined efforts to address the problem. Groups included the University Council for Vocational Education (UCVE), the National Center for Research in Vocational Education, the U.S. Department of Education, and the National Association of State Directors of Vocational Technical Education Consortium (Lynch, 1997).

Different combinations of the groups produced areas and themes of action for vocational teacher education. Three of the major reports called for an accountability system. In one, individual states were to develop the equivalent of entry-level industry standards for the profession. Another report called for standards and authentic assessments for evaluation of educators and programs. Also, a set of standards for vocational teacher education was to be adopted (Lynch, 1997).

Lynch (1997) proposed that before 1993 few institutions with vocational teacher education showed much concern about reform or about the fact that graduates were leaving unprepared for the teaching assignments ahead of them. From the combined efforts of vocational educators since 1993, an idea emerged that changes in vocational teacher preparation were both necessary and inevitable for survival (Bromley, Cobb, & Hartley, 1996).

In 1996, the UCVE funded a study to identify national trends and issues for workplace preparation and their implications for vocational teacher education. Over 300 relevant publications that focused on the preparation of the nation's skilled workforce were reviewed. Nineteen of those documents were submitted to institutional representatives to identify implications for vocational teacher education. Implications were identified and prioritized with respect to the improvement of the policy and practice for vocational teacher education. Results were used to submit "Preparing Teachers for the Nation's Workforce," a statement pertaining to the preparation of teachers needed to educate a well qualified workforce for the nation. One of the major recommendations in the statement was that teachers should be prepared to focus not on disciplines but on contextual relationships between subject matter and integrated contexts meaningful to students during the learning process (Frantz, 1997).



## Business and Industry Perspectives

For quite some time, the United States economy has been experiencing a shift from a long-established industrial manufacturing base to that of a service, information, and high-technology base (Meirhenry, 1981; Naisbitt & Aburdene, 1990). Cannings (1990) confirmed this shift and projected that service jobs would form about 90% of the economy by the year 2000.

The 120 million people in the United States work force today must constantly upgrade their skills over the course of the 1990s. It will require a tremendous human resource effort to transform corporate America into the decentralized, customer-oriented model of the information economy (Naisbitt and Aburdene, 1990, p. 36).

One of the purposes of school is to prepare people to make a living (SCANS, 1991), and Dwyer (1995) reported that education and training should reflect society. He stated that over the past century, society has changed from local communications to global communications, from local markets to global markets, and from unsophisticated to sophisticated technologies.

One of Miller's (1985) Modern Principles of Vocational Education was that curricula should be derived from the requirements of the workplace. Another was that federal legislation is a reflection of national priorities. As secondary schools consider national priorities and evaluate curriculum competencies for students to take to the changing workplace, teacher education programs need to reflect similar

changes in the curriculum required for teachers' subject matter educational components.

### Business Education Perspectives

As the United States has moved through the stages of the Information Age during the 20th century, business education has made changes to evolve with the new Technology Age. From manual typewriters to electronic typewriters to microchips, the change has been an ongoing process (Haynes & Wray, 1994).

In 1979, even before *A Nation At Risk*, business education professionals met at Snowbird, Utah, to discuss necessary changes. The Snowbird Report directly addressed business teacher education offerings and recommended updating business educators to teach emerging technologies in office and distributive education (Bartholome, 1997).

In 1983, the NBEA Task Force met to make recommendations for the next 5 to 10 years in an effort to keep current with changes in the 21st century. These changes required the business curriculum to incorporate new technologies and learning strategies to train workers for global information networks as well as basic learning strategies (Bartholome, 1997).

In 1995, the NBEA adopted *The National Standards for Business Education*, which delineates the curriculum standards for business education (Atkinson, 1997). The document (see Appendix A) is a developmental guideline for what kindergarten through postsecondary students should know about business. The standards are an

effective tool for integrating academic and vocational areas in mathematics, language arts, and social studies (Fry, 1998).

Another national organization, the National Board for Professional Teaching Standards (NBPTS, 1997), requires accomplished business teachers to command a core body of general vocational knowledge about the world of work in general, industry specific knowledge, and the skills and processes that cut across industries. These transferable skills and processes are important as vocational educators focus on occupational and academic education for and about career areas in business. Previously, the educators were to focus on the development of a specific skill in a specific occupation. The board recognizes the fact that subject matter necessary to become an accomplished teacher in vocational education has changed over time and needs to be applicable to the different career areas.

Business teacher education was addressed at a national level again in 1997 at the Business Education Summit in Arizona (Bartholome, 1997). One of the major issues was to ensure training and preparation of teachers to teach business courses at the secondary and postsecondary levels. On a state level, the 1997-98 Program of Work in Virginia business education uses the standards in the *National Standards for Business Education* (NBEA, 1995) to develop and maintain strong curriculum materials. Continuous updating of the business curriculum is required on all levels in order to stay current with rapidly changing forces due to technological advances, globalization of the marketplace, and the rise of entrepreneurship (Fry, 1998).

Business education has changed through history to survive (Bartholome, 1997). Task forces and committees in this section are examples of the many forces that have reviewed legislation and reform calls to make adaptations to the business program and its curriculum in order to prepare educators and students for the rapidly changing world of work.

### Reform Calls and Standards

Many organizations and educational associations have developed standards in response to the reform calls from across the nation. “The various standards express explicit expectations for teacher education programs” (Lynch, 1997, p. 36).

The National Council for Accreditation of Teacher Education (NCATE) has been one of the contributors to reform efforts. NCATE redesigned its requirements in 1985 in an effort to sustain self-regulation in teacher education institutions and to raise the professional standards of teacher education (Roth, 1989).

The Interstate New Teacher Assessment and Support Consortium (INTASC) was drafted in 1992 from personnel in 17 state agencies and various professional organizations. The consortium encouraged rethinking for preparation and induction into the profession and identified standards for initial licensing (Lynch, 1997). Similarly, Marshall and Tucker (1992) suggested that teachers obtain their certificates by passing a series of examinations on essential skills and on their teaching subjects.

The National Board for Professional Teaching Standards is a nonprofit, nonpartisan organization governed by a 63-member board of directors, many of whom are teachers. The organization offers a national, voluntary certification for teachers with three or more years of teaching. Certification demands demonstration of rigorous standards for what outstanding teachers should know and be able to do (Logan & Krizan, 1997).

“Research data from the industry is a necessity for determining curriculum content for an educational program that prepares workers for that industry” (Flanders, 1988, p. 9). The Secretary’s Commission on Achieving Necessary Skills (SCANS) (1991) researched industry for standards from that arena. SCANS identified five generic workplace basic competencies (resources, information, interpersonal skills, systems, and technology) and three educational foundation skills (basic skills, thinking skills, and personal qualities) required of new workers. The national study concluded that the competencies were applicable from the shop floor to the executive suite and should be taught in an integrative fashion to reflect the individual context.

One of the conclusions in SCANS (1991) was that all American high school students must develop a new set of competencies in order to work for companies in the global marketplace as well as in small, local companies. Everett (1995) stated that the challenge for business teachers was to teach the SCANS skills in context by choosing as many activities as possible to integrate the competencies.

The educational reform effort of the 1980s resulted in action from a variety of responses from business, industry, and education. More accountability was demanded from existing organizations as well as newly formed consortiums. Standards discussed in this section are the result of some of the efforts to respond to the reform calls.

### Importance of Content Area Skills

From the 1917 adoption of *Prosser's Sixteen Theorems* for public high schools to current times with university professors, scholars have agreed that instructors need to be well grounded in subject-matter competencies in order to be effective with their learners. "Vocational education will be effective in proportion as the instructor has had successful experience in the application of skills and knowledge to the operations and processes he undertakes to teach" (Prosser & Allen, 1925, p. 200). "Old adages such as 'you cannot teach what you do not know' and 'teachers should know that they are talking about' are as accurate today as they were in 1917" (Camp & Hillison, 1984, p. 17). Miller's (1985) *Modern Principles of Vocational Education* also addressed teachers' accountability. He stated that teachers are to be both professionally and technically educated. Amstutz and Whitson (1997) questioned whether college faculty with limited skills will be able to train students to become proficient in information usage.

McEwen and King (1998) agreed with the importance of teachers knowing technical skills when the researchers stated that teacher education should provide

opportunities for preservice teachers to acquire necessary skills for their careers.

Camp and Hillison (1984) stated that subject matter expertise was crucial for both vocational teachers and students.

One of the purposes of the NBPTS (1997) is “to establish high and rigorous standards for what accomplished teachers should know and be able to do” (p. 1). The board mandates that certified teachers must have a rich understanding of the subjects they teach. That will help the teacher to be aware of preconceptions and background knowledge that students bring to each subject. The standards also state that accomplished teachers should know their subject matter well enough to create multiple paths to the subjects they teach.

Technical skills involve not only knowledge of the discipline but also the ability to impart that knowledge to learners (White & Roach, 1997). Camp and Heath-Camp (1989) stated that “teachers must know and understand the content of their disciplines well enough to teach it to someone else and to respond to questions about its underlying assumptions and theories” (p. 13).

Fullan (1995) added that teachers must know their subject areas well enough to teach them both individually and in relation to other disciplines. Cruickshank (1990) stated that effective teachers know much about their subject fields and possess much factual information. According to Ward (1986), the ideal professional teacher is knowledgeable and up-to-date in one or more content areas. When secondary students in Ward's study were asked to describe the ideal teacher, the

professional teacher's students depicted someone who knew the subject well enough to explain it in several ways to ensure that all students understood. High school business students in Messenger's (1979) study characterized poor teachers as those who did not explain subject matter well and did not care about students.

Preservice teachers who are taught necessary technical concepts and applications are more likely to teach as classroom teachers and to feel comfortable while doing so (Chalupa, 1993). By increasing their technical knowledge, they will have more confidence in their ability and will be better able to increase their teaching skills. They can also use the technical knowledge to aid in interpreting and applying new research-based knowledge (Ward & Griffin, 1986).

Bandura's (1977) theory of self-efficacy supports the principle of teacher effectiveness and knowledge of subject matter. Self-efficacy is the extent to which one believes that he or she can successfully execute a behavior necessary to produce a certain outcome. Bandura stated that "individuals can believe that a particular course of action will produce certain outcomes, but if they entertain serious doubts about whether they can perform the necessary activities such information does not influence their behavior" (p. 193).

Bandura (1977) did not imply that expectation is the sole determinant of behavior. "Expectation alone will not produce desired performance if the component capabilities are lacking" (p. 194). However, if people are given appropriate skills and adequate incentives, "efficacy expectations are a major determinant of people's



choice of activities, how much effort they will expend, and of how long they will sustain effort in dealing with stressful situations” (p. 194). Bandura suggested that his theoretical framework is generalizable beyond the psychotherapy domain. Researchers in many domains, including education, have generalized the theory of self-efficacy to their fields.

In 1976 and 1977, the Rand Corporation conducted research in teacher efficacy, the extent to which teachers believe that they have the ability to affect student performance. Researchers reported that a teacher’s sense of self-efficacy was one of the best predictors of increases in student achievement scores (Ashton & Webb, 1986). Gibson and Dembo (1984) found that teachers with higher self-efficacy were more likely to have a positive classroom environment, support students’ needs, and meet the needs of all students. Self-efficacy might also influence teachers’ activities, effort, and persistence. Also, teachers with low self-efficacy might avoid planning instructional activities with which they do not feel confident. They might not persist with students who run into problems, or they might omit reteaching of difficult material.

Woolfolk and Hoy (1990) referred to instructional efficacy with teachers. They found that those who had a low sense of instructional efficacy favored a caretaker role that relied heavily on extrinsic rewards and negative inducements to get students to study.

Gibson and Dembo (1984) also found that teachers with a high sense of instructional efficacy devote more classroom time to academic learning, providing students who are having difficulty with help, and praising them for their accomplishments. On the other hand, they found teachers with low instructional efficacy spending less time on academic pastimes, giving up on students if they did not catch on quickly, and criticizing them for failures.

The American Vocational Association conducted a poll in 1983 on 40 program-related concerns, and vocational educators indicated that “upgrading subject matter” was the third highest program concern (Corwin & Sandiford, 1984). Research in this section has covered the past 30 years, and all findings have indicated that proficiency in curriculum competencies has critical implications for teachers. If teachers are to be the key players in the nation’s academic reform (Lynch, 1996), then teacher education programs must be proactive in striving to narrow the gap between the rapidly changing forces of the Information Age and the necessary changes in curriculum competencies for preparing beginning secondary business teachers.

### Beginning and Experienced Teachers

Recent research by Kirby and LeBude (1998) implied that concerns of beginning teachers start to shift as they experience success in the classroom and progress in years of experience. Some researchers concluded that teachers move through a career stage cycle that is similar to the product life cycle in marketing

(introduction, growth, maturity, and decline). These stages are based on years of teaching experience (Alexander, Ober, Davis, and Underwood (1997)).

According to Aneke and Finch (1997), teachers are first concerned with self. As they gain experience in the use of educational innovations, their concerns shift more to task-oriented matters. Finally, their concerns shift to students and other teachers. This same pattern was reported thirty years ago. Fuller's (1969) research indicated that beginning teachers were concerned more with the self than with the actual specifics of teaching. Time involved in the shift could be dependent upon whether the beginning teachers lack adequate knowledge or emotional support during the pre-service and beginning years of teaching.

Two problematic areas that research repeatedly indicates for new teachers are maintaining classroom discipline and motivating students (Fuller & Brown, 1975). As beginning teachers in Waters's (1988) study experienced and resolved their concerns from the lower stages, they progressed from a state of self toward a stage of concern where their focus was more on student learning. McCannon and Stitt-Gohdes (1995) surveyed award-winning teachers and found that their central focus was more on the success of their students.

Alexander, Ober, Davis, and Underwood's (1997) research was to determine the extent that teaching concerns differed between prospective and experienced teachers. That study reported similar conclusions as those stated for beginning and experienced teachers. Findings indicated that experienced teachers had fewer, yet

more serious, concerns than prospective teachers. The most significant concern for prospective teachers was handling problems of student control and discipline. The most significant concern for experienced teachers was giving students a share in planning objectives and learning activities.

One purpose of a study by Mullenex (1998) was to determine whether problems experienced by beginning and experienced teachers in business education had changed over the years. The top three trouble areas reported by beginning teachers in that study were motivating students, class discipline, and time organization. Experienced teachers reported motivating students, time organization, and resources and materials.

One of the threads in all of these studies is that inexperienced teachers have much concern about classroom control. Research also indicates that overcoming this concern is something that comes mostly through experience. However, business teacher education institutions can help eliminate some of the concerns of beginning teachers by grounding them in subject matter content so they do not have to be concerned with their technical competency.

Teachers who are empowered with knowledge and skills from curriculum competencies that are current and valid will be more effective in the classroom. Relating teaching efficacy to Bandura's (1977) explanation of efficacy expectations, these teachers will be more likely to plan instructional activities which entail more challenging thought processes. Teachers who are not as familiar with subject matter

are likely to avoid challenging activities, spend less time on the difficult material, or reteach materials that students do not understand (Ashton & Webb, 1986). Schools of education cannot correct the problems that beginning teachers will face with discipline and other school-related problems, but they can ensure that these teachers have been provided the opportunity to become empowered with the necessary subject matter skills to become the figurehead in the classroom.

#### Related Studies

Today, vocational education is threatened with the fact that skills taught will be outdated even before a student graduates or that skills included in the curriculum may become outdated before the curriculum is implemented. In order to prevent this from happening, research data to determine curriculum content for an educational program is imperative (Flanders, 1988). This section examines some of the recent research in that area.

McEwen and King (1998) employed both qualitative and quantitative methods to survey 31 business education student teachers. Surveys, observations, discussions and focus groups were utilized. Although the majority expressed no problems during their practicum, they identified areas of concern.

When asked about preparation for course content, some student teachers felt inadequately prepared to teach Accounting II, computerized accounting, and some hardware and software skills. Student teachers reported keyboarding as the course

taught most often. Word processing was the second most frequently taught course, spreadsheets was third, and accounting was fourth.

One of the recommendations from the study addressed the near impossibility of teaching all the hardware and software skills that each student teacher will need. The researchers recommended that preservice programs should alert students to the fact that they very likely will have to learn new products on their own (McEwen & King, 1998).

Peel, Joyner, and Volk (1998) examined basic academic and vocational skills required by employers who hire high school graduates. Manufacturers rated skills in the areas of reading, writing, and math; communications; critical thinking; group interaction; personal development; computers; technological systems; leadership; and employability. Of skills in the nine areas, group interaction skills was first, employability skills was second, technological system skills was seventh, and computer skills was last.

Railsback (1997) surveyed all Kansas public secondary head guidance counselors, principals, and presidents of local boards of education to ask how they perceived the field of business education and its importance in their high school curriculum. A 7.00 Likert scale was used in the questionnaire. For all three groups, the one semester keyboarding course was ranked highest, computer applications (spreadsheets, database, multimedia, desktop publishing, e-mail, Internet) was second highest, and international business was ranked lowest.

One section of Railsback's (1997) questionnaire listed 17 competencies associated with workplace skills required of entry-level employees by employers. Decision making/critical thinking skills was ranked highest by all three groups. Second highest was human relations skills, and third was responsibility and self-management skills. Fourth highest was keyboarding skills. Principals ranked marketing skills and knowledge second lowest and small business management lowest. Management functions and small business management/entrepreneurship shared lowest and second lowest positions for counselors. Business law and small business management/entrepreneurship shared lowest and second lowest positions for board presidents.

Frueling, Kerin, and Sebastian (1997) examined the impact that information technology has on the business environment and focused on the changes experienced in the business education sector. Some of the core business processes they listed as necessary for the knowledge needed by workers included sales and marketing, product/service development, manufacturing or service delivery, distribution/transportation, accounting, and management decision making.

Similar findings were reported by White and Roach (1997). They reviewed the preparation needed by current and future business teachers. Some of the subject competencies they reported as necessary for business teachers included keyboarding, technology/computer applications, accounting, basic business and international business, business English/communication, and business math.

Young (1995) surveyed all the students of Florida Agricultural and Mechanical University's business teacher education program who graduated from 1983-1993. The 130 graduates who responded were all employed in school systems or business-education related positions in the United States. The study collected data related to their present occupations and to their perceived degree of preparation to teach business subjects.

One of the five primary conclusions of the Young (1995) study was that the graduates perceived themselves to be less prepared in the instruction of computer-related courses than in other offerings. They perceived that they were adequately prepared to teach only traditional courses in typewriting, keyboarding, and office procedures. Young (1995) also found that graduates perceived themselves to be least prepared to teach Basic Programming. (Florida A&M does not prepare their graduates to teach courses in programming.)

In addition, graduates in both teaching and non-teaching positions perceived themselves to be inadequately prepared in the areas of accounting, economics, and shorthand. Graduates perceived all of their professional education and methods courses as being relevant to their careers. Of the 23 professional core courses, "Office Procedures" and "Student Teaching" were perceived to be the most relevant, and "Shorthand I" was perceived as being least relevant.

In 1995, The Council for Basic Education mailed surveys to 1,650 award-winning teachers and to all the teachers certified by the National Board for



Professional Teaching Standards. The purpose of the research was to examine how well respondents perceived that their education prepared them for teaching and for them to make suggestions for improving teacher education. One of the three broad recommendations was to require all teachers to know the content of the subjects they teach. In order to achieve this, teacher education programs would be required to accept responsibility for the graduates' knowledge of content. Two of the recommendations from the study were for schools of education to set grade requirements for course work and to require an exit exam that measures breadth and depth of subject-area knowledge (Rigden, 1997).

Maddox (1995) examined responses from 158 secondary business teachers and 171 business persons as to their perceptions of the information processing competencies in the Alabama Course of Study. The seven competency groups were Automated Office Systems, Word Processing, Database Management, Electronic Spreadsheet, Graphics, Integrated Applications, and Telecommunications. The highest ranked mean by both groups was Word Processing, and Automated Office Systems was second highest. The lowest ranked mean was Graphics with Integrated Applications being second lowest.

Schmidt, Finch, and Oliver (1994) contacted institutions in the Southern Regional Educational Board and documented the coursework that business education teachers completed during their undergraduate teacher preparation studies. Research findings were to be used by teacher educators, administrators, and policy makers in

making informed decisions as to future coursework requirements for business teacher education programs.

The researchers described business teacher education as a multifaceted discipline where business teachers are expected to teach everything from middle school keyboarding to high school artificial intelligence courses. In order to teach the courses, the researchers also stated that teachers “. . . must be knowledgeable of basic business content, including business principles, management, law, and finance; accounting; and economics; and they must have extensive information systems and computer knowledge. The . . . coursework in all reality only sets the stage for further learning when they begin teaching” (Schmidt et al., 1994, p. 19).

Flanders (1988) described curriculum as the ‘life blood’ of educational methodology and curriculum content as the basic building block of curriculum planning. As such, curriculum must be constantly monitored so that it does not become stagnant, outdated, and ineffective. Bartholome (1997) further stated that curriculum must always be monitored to meet the needs of business.

Business education, like many other areas of America’s public school, has seen much change since it became a discipline. With change comes uncertainty; but “business education must continue to adapt effectively, or other disciplines will surely take up the challenge” (Bartholome, 1997). Research in this section has shown that business education is constantly striving to examine the curriculum in order to keep business teachers and students current in the changes of the work force.

## Summary

The purpose of Chapter Two has been to present a review of the literature pertaining to the need for beginning secondary business teachers to possess the skills and knowledge to teach the curriculum competencies necessary for preparing students to enter the workforce. The review of literature related to the need for a teacher to be competent in content area skills is encompassed in the Related Theoretical Literature, General Education Reform Efforts, Vocational Teacher Reform Efforts, Business and Industry Perspectives, Business Education Perspectives, Reform Calls and Standards, Importance of Content Area Skills, Beginning and Experienced Teachers, Related Studies, and Summary.

According to the literature review, leaders in government, business, and education agree that empowering teachers with knowledge and skills in the curriculum content area contributes greatly to the success experienced by beginning teachers in general. Vocational education was addressed; and concerns about business education, specifically, were researched.

Findings in nine studies were identified and described in detail. Those findings support the need for more research in evaluating the curriculum competencies necessary to prepare beginning secondary business teachers. The population in these studies included business persons; teacher educators; and

educators, including business teachers and business student teachers. No recent studies were found that contrasted the perceptions of experienced teachers and inexperienced teachers pertaining to specific curriculum content essential for beginning secondary business teachers.

Strengths and weaknesses of the business curriculum competencies as well as curriculum competencies necessary for preparing secondary business education teachers were identified. McEwen and King (1998) concluded that teaching all the hardware and software skills that each teacher will need is a near impossibility. This was supported by Schmidt, Finch, and Oliver (1994) when they reported that business teachers were expected to teach everything from middle school keyboarding to high school artificial intelligence courses. Flanders (1988) added that curriculum eventually becomes stagnant, outdated, and ineffective. He also stated that vocational education is threatened with the fact that skills taught will be outdated even before a student graduates.

With challenges of technology and curriculum that become rapidly outdated and with the need to empower beginning business teachers with current curriculum competencies, the responsibility of business teacher education institutions to evaluate their programs is even more crucial. Lag time will always exist due to the rapid improvements in technology. However, secondary business teachers deserve the best beginning possible, and that beginning starts with their preparation. Colleges and universities need to evaluate curriculum competencies on a continual basis in order

to empower teachers with the necessary knowledge and skills for preparing students to become effective workers in a changing society.

Research in this chapter which examined curriculum competencies in business teacher preparation programs (McEwen & King, 1998; Railsback, 1997; White & Roach, 1997); Young, 1995) supports one of the basic purposes of the *National Standards for Business Education* (NBEA, 1995). That purpose is to “provide a document which curriculum writers can use as a guide in developing superior programs in business education” (p. 8). This study will use the document to help business education in Virginia answer the call for reform in education that has been discussed for over a decade.

Reform efforts throughout the nation have called for better preparation of teachers and students. Forces mentioned in this chapter in government, business, and education have joined to help keep necessary reform within guidelines that will benefit our nation as a whole. “Standards, assessment, structure, governance, and technology are all words that describe much of the change that is happening in our schools” (McEntee, 1997, p. 7). From both the standards that have evolved and ongoing research in the discipline, business education professionals strive to maintain an up-to-date curriculum that will prepare teachers and students to operate effectively in the constantly changing world of work.

## CHAPTER III

### RESEARCH METHODS

This chapter focuses on the specific details of obtaining and analyzing data for this study. McMillan and Schumacher (1984) clearly identified the characteristics of research design and reported that

research design is a term that refers to the way an investigator conducts a study of the procedures and techniques employed to answer the research problem or question (p. 107).

This chapter describes the methods used to determine the degree of importance of the curriculum competencies in the *National Standards for Business Education* (NBEA, 1995) for beginning secondary business teachers in Virginia. The chapter also includes the Purpose of the Study, Research Questions, Population, Instrumentation, Data Collection, and Data Analysis.

#### Purpose of the Study

The purpose of this study was to determine the degree of importance of each of the curriculum competencies in the *National Standards for Business Education* (NBEA, 1995) for the successful performance of beginning secondary business teachers in Virginia. Findings from this study should be valuable to universities, colleges, and community colleges in Virginia to use in redesigning the subject matter content areas in business teacher education programs.

## Research Questions

The research questions that were addressed in this study were as follow:

1. To what degree do experienced business teachers in Virginia perceive that beginning secondary business teachers in Virginia should possess each of the curriculum competencies identified in the *National Standards for Business Education*?
2. To what degree do inexperienced business teachers in Virginia perceive that beginning secondary business teachers in Virginia should possess each of the curriculum competencies identified in the *National Standards for Business Education*?
3. To what degree do experienced and inexperienced business teachers in Virginia differ in their perceptions of the importance of each of the eleven curriculum content areas in the *National Standards for Business Education* for beginning secondary business teachers in Virginia?

## Population

A Roster of Virginia Business Teachers was obtained from the Virginia Department of Education. The roster included all business teachers at high schools, middle schools, vocational schools, training and educational programs, combined schools, continuing education schools, private schools, and technical centers. This study was delimited to public school business education programs that prepare

students at Level 3 (Secondary, 9-12) as identified in the *National Standards for Business Education* (NBEA, 1995).

Another roster from the Department of Education identified 19 school systems with local business supervisors. The researcher addressed the local business supervisors at a state meeting and asked them to support the research by encouraging business teachers in their school systems to respond to the upcoming survey. The local business supervisors were then contacted by mail (see Appendix F) to remind them of the study and to determine the names of contact persons who could grant permission for research to be conducted in their school divisions.

After obtaining the names, those persons were contacted (see Appendix G); and permission was granted from 12 of the school systems involved. All business teachers in school systems that were not identified on the roster of local business supervisors were included in the population for the sample selection.

According to Krejcie and Morgan (1970), a sample size of 274 was needed to represent the available population of 955 business teachers. The sample was identified by systematic selection. A random number was chosen for the selection of the first subject (Fink, 1995). After that, every fourth person was chosen from the population until the entire sample of 274 was identified.

#### Instrumentation

Survey instruments are a commonly accepted and widely used method for collecting information about people's attitudes and behaviors (Sudman & Bradmun,



1983). Best and Kahn (1986) maintained that the questionnaire has unique advantages and that properly constructed and administered, it may serve as an appropriate and useful data-gathering device.

A review of the literature did not reveal a questionnaire that could be used to find the desired information for this study. Therefore, a survey instrument was developed (see Appendix C) that was based on the curriculum competencies in the *National Standards for Business Education* (NBEA, 1995) (see Appendix A) and the Curriculum Standards Model (see Appendix B).

Writers who developed the national standards had identified 12 content areas which included all subject matter taught in the business education discipline (NBEA, 1995). Of the 12 areas, 11 contained varying numbers of competencies. The twelfth area, Interrelationships of Business Functions, showed only how the 11 areas are related to each other and did not list specific competencies. Therefore, Interrelationships of Business Education was not included on the survey instrument.

The survey instrument contained a total of 102 competencies in 11 subject areas. A 5-point Likert scale was provided for each of the listed competencies. Respondents were instructed to rate the importance of each competency for the successful performance of beginning high school business teachers in Virginia by circling one of the following codes:

- 1 - Not Important
- 2 - Less Than Average Importance
- 3 - Average Importance
- 4 - More Than Average Importance
- 5 - Essential Importance

A Likert scale was chosen for the following reasons: (a) it is simple to construct and to answer; (b) it contains a set of items, all of which are considered approximately equal in attitude; (c) the subject responds with varying degrees of intensity on a scale ranging between extremes; (d) it provides great flexibility since the descriptors on the scale can vary to fit the nature of the question or statement; (e) the scores of the position responses can be summed and averaged to yield an individual's attitude score (McMillan & Schumacher, 1984).

According to Litwin (1995), assessing the quality of collected data is somewhat difficult. Quality assessment can be better ensured by performing careful validity and reliability procedures when constructing the survey instrument.

Validation of the competency list was not necessary for this study as the validity of the list was based on the *National Standards for Business Education* (NBEA, 1995), but a pilot test for reliability and usability was conducted. Reliability was estimated during the final administration of the instrument. The Chronbach's alpha estimate of internal consistency for the survey instrument was determined at that time to be 0.98.

While this number appears to be high, an analysis of individual items did not indicate a specific item related to the inflation.

Fink (1995) stated that 10 or more people were usually needed for the pilot test; therefore, 13 respondents were included in the pilot study. They were business teachers in a neighboring state and a doctoral student who was an experienced business teacher in a teacher education program at a university in Virginia.

Respondents for the pilot study were mailed a copy of the survey instrument (see Appendix C), a letter (see Appendix E), and a self-addressed, stamped envelope. The letter requested feedback on clarity, format, and style (Ary, Jacobs, & Razavieh, 1990). After receiving the data and the feedback from the respondents, minor modifications were made to the survey instrument, and packets were distributed to the sample for data collection.

#### Data Collection

Researchers at the university where this study was conducted must obtain permission from the Institutional Review Board to use the responses of human subjects. The board reviewed the proposal for this study and granted the necessary clearance to conduct the research (see Appendix D). Information for the study was then collected through a survey instrument described in the previous section. All subjects in the study received the same packet that contained an introductory letter from the researcher (see Appendix H), a survey instrument (see Appendix C), and a

self-addressed, stamped envelope. The survey packets were mailed to the 274 subjects in the sample who were asked to complete and return the surveys.

Instruments and return envelopes were coded and tracked as to the date of return receipt, and a record was kept for follow-up contact (see Table 1, p. 55). At the end of data collection, 189 surveys (69%) had been returned. Ten surveys were not usable, which resulted in 179 (64%) participants for the study.

The first question on the survey asked the participants for the number of years they had taught high school business courses. This question was to determine whether the respondents would be categorized as experienced (more than 3 years) or inexperienced (3 years or less) business teachers. Results of that question were used to identify 161 experienced business teachers and 18 inexperienced business teachers.

### Data Analysis

SPSS was the statistical software package used to analyze collected data. Descriptive statistics were used to organize, summarize, and describe the observations (Ary & Jacobs, 1990). Means and standard deviations were used to summarize and describe the data for the 102 individual competencies. *T*-tests were used to determine whether significant differences existed between the experienced and inexperienced business teachers regarding their opinions of the importance of the 11 content areas.

## CHAPTER IV

### FINDINGS

The purpose of this study was to determine the degree of importance of each of the curriculum competencies in the *National Standards for Business Education* (NBEA, 1995) for the successful performance of beginning secondary business teachers in Virginia. This section reports the results of the study by comparing the perceptions of experienced business teachers in Virginia with the perceptions of inexperienced business teachers in Virginia. The chapter includes the Research Questions, Population, Importance of Competencies, Competency Findings by Content Areas, Importance of Content Areas, Nonrespondent Follow-up, and Summary.

#### Research Questions

1. To what degree do experienced business teachers in Virginia perceive that beginning secondary business teachers in Virginia should possess each of the curriculum competencies identified in the *National Standards for Business Education*?
2. To what degree do inexperienced business teachers in Virginia perceive that beginning secondary business teachers in Virginia should possess each of the curriculum competencies identified in the *National Standards for Business Education*?

3. To what degree do experienced and inexperienced business teachers in Virginia differ in their perceptions of the importance of each of the eleven curriculum content areas in the *National Standards for Business Education* for beginning secondary business teachers in Virginia?

On the survey instrument, the 102 competencies were grouped into the 11 different subject areas in the business education curriculum. Secondary business teachers in Virginia were asked to rate each competency statement relative to their perceptions of the competency's importance to the successful performance of a beginning secondary business teacher in Virginia. The following scale was used:

1 = The competency is not important.

2 = The competency is of less than average importance.

3 = The competency is of average importance.

4 = The competency is of more than average importance.

5 = The competency is of essential importance.

For purposes of analyzing mean values for each competency and/or category of competencies, the following scheme was used to interpret the mean values above and below the numbers used in the rating scale:

0.00 - 1.49 = not important

1.50 - 2.49 = less than average importance

2.50 - 3.49 = average importance

3.50 - 4.49 = above average importance

4.50 - 5.00 = essential importance

The results ignore the potential difference in scale interpretation by experienced and/or inexperienced business teachers in Virginia. Therefore, caution should be exercised when interpreting the mean perceptions as shown in the tables in this chapter.

#### Population

A sample of 274 was drawn from an available population of 955 Virginia business education teachers (Krejcie and Morgan, 1970). Table 1 shows the number of business teachers who responded to each of the three mailings used to collect data.

Table 1

#### Returns by Individual Mailings

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Group	Mailed	Returned	Cumulative Percentage
	Returned	ReturnedReturned	
		Returned	

First Mailing	274	55	20
Second Mailing	219	55	42
Third Mailing	164	79	69

---

Of the 189 returned surveys shown in Table 1, ten were not usable. Reasons for not using the surveys include the following: (1) one teacher was retired and did not complete the survey, (2) one teacher was not a beginning teacher and did not think he/she was supposed to complete the survey, (3) one survey was returned by the school secretary because the teacher had moved, (4) two teachers had not taught business subjects for several years and did not complete their surveys, and (5) five surveys were returned by the post office. As a result of the elimination of the 10 surveys, 179 (65%) returned surveys were used in the study to determine the competencies perceived necessary for beginning secondary business teachers.

One demographic question was asked on the survey instrument. This question asked the participants for the number of years they had taught high school business courses.

The response to this question determined whether the respondents would be categorized as experienced business teachers (more than 3 years) or inexperienced business teachers (3 years or less). Results of the question were used to identify 161 (90%) experienced business teachers and 18 (10%) inexperienced business teachers.

### Importance of Competencies

#### Research Questions One and Two



(1) To what degree do experienced business teachers in Virginia believe that beginning secondary business teachers should possess each of the curriculum competencies identified in the *National Standards for Business Education*?

(2) To what degree do inexperienced business teachers in Virginia believe that beginning secondary business teachers should possess each of the curriculum competencies identified in the *National Standards for Business Education*?

Based upon the ratings given by the experienced and the inexperienced business teachers for research questions one and two, the mean value and the standard deviation for each competency were determined, and a rank order was assigned to each statement according to its mean value.

Of the 102 competencies, experienced business teachers rated 11 competencies as having essential importance, 86 competencies as having more than average importance, and 5 competencies as having average importance. Inexperienced business teachers rated 11 competencies as having essential importance, 87 as having more than average importance, and 4 as having average importance. When comparing the competencies rated as essential importance and the competencies rated as average importance for the experienced and the inexperienced business teachers, 9 competencies rated as essential importance were the same for both groups; and 3 competencies rated as average importance were the same for both groups.

#### Competency Findings by Content Areas

Tables 2-12 (pp. 58-80) present the rank order, number, mean rating, and standard deviation for each competency statement within each of the 11 content areas for both the experienced and the inexperienced teachers. Preceding the tables are descriptions of the findings for Questions 1 and 2.

### Accounting

The overall content area of Accounting was rated as more than average importance by both experienced teachers (4.38) and inexperienced teachers (4.48). Findings are revealed in Table 2.

Experienced teachers rated all five competencies in the Accounting content area as being of more than average importance or of essential importance. The highest ranked competency was Accounting Cycle.

Inexperienced teachers also rated all five competencies in the Accounting content areas as being of more than average importance or of essential importance. The highest ranked competency, Accounting Process, was also the overall second highest ranked competency by inexperienced teachers.

Rankings in the Accounting content area by both groups of teachers were the same for all competencies except Accounting Cycle and Accounting Process. The teachers reversed the rankings of first and second highest for these two competencies.

However, the competencies were two of the nine that were rated as having essential importance by both groups.

### Business Law

The overall content area of Business Law was rated as more than average importance by both experienced teachers (3.92) and inexperienced teachers (3.68). Findings are revealed in Table 3.

Table 2

Rankings, Numbers, Mean Importance Response Scores, and Standard Deviations for the Importance of the Accounting Curriculum Competencies as Perceived by Experienced and Inexperienced Business Teachers in Virginia

Accounting Competency	Experienced				Inexperienced			
	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>
Accounting Cycle	1	157	4.73	.55	2	17	4.53	.94
Accounting Process	2	157	4.71	.54	1	17	4.76	.44
Financial Statements	3	157	4.49	.73	3	17	4.35	.79
Special Applications	4	157	4.17	.85	4	17	4.12	.86
Interpretation and Use of Data	5	156	3.80	.97	5	17	3.88	.93

Overall Content Area	4.38	.55	4.33	.62
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Table 3

Rankings, Numbers, Mean Importance Response Scores, and Standard Deviations for the Importance of the Business Law Curriculum Competencies as Perceived by Experienced and Inexperienced Business Teachers in Virginia

Business Law Competency	Experienced				Inexperienced			
	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>
Basics of the Law	1	144	4.28	.87	1	18	4.28	.89
Property Law	2	144	4.16	.87	2	18	3.94	1.00
Contract Law, Law of Sales, and Consumer Law	3	145	4.11	.86	4	18	3.83	1.04
Business Organizations	4	145	3.99	.87	3	18	3.89	1.18
Computer Law	5	144	3.94	.88	6.5	18	3.61	1.14

Domestic Relations Law	6.5	144	3.86	.96	5	18	3.67	1.28
Commercial Paper, Insurance, Secured Transactions, and Bankruptcy	6.5	145	3.86	.85	9	18	3.28	1.01

(continued)

Table 3 (Continued)

Rankings, Numbers, Mean Importance Response Scores, and Standard Deviations for the Importance of the Business Law Curriculum Competencies as Perceived by Experienced and Inexperienced Business Teachers in Virginia

Business Law Competency	Experienced				Inexperienced			
	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>
Wills and Trusts	8	144	3.79	.92	8	18	3.50	1.20

Agency Law and Employment Law	9	145	3.71	.94	6.5	18	3.61	.78
Environmental Law and Energy Regulation	10	144	3.49	.93	10	18	3.17	1.29
Content Area			3.92	.67			3.68	.76

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Experienced business teachers rated all but one of the ten Business Law competencies as being of more than average importance: Environmental Law and Energy Regulation was perceived as being of average importance.

Inexperienced business teachers rated all but two competencies as being of more than average importance: Commercial Paper, Insurance, Secured Transactions, and Bankruptcy as well as Environmental Law and Energy Regulation were rated as having average importance. These two competencies were also ranked lowest overall by the inexperienced teachers.

Experienced and inexperienced teachers ranked Basics of the Law and Property Law first and second highest in importance, respectively. Environmental Law and Energy Regulation was ranked lowest in importance by both groups. This was also one of the three competencies rated to be of average importance by combining experienced and inexperienced teachers' findings.

### Career Development

The overall content area of Career Development had an overall rating of more than average importance by both experienced teachers (4.37) and inexperienced teachers (4.48). Findings are revealed in Table 4.

Experienced teachers rated one of the six competencies in the Career Development content area as having essential importance. The remaining five competencies were perceived to be of more than average importance.

Table 4

Rankings, Numbers, Mean Importance Response Scores, and Standard Deviations for the Importance of the Career Development Curriculum Competencies as Perceived by Experienced and Inexperienced Business Teachers in Virginia

Career Development Competency	Experienced				Inexperienced			
	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>
Workplace Expectations	1	158	4.52	.71	3	18	4.56	.70
School-To-Work Transition	2.5	158	4.49	.67	1	18	4.72	.57
Lifelong Learning	2.5	158	4.49	.67	4.5	18	4.39	.85
Self-Awareness	4	159	4.43	.77	2	18	4.67	.84
Career Resources	5	158	4.15	.85	6	18	4.17	.86
Career Strategy	6	158	4.14	.81	4.5	18	4.39	.70

Overall Content Area

4.37 .58

4.48 .60

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Inexperienced teachers ranked three competencies as being essential. The remaining three competencies were perceived to be of more than average importance. Workplace Expectations was rated as essential by both experienced and inexperienced teachers. This competency was also one of the nine overall competencies perceived to be of essential importance by both groups of teachers.

### Communications

The overall content area of Communications had an overall rating of essential importance by experienced teachers (4.52) and more than average importance by inexperienced teachers (4.48). Findings are revealed in Table 5.

Experienced business teachers perceived four of the five competencies in the Communications content area to be of essential importance. The remaining competency was perceived to be of more than average importance. Overall for experienced teachers, Foundations of Communications was the third highest ranked competency.

Beginning teachers perceived three of the five competencies to be of essential importance. The remaining two competencies were rated as being of more than average importance.

Competencies in the Communications content area were ranked the same by experienced and inexperienced business teachers. Three competencies, Foundations of Communications, Social Communications, and Technological Communications

Table 5

Rankings, Numbers, Mean Importance Response Scores, and Standard Deviations for the Importance of the Communications Curriculum Competencies as Perceived by Experienced and Inexperienced Business Teachers in Virginia

Communications Competency	Experienced				Inexperienced			
	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>
Foundations of Communications	1	160	4.80	.50	1	18	4.72	.57
Social Communications	2	160	4.59	.66	2	18	4.61	.85
Technological Communications	3	160	4.54	.65	3	18	4.50	.71
Employment Communications	4	160	4.53	.62	4	18	4.33	.69
Organizational Communications	5	159	4.14	.84	5	18	4.22	.81

Content Area

4.52 .51

4.48 .55

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were among the nine individual competencies perceived overall as having essential importance by both experienced and inexperienced teachers.

### Computation

The overall content area of Computation had a rating of more than average importance for both experienced teachers (4.05) and inexperienced teachers (3.99). Findings are revealed in Table 6.

Experienced business teachers perceived two of the six Computation competencies to be of essential importance, three competencies to be of more than average importance, and one competency to be of average importance. One competency, Statistics and Probability, was ranked second lowest overall by experienced teachers.

Inexperienced business teachers perceived two competencies to be of essential importance. They rated the remaining four competencies to be of above average importance.

Both experienced and inexperienced business teachers rated Number Relationships as one of the nine competencies to be of essential importance.

Table 6

Rankings, Numbers, Mean Importance Response Scores, and Standard Deviations for the Importance of the Computation Curriculum Competencies as Perceived by Experienced and Inexperienced Business Teachers in Virginia

Computation Competency	Experienced				Inexperienced			
	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>
Mathematical Foundations	1	157	4.71	.5	2	18	4.47	.92
Number Relationships	2	157	4.59	.66	1	18	4.50	.92
Problem-Solving Applications	3	156	4.39	.80	3	18	3.94	1.06
Measurements	4	157	3.67	1.03	6	18	3.50	1.04
Patterns, Functions, and Algebra	5	157	3.50	.96	4	18	3.83	.92



Statistics and Probability	6	157	3.45	.97	3	18	3.67	.91
Overall Content Area			4.05	.62			3.99	.76

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### Economics and Personal Finance

The overall content area of Economics and Personal Finance was rated as more than average importance by both experienced and inexperienced teachers. The ranking (1) and the mean (4.01) were the same for both groups. Findings are revealed in Table 7.

Both experienced and inexperienced business teachers rated all the competencies in the Economics and Personal Finance content area to be of above average importance. Teachers in both groups included the same competencies in the four lowest rankings.

### Entrepreneurship

The overall content area of Entrepreneurship was rated as more than average importance for both experienced teachers (3.92) and inexperienced teachers (4.04). Findings are revealed in Table 8. All nine curriculum competencies in the Entrepreneurship content area were rated to be of more than average importance by both experienced and inexperienced business teachers.

### Information Systems

The Information Systems content area was rated as more than average importance by both experienced teachers (3.99) and inexperienced teachers (3.90). Findings are revealed in Table 9.

Experienced business teachers rated two Information Systems competencies as having essential importance and the remaining 13 competencies as having more than

Table 7

Rankings, Numbers, Mean Importance Response Scores, and Standard Deviations for the Importance of the Economics and Personal Finance Curriculum Competencies as Perceived by Experienced and Inexperienced Business Teachers in Virginia

Economics and Personal Finance Competency	Experienced				Inexperienced			
	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>
Supply and Demand	1	152	4.31	.81	2	16	4.31	.60
Role of Consumers	2	153	4.28	.83	10.5	16	3.94	.93
Career Choices	3	153	4.27	.86	6	16	4.09	.86
Role of Citizens	4	153	4.24	.89	4.5	16	4.13	.89
Personal Decision Making	5	153	4.21	.82	1	16	4.44	.73

Markets and Prices	6	153	4.05	.86	8	16	4.00	.89
Competition	7	153	4.05	.83	10.5	16	3.94	.77
Productivity	8	153	4.03	.89	9	16	3.97	.90

(continued)

Table 7 (continued)

Rankings, Numbers, Mean Importance Response Scores, and Standard Deviations for the Importance of the Economics and Personal Finance Curriculum Competencies as Perceived by Experienced and Inexperienced Business Teachers in Virginia

Economics and Personal Finance Competency	Experienced				Inexperienced			
	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>
Economic Systems	9	153	3.99	.90	4.5	16	4.13	.72

Role of Government	10	152	3.93	.87	7	16	4.06	.93
Scarcity, Choice, and Opportunity Costs	11	152	3.87	.93	3	16	4.19	.83
Exchange, Money, and Interdependence	12	153	3.79	.89	14.5	16	3.72	.82
Aggregate Supply and Demand	13	152	3.77	.87	12	16	3.78	.95
International Economic Concepts	14	152	3.71	.91	14.5	16	3.72	.89
Economic Institutions and Incentives	15	153	3.70	.84	13	16	3.75	.86
Overall Content Area			4.01	.68			4.01	.61

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Table 8

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Rankings, Numbers, Mean Importance Response Scores, and Standard Deviations for the Importance of the Entrepreneurship Curriculum Competencies as Perceived by Experienced and Inexperienced Business Teachers in Virginia

Entrepreneurship Competency	Experienced				Inexperienced			
	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>
Accounting	1	150	4.18	.82	6.5	15	4.00	.85
Characteristics	2	151	4.05	.84	4.5	16	4.06	.93
Finance	3	150	3.97	.86	6.5	15	4.00	.93
Legal	4	149	3.96	.82	2.5	15	4.07	.96
Economics	5	150	3.89	.88	8	15	3.87	.83
Business Plans	6	150	3.87	.83	1	16	4.19	1.05

Management	7	150	3.84	.82	2.5	15	4.07	1.03
Global Markets	8	150	3.79	.82	9	15	3.73	.96
Marketing	9	150	3.75	.91	4.5	16	4.06	1.06
Overall Content Area			3.92	.69			4.04	.83

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Table 9

Rankings, Numbers, Mean Importance Response Scores, and Standard Deviations for the Importance of the Information Systems Curriculum Competencies as Perceived by Experienced and Inexperienced Business Teachers in Virginia

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Information Systems	Experienced				Inexperienced			
Competency	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>



Common Applications to Organizations	1.5	157	4.85	.43	1	16	4.88	.34
Keyboarding	1.5	158	4.85	.44	2	16	4.63	.72
File and Database Management Systems	3	157	4.43	.77	3	16	4.44	.73
Careers	4	157	4.23	.78	6.5	16	4.06	.93
Ethical Issues	5	157	4.22	.89	8	16	4.00	1.03
Across the Curriculum	6	157	4.17	.84	4.5	16	4.13	.89
Computer Application Software	7	157	4.03	.99	6.5	16	4.06	1.00
Impact on Society	8	157	3.98	.94	10	16	3.63	1.15
Planning and Acquisition	9	157	3.85	.94	12.5	16	3.50	.97
(continued)								

Table 9 (continued)

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Rankings, Numbers, Mean Importance Response Scores, and Standard Deviations for the Importance of the Information Systems Curriculum Competencies as Perceived by Experienced and Inexperienced Business Teachers in Virginia

Information Systems Competency	Experienced				Inexperienced			
	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>
Communications Systems and Networking	10	157	3.80	.95	4.5	16	4.13	.81
Operating Systems, Environments, and Utilities	11	158	3.75	.99	9	16	3.88	.89
Computer Architecture	12	157	3.65	1.11	11	16	3.56	1.26
Systems Analysis and Design	13	157	3.46	1.02	15	16	3.38	1.20
Security	14	157	3.40	1.02	12.5	16	3.50	1.10
Programming	15	157	3.09	1.08	14	16	3.44	1.26

Overall Content Area

3.99 .60

3.90 .70

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average importance. Keyboarding (4.85), and Common Applications for Organizations (4.85) shared the highest ranking for this content area. Of the 11 competencies rated overall as essential by experienced teachers, these two competencies also shared the ranking for highest. Security and Programming were ranked second lowest and lowest, respectively, in the Information Systems content area as well as for the five overall competencies rated as average by experienced teachers.

The inexperienced business teachers ranked Common Applications to Organizations and Keyboarding to be of second highest and highest importance, respectively. Common Applications to Organizations was also ranked highest of all competencies by inexperienced teachers.

Experienced and inexperienced teachers rated the same two Information Systems competencies as having highest and second highest positions. Also, of the nine curriculum competencies to be rated as having essential importance by both experienced and inexperienced teachers, two were Keyboarding and Common Applications to Organizations. Systems Analysis and Design and Programming were two of the three competencies with lowest rank by the combined analysis of beginning and inexperienced teachers.

### International Business

The overall content area of International Business was rated as more than average importance by both experienced teachers (3.74) and inexperienced teachers (3.82). Findings are revealed in Table 10.

All nine of the competencies in International Business were perceived to be of more than average importance by both beginning and experienced business teachers. The two highest ranked positions in International Business were identical for both experienced and inexperienced business teachers. Ethics and Awareness were ranked by both groups to be of highest and second highest importance, respectively. Also, both experienced and inexperienced teachers ranked the same competencies to share the three lowest positions.

### Management

The overall content area of Management was rated as more than average importance by both experienced teachers (3.86) and inexperienced teachers (3.92). Those findings are revealed in Table 11.

Experienced business teachers perceived Ethics and General Management Skills to be of highest and second highest importance, respectively. Inexperienced business teachers ranked the same two competencies as second highest and highest importance, respectively.

Table 10

Rankings, Numbers, Mean Importance Response Scores, and Standard Deviations for the Importance of International Business Curriculum Competencies as Perceived by Experienced and Inexperienced Business Teachers in Virginia

International Business Competency	Experienced				Inexperienced			
	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>
Ethics	1	145	4.20	.81	1	14	4.20	.81
Awareness	2	146	3.90	.94	2	16	3.90	.94
Environment	3	145	3.69	.94	4	16	3.69	.94
Import/Export and Balance of Trade	4	145	3.67	.94	7.5	14	3.67	.94
Organizational Structure	5	143	3.66	1.00	3	14	3.66	1.00
Communications	6	145	3.63	.94	5	16	3.63	.94
Finance	7	145	3.62	.92	7.5	14	3.62	.92
Marketing	8	145	3.61	.92	7.5	14	3.61	.92
Management	9	145	3.56	.92	7.5	14	3.56	.92
Overall Content Area			3.74	.79			3.74	.79

Table 11

Rankings, Numbers, Mean Importance Response Scores, and Standard Deviations for the Importance of the Management Curriculum Competencies as Perceived by Experienced and Inexperienced Business Teachers in Virginia

Management Competency	Experienced				Inexperienced			
	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>
Ethics	1	147	4.26	.83	2	14	4.21	.89
General Management Skills	2.5	147	4.04	.88	1	14	4.36	.74
Functions	2.5	147	4.04	.92	5	14	4.00	.96
Human Resources Management	4.5	146	3.92	.89	3	14	4.14	.95
Organizational Structure	4.5	146	3.92	.94	4	14	4.07	.92

Financial Decision Making	6	146	3.88	.91	7.5	14	3.71	.99
Government Regulations and Social Responsibility	7	145	3.84	.87	6	14	3.93	.83
(continued)								

Table 11 (continued)

Rankings, Numbers, Mean Importance Response Scores, and Standard Deviations for the Importance of the Management Curriculum Competencies as Perceived by Experienced and Inexperienced Business Teachers in Virginia

Management Competency	Experienced				Inexperienced			
	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>
Theories	8	147	3.73	.93	7.5	14	3.71	.91
Competitive Analysis and Marketing Strategies	9	146	3.65	.90	10	14	3.64	1.15



Functions of Organized Labor	10	147	3.63	.81	10	14	3.64	.74
Operations Management	11	145	3.54	.87	10	14	3.64	1.08
Overall Content Area			3.86	.73			3.92	.76

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All 11 curriculum competencies in the Management content area were rated to be of more than average importance by both experienced and inexperienced business teachers. The same competencies were in the lowest three positions for both groups of teachers.

### Marketing

The overall content area of Marketing was rated as more than average importance by both experienced teachers (3.93) and inexperienced teachers (3.95). Findings are revealed in Table 12.

All Marketing curriculum competencies were rated as having more than average importance by experienced business teachers and inexperienced business teachers. No Marketing curriculum competency was perceived to be of the same importance by either experienced or inexperienced teachers.

### Overall Findings for Question One

All individual competencies were rated by the experienced business teachers as having average importance, more than average importance, or essential importance (see Tables 2-12, pp. 58-80). Two competencies, Keyboarding (4.85) and Common Applications to Organizations (4.84) in the Information Systems content area (Table 9, p. 71), shared the highest ranking. The third highest ranking was Foundations of Communications (4.80) in the Communications content area (Table 5, p. 64). The lowest ranked competency was Programming in the Information Systems content area

Table 12

Rankings, Numbers, Mean Importance Response Scores, and Standard Deviations for the Importance of the Marketing Curriculum Competencies as Perceived by Experienced and Inexperienced Business Teachers in Virginia

Marketing Competency	Experienced				Inexperienced			
	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>
Ethics	1	147	4.23	.88	4	14	4.00	1.04
Standards	2	147	4.15	.92	3	14	4.07	.92
Price	3	147	4.11	.90	1	14	4.21	.80
Promotion	4	147	4.01	.91	6.5	14	3.93	1.00
Product	5	147	3.96	.99	2	14	4.14	.77
External Factors to Business	6	147	3.92	.90	6.5	14	3.93	.92

Place	7	147	3.83	.97	6.5	14	3.93	.92
Characteristics of a Market	8	147	3.82	.90	10	14	3.79	.98
(continued)								

Table 12 (continued)

Rankings, Numbers, Mean Importance Response Scores, and Standard Deviations for the Importance of the Marketing Curriculum Competencies as Perceived by Experienced and Inexperienced Business Teachers in Virginia

Marketing Competency	Experienced				Inexperienced			
	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>R</u>	<u>n</u>	<u>M</u>	<u>SD</u>
Developing a Marketing Plan	9	147	3.78	.97	9	14	3.86	1.09
Marketing Research	10	147	3.73	1.00	11	14	3.71	1.00
Forecasting	11	147	3.68	.91	6.5	14	3.93	.92

Overall Content Area

3.93 .79

3.95 .86

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with a mean of 3.09 (Table 9, p. 71). Second lowest was Security in the Information Systems content area with a mean of 3.40 (Table 9, p. 71).

Three content areas, International Business (Table 10, p. 75), Management (Table 11, p. 76), and Marketing (Table 12, p. 79) included a competency of Ethics. Ethics was ranked first in importance by the experienced teachers in all three content areas. The total number of the 102 competencies perceived to be of essential importance by the experienced teachers was 11, of more than average importance was 86, and of average importance was 5.

#### Overall Findings for Question Two

Inexperienced business teachers perceived all competencies to be of average importance, more than average importance, or essential importance (Tables 2-12, pp. 58-80). The competency ranked highest with a mean of 4.88 (Table 9, p. 71) was Common Applications to Organizations in the Information Systems content area. Second highest was Accounting Process in the Accounting content area with a mean of 4.76 (Table 2, p. 58). The lowest ranked competency was Environmental Law and Energy Regulation in the Business Law content area with a mean of 3.17 (Table 3, p. 59). Second lowest with a mean of 3.28 (Table 3, p. 59) was Commercial Paper, Insurance, Secured Transactions, and Bankruptcy in the Business Law content area. The total number of 102 competencies perceived to be of essential importance was 11, of more than average importance was 87, and of average importance was 4.

## Importance of Content Areas

### Research Question Three

To what degree do experienced and inexperienced business teachers in Virginia differ in their perceptions of the importance of each of the eleven curriculum content areas in the *National Standards for Business Education* for beginning secondary business teachers in Virginia?

Analyses of the data were conducted using *t*-tests on the group comparisons. As shown in Table 13 (p. 83), no significant differences were found between the experienced and inexperienced business teachers relative to the 11 content areas. All the content areas were perceived to be of average importance, more than average importance, or essential importance. Communications had the highest mean from the experienced teachers, while International Business had the lowest. Inexperienced teachers ranked Career Development and Communications highest and Business Law lowest. Both experienced and inexperienced business teachers ranked the same three competencies, Communications, Accounting, and Career Development, in the three highest positions. Both groups of teachers ranked Economics and Personal Finance and Marketing in fifth and seventh positions, respectively.

When comparing the individual competencies rated as having essential importance or average importance by both experienced and inexperienced business teachers, nine competencies were reported as essential importance, and three were reported as average importance. The nine competencies perceived to be of essential

Table 13

Analysis of the Degree to Which Experienced Business Teachers and Inexperienced Business Teachers Differ in Their Perceptions as to Which Subject Areas are Most Important for Beginning Secondary Business Teachers  
(alpha = .05)

	Experienced			Inexperienced			“t”	df	Prob.
	Rank	Mean	SD	Rank	Mean	SD			
Communications	1	4.52	.51	1.5	4.48	.55	.319	176	.750
Accounting	2	4.38	.55	3	4.33	.62	.382	172	.703
Career Development	3	4.37	.58	1.5	4.48	.60	-.798	176	.426
Computation	4	4.05	.62	6	3.99	.76	.415	173	.679
Economics and Personal Finance	5	4.01	.68	5	4.01	.61	.011	167	.991
Information Systems	6	3.99	.60	9	3.90	.70	.584	173	.560
Marketing	7	3.93	.79	7	3.95	.86	-.115	159	.908



Business Law	8	3.92	.67	11	3.68	.76	1.417	161	.158
Entrepreneurship	9	3.92	.69	4	4.04	.83	-.707	165	.480
Management	10	3.86	.73	8	3.92	.76	-.256	160	.798
International Business	11	3.74	.79	10	3.82	.87	-.365	160	.716

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importance by both the experienced and inexperienced teachers are as follows and are listed according to the content area: Accounting Cycle and Accounting Process (in Accounting); Workplace Expectations (in Career Development); Foundations of Communications, Social Communications, and Technological Communications (in Communications); Number Relationships (in Computation); and Keyboarding and Common Applications to Organizations (in Information Systems).

The three competencies perceived to have average importance by both experienced and inexperienced teachers are as follows and are listed according to the content area: Environmental Law and Energy Regulation (in Business Law) and Systems Analysis and Design and Programming (in Information Systems).

#### Nonrespondent Follow-up

Miller and Smith (1983) reported that “using information only from those that choose to respond can introduce error” as that data may not represent the opinions of the entire sample of the population (p. 45). One of these researchers’ techniques to control the possible error was to “double dip” a sample of 10% to 20% of the nonrespondents using the questionnaire as an interview schedule and to statistically compare that data with the data from the respondents.

The non-respondent information for this study was procured by systematically selecting 13 nonrespondents. The nonrespondents were contacted by telephone and asked their perceptions of one competency randomly selected from each of the 11 content areas. A composite score was derived by summing the telephone-solicited

responses. This score was compared to a similar composite score using the statements pertaining to the same competencies in the respondent study. No significant difference was revealed. The conclusion that the respondents were representative of the entire population from which the sample was drawn was supported by this result.

### Summary

An analysis of the data compiled from the surveys returned by experienced and inexperienced business teachers in Virginia revealed that all of the 102 competencies in the *National Standards for Business Education* were considered to be of average importance, more than average importance, or essential importance for the successful performance of a beginning secondary business teacher in Virginia. Of the 102 competencies, experienced teachers rated 11 as being of essential importance, 86 as being of more than average importance, and 5 as being of average importance. The inexperienced teachers rated 11 competencies as having essential importance, 87 as having more than average importance, and 4 as having average importance. When comparing the competencies rated as average importance and the competencies rated as essential importance for the experienced and the inexperienced business teachers, 9 competencies rated as essential importance were the same for both groups, and 3 competencies rated as average importance were the same for both groups.

A Student's *t*-test showed no significant differences in any of the 11 content matter areas for the experienced or inexperienced teachers.

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents the following information: Summary of the Completed Study, Review of Findings and Related Studies, Conclusions, Discussion, and Recommendations for Further Research.

#### Summary of the Completed Study

##### Background

Beginning in 1983, the current national reforms movement for education called for improvement in teacher education (Hartley, Mantle-Bromley, & Cobb, 1996). Critics charged that teacher-education programs were producing teachers who were not prepared for the demanding role of teaching (Brower, 1986). According to Schmidt, Finch, and Oliver (1994), business teacher preparation institutions were faced with another complication as they were expected to prepare beginning business teachers to teach everything from middle school keyboarding to high school artificial intelligence courses. The rapid advancement of changing technology associated with these courses further complicated the problem as colleges and universities reported having too much lag time in preparing teachers to keep up with the changes (Zehr, 1998).

In addition to the complications added by rapidly changing technology, Heath-Camp and Camp (1990) stated that beginning teachers were faced with many new concerns during the first year of teaching and that they were expected to perform

from the very beginning like seasoned teachers. However, Price (1969) reported that a beginning teacher could not realistically be expected to be as proficient as an experienced classroom teacher in the many curriculum areas and that no individual should hope to be a success at everything in his or her first year of teaching. Even though beginning business teachers cannot be expected to be proficient in all areas, some competencies are essential for successful performance in the classroom. Therefore, the researcher in this study sought to identify those competencies and curriculum areas.

An extensive literature search on beginning secondary business teachers and the curriculum competencies necessary for a successful entry into the teaching profession revealed very little information. However, essential curriculum competencies for business teachers were identified in one document, the *National Standards for Business Education* (NBEA, 1995). The National Business Education Association (NBEA) developed the document in response to the many reform calls discussed in this study for more rigorous standards in business education. The developmental guidelines in the NBEA standards define what kindergarten through postsecondary students should know about business. The document is designed to be used by curriculum planners at all levels of development to custom tailor instruction. The investigation in this study focused specifically on the 102 competencies in the 11 subject content areas identified for the secondary level in the *National Standards for Business Education* (1995).

### Purpose and Research Questions

The purpose of this study was to determine the degree of importance of each of the curriculum competencies in the *National Standards for Business Education* for the successful performance of beginning secondary business teachers in Virginia.

More specifically, the following research questions were investigated:

1. To what degree do experienced business teachers in Virginia perceive that beginning secondary business teachers in Virginia should possess each of the curriculum competencies identified in the *National Standards for Business Education*?

2. To what degree do inexperienced business teachers in Virginia perceive that beginning secondary business teachers in Virginia should possess each of the curriculum competencies identified in the *National Standards for Business Education*?

3. To what degree do experienced and inexperienced business teachers in Virginia differ in their perceptions of the importance of each of the eleven curriculum content areas in the *National Standards for Business Education* for beginning secondary business teachers in Virginia?

### Data Collection

A review of the literature did not reveal an instrument that could be used in conjunction with the *National Standards for Business Education*. Therefore, a

survey instrument (see Appendix C) was developed that was based on the curriculum competencies in the document.

This study was delimited to public high school business teachers in Virginia. The population frame was those teachers who were identified from a roster of Virginia business teachers that was obtained from the Virginia Department of Education. Another roster from the Department of Education identified school systems with local business supervisors. These supervisors were contacted for their support in the study (see Appendix F) and for the name of the contact person in their divisions who granted authorization for research studies, and those persons were contacted. Those contacts resulted in 12 school systems granting permission for the survey to be distributed. In addition to teachers from those 12 school systems, all business teachers in school systems without local business supervisors were included in the population ( $n = 955$ ).

The survey instrument was pilot tested, revised, and then mailed with a cover letter to the 274 subjects in the sample, which was systematically selected from the population. A total of 189 surveys were returned for an overall response rate of 69 percent.

The nonrespondent information for this study of essential competencies for beginning business teachers was procured by contacting 13 nonrespondents and obtaining perceptions of one competency in each of the 11 content areas. Responsive statements in the non-respondent study were compared to statements pertaining to



the same competencies in the original study. No significant differences were revealed.

The first question on the survey instrument asked for years of experience with teaching high school business courses. Results of that question were used to identify 161 experienced business teachers and 18 business teachers with three or fewer years of experience.

The first two research questions were answered by obtaining means and standard deviations of the 102 competencies rated by the experienced and the inexperienced teachers. Those statistics are represented in this study in Tables 2-12 on pages 58-80. The third research question was answered by calculating composite scores in the 11 content areas from the experienced and inexperienced business teachers. These content areas were compared by using *t*-tests. Table 13 on page 83 depicts the findings of that statistical procedure.

## Review of Findings and Related Studies

### Research Question One

To what degree do experienced business teachers in Virginia perceive that beginning secondary business teachers in Virginia should possess each of the curriculum competencies identified in the *National Standards for Business Education*?

As shown in Tables 2-12 on pages 58-80, all individual competencies were ranked by the experienced teachers as having average importance, more than average

importance, or essential importance. Keyboarding (4.85) and Common Applications to Organizations (4.85) were ranked highest overall. Both competencies are in the Information Systems content area. This finding supports a similar study by Railsback (1997) where Kansas public school counselors, principals, and presidents of local boards of education were asked their perceptions of the importance of business education courses in the high school curriculum. For all three groups, the one semester keyboarding course was ranked highest, and computer applications (spreadsheets, database, multimedia, desktop publishing, e-mail, and Internet) was second highest.

Young (1995) studied graduates of a business teacher education program and asked their perceived degree of preparation to teach business subjects. Graduates in that study perceived themselves to be least prepared to teach programming courses. Current findings in this researcher's study revealed that programming was the competency ranked lowest in importance by experienced teachers.

### Research Question Two

To what degree do inexperienced business teachers in Virginia perceive that beginning secondary business teachers in Virginia should possess each of the curriculum competencies identified in the *National Standards for Business Education*?

As shown in Tables 2-12 on pages 58-80, inexperienced teachers perceived all competencies to be of average importance, more than average importance, or

essential importance. The competency ranked highest was Common Applications to Organizations in the Information Systems content area. These findings are similar to those in Railsback's (1997) study where secondary head guidance counselors, principals, and presidents of local boards of education were asked their perceptions of the field of business education. In that study, Computer Applications (spreadsheets, database, multimedia, desktop publishing, e-mail, and Internet) was ranked second highest for the value of business education courses in the high school curriculum. The current findings are also similar to Maddox's (1995) research that surveyed secondary business teachers and business persons in Alabama for their perceptions of the information processing competencies in the Alabama Course of Study. Respondents in that study ranked Word Processing highest in importance.

The lowest ranked competency by inexperienced business teachers in this study was Environmental Law and Energy Regulation in the Business Law content area; and second lowest was Commercial Paper, Insurance, Secured Transactions, and Bankruptcy in the Business Law content area. This finding is similar to the finding of Railsback's (1997) study where school board presidents ranked Basic Business Law Knowledge as one of the two least important individual competencies obtained in business education courses for high school graduates to possess.

### Research Question Three

To what degree do experienced and inexperienced business teachers in Virginia differ in their perceptions as to which curriculum content areas in the

*National Standards for Business Education* are most important for beginning secondary business teachers in Virginia?

Data were analyzed from both experienced and inexperienced business teachers, and composite scores for each of the 11 content areas were obtained. As shown in Table 13 on page 83, the responses were compared with two-sample *t*-tests; and no significant differences were found. Communications had the highest mean from the experienced teachers, and Career Development was highest with the inexperienced teachers. The rankings for Communications and Career Development competencies in this study are related to similar areas in a study by Peel, Joyner, and Volk (1998) with employers who hired high school graduates. That study examined basic academic and vocational skills. Group interaction skills was ranked first in importance, and employability skills was ranked second.

The lowest ranked content areas in this study were International Business by the experienced teachers and Business Law by the inexperienced teachers. In Railsback's (1997) research, local school board presidents ranked Basic Business Law Knowledge as one of the two specific business education competencies lowest in importance for all Kansas high school graduates to possess. All three groups in that study (school board presidents, head guidance counselors, and principals) ranked International Business as the lowest in importance for the value of business education courses in the high school curriculum.

## Conclusions

1. Based on the finding that teachers in this study identified all competencies to be of average or above importance, one can conclude that all competencies in the *National Standards for Business Education* are perceived as important for beginning secondary business teachers in Virginia.

2. Nine competencies in this study were identified by both experienced and inexperienced teachers as having essential importance by both experienced and inexperienced teachers. Therefore, one can conclude that beginning business teachers need to be especially proficient in these competencies.

3. Teachers in this study identified three competencies to be of average importance. Since business teacher education programs lack the time to give all competencies top priority, one can conclude that less emphasis may be given to these competencies.

4. Experienced and inexperienced teachers in this study were very similar in their ratings of competencies. Therefore, one can conclude that attitudes toward curriculum skills are not related to years of experience.

## Discussion

1. Since both experienced and inexperienced teachers perceived all competencies in the NBEA standards to be of average or above importance, it appears that all the competencies are important for beginning business teachers.

These competencies will be necessary to teach the wide array of business courses researchers have identified as necessary for both current and future business teachers.

Beginning business teachers cannot be expected to be proficient in all those areas, but beginning business teachers must acquire some skills in these areas.

Therefore, business teacher educators must examine each competency in the *National Standards for Business Education* to determine that it is being addressed in the program at least to the degree of importance as indicated in this study.

2. All teachers in this survey identified nine competencies as having essential importance for beginning business teachers. In addition, experienced business teachers identified two more competencies as having essential importance, and inexperienced business teachers identified two other competencies as having essential importance. Beginning business teachers need to be especially proficient in these 13 competencies.

Business teacher educators need to give top priority to these competencies when making decisions about curriculum competencies to include in business teacher education programs. The competencies can be addressed in many different courses. Business teacher educators need to examine the content of required courses in the business teacher education program and make sure that all competencies identified as having essential importance are being integrated and reinforced throughout the curriculum.

3. Three competencies were rated as having average importance by both experienced and inexperienced teachers in this study. Although these competencies were not identified as having essential importance for the successful performance of beginning business teachers in Virginia, the competencies were perceived to be important and should be developed at some point in a beginning business teacher.

Schmidt, Finch, and Oliver (1994) stated that coursework only sets the stage for further learning after teachers enter the classroom. This concept was reinforced in McEwen and King's (1998) research with business education student teachers. The researchers stated that teaching all the hardware and software skills that each student teacher would need is a near impossibility. This problem is intensified by the fact that business education is composed of many areas that center around computer hardware and software, and much of the research in this study has stated that technology is changing rapidly in today's society.

One of the competencies in the *National Standards for Business Education* is Lifelong Learning in the content area of Career Development. Business teacher educators need to alert preservice teachers that they will be responsible for learning much of the new computer hardware and software information necessary for keeping current with emerging technology.

4. Experienced and inexperienced business teachers in this study agreed on what was important, and they were also in agreement as to the interpretation of the qualifiers--average, more than average, and essential. Both experienced and

inexperienced business teachers identified the same number of competencies to be of essential importance, and the two groups of teachers differed in number in only one competency for those rated as more than average importance and for those rated as average importance. The changes that took place in society, education, and technology over the span of time involved in the professional lives of the experienced and the inexperienced teachers did not override the perceptions pertaining to the importance of curriculum content with this group of educators.

#### Recommendations for Further Research

1. This study was focused on preparing business teachers for Level 3, Secondary (9-12) as identified in *The National Standards for Business Education*. The document also includes competencies for Level 2, Middle School/Junior High (6-9). This study should be replicated with public schools in Virginia that prepare students at Level 2 to identify the degree of importance of competencies for business teachers who begin teaching at Level 2.
2. A study should be conducted with first year teachers to evaluate how well prepared they perceive themselves to be. Information from recent graduates can be useful in assessing how well a teacher education program is preparing graduates with curriculum competencies for beginning business teacher positions.



3. A study should be conducted to determine if a relationship exists between perceived importance of a competency and the demographics of courses taught and educational level.
4. This research was conducted with only a sample of Virginia business teachers. In order to determine the importance of the NBEA competency areas to other business teachers in other geographic locations, researchers should replicate this study in other areas of the United States to determine if those teacher education programs are utilizing the standards identified by the national organization.

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