

PERCEIVED PROFESSIONAL DEVELOPMENT NEEDS
OF BUSINESS EDUCATION TEACHERS
IN WEST VIRGINIA

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Dissertation submitted to the Graduate Faculty of
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirement for the degree of

DOCTOR OF PHILOSOPHY

in

Vocational and Technical Education

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May 10, 2001
Blacksburg, VA

Keywords: Business Education Competencies, Professional Competencies, Professional
Development, Business Education Teachers, Standards

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(ABSTRACT)

This study identified the perceived professional development needs of secondary business educators in West Virginia related to professional and business education content competency areas. A population of 408 secondary business educators was randomly assigned to two groups to evaluate their perceived professional development needs. A total of 104 (51.40% of 202) respondents reported their perceived need for professional development for professional competencies based on *Policy 5310: Performance Evaluation of School Personnel* of the West Virginia Department of Education. Also, a total of 89 (43.0% of 206) respondents indicated their perceived need for professional development for business education content competencies based on the NBEA's *National Standards for Business Education*.

Data analyzed using frequency analyses revealed that the highest rated perceived professional development needs related to professional competencies were found in the areas of Programs of Study, Classroom Climate, and Instructional Management Systems. It was further determined that the highest rated perceived professional development needs related to business education content competencies were found in the areas of Information Systems, Career Development, and International Business.

The one-way ANOVA analyses did not find differences among teachers' perceived professional development needs based on years of teaching experience or educational level for professional competencies or for business education content with the exception of the competency areas of Accounting and Business Law. In both of these areas, the post-hoc statistical analysis revealed differences among the educational levels of teachers, with respondents who had an Ed.S degree reporting a higher level of need than those with bachelor's or master's degrees. Overall, teachers perceived a higher need for professional development activities in the business education content areas than in the professional competencies.

Findings of the study indicate that professional development activities should be relevant to teachers' needs. This study found specifically that business education teachers were most interested in technology-driven subject matter, technology integration into classroom learning, and general economic awareness and career awareness of international and technological occupations. In addition, all areas of methodology, professional competencies and content area competencies, should be integrated into professional development activities to prepare teachers to effectively disseminate the content to ensure student learning.

DEDICATION

I dedicate this dissertation to my parents, Thomas C. and Dona E. Kirby. Thanks for giving me a good start in life. I would not be what I am today without your love and support.

ACKNOWLEDGEMENTS

The completion of this dissertation would not have been possible without the assistance and support of many people. Special appreciation is extended to Dr. Daisy Stewart, Chair of my committee. Dr. Stewart made this task very attainable. Through her, I learned that I did have the ability and desire to research and publish. I truly appreciate all of her help, support, and guidance throughout the entire process. I would like to express my sincere thanks to Dr. Betty Heath-Camp who spent a semester with me discussing and shaping my dissertation idea into a doable project, and for her constant support and encouragement. I would like to offer sincere thanks also to Dr. Clarence White who has been instrumental in my educational process since the early days of my undergraduate education. Finally, sincere appreciation is offered to Dr. Jimmie Fortune who helped me struggle through and understand the educational research statistical process, and to Dr. Sue Magliaro who has always offered support and encouragement throughout my educational endeavors.

Sincere appreciation is extended to Abby Reynolds for her support of the project. Without her input and cooperation this project would not have been possible.

I would also like to express my sincere thanks to all of my friends and family who were patient and supportive. Special recognition is given to Melinda, my sincere appreciation for your encouragement and support, and for helping enter all of that data. Finally, I would like to express a special thank-you to my husband, Dwight, for putting up with me throughout this process, and for his support and patience while I finished.

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CHAPTER 1

Introduction

Extensive research has indicated that student achievement in the classroom is dependent upon teacher expertise (Darling-Hammond & Rustique-Forrester, 1997). A teacher should be a professional who is instrumental in not only providing instruction to students but is also able to motivate, stimulate, and develop the minds of students in a learning environment (Office of Educational Research and Improvement, 1992). Career and technical education, formerly vocational education, is a content area of knowledge in which students are engaged in an activity-based learning environment in which motivation, stimulation, and development of students is fostered.

John Dewey (1917) first cited the need to design a curriculum with teaching methodologies that integrated experiences and interests of students. This philosophy of learning is currently referred to as contextual learning (Resource Bulletin, 1996). Contextual learning activities have been used continuously in career and technical education, and through these activities students are exposed to instruction that is immersed in the workplace environment (Johnson, 1996). From early apprenticeships to current day vocational training, students have learned their skills by doing and relating their skills to actual work place environments.

Two facets of the educational reform movement involve reshaping schools to accentuate more rigorous academics and to incorporate career and technical education into traditional academic courses to broaden the work world concept in education (Little, 1995). Emphasis on these educational reform practices will offer more contextual learning and stronger academics both in career and technical and academic education; however, without providing proper professional development for teachers, these reform movements will not achieve their purposes. Professional development is necessary to ensure the growth of new knowledge and skills needed in the reformed classroom in order to maintain student achievement (Roskos & Bain, 1998). All teachers, both academic and career and technical, will require extensive professional development sessions with specific goals and objectives based on the needs of participants. The traditional staff development that may be described as in-service based, designed for large groups, and one-size-fits-all, will no longer be appropriate (Licklider, 1997).

Background of the Study

Employers are searching for workers with higher skills and knowledge even for the low-end jobs of the labor market (Taylor, 1997). Career and technical education has long been the answer to providing the skilled workers that employers need. As employers' needs continually change with upgrades in technology and work place requirements, the following questions surface: Are potential workers still prepared to enter the workforce? Are career and technical educators prepared to meet the challenges of the new career and technical classroom dictated by educational reform and workforce need?

Nationally, educators and administrators believe that contextual learning is the appropriate teaching method for preparing students for the work place. In a 1994 report by the National Association of State Directors of Vocational Technical Education Consortium, the Association stated, "Vocational Technical Education is the country's most effective workforce development system" (National Association of State Directors of Vocational and Technical Education Consortium, 1994, p. 1). In addition, a regional survey of 53 supervisors in private and public industries in Central Ohio indicated that career and technical graduates were superior to general education graduates in one indicator of the study—preparation for work (Lankard, 1994)

As indicated previously, career and technical education does provide employers with a group of needed workers; however, as changes in the work place rapidly continue so must changes in the delivery of career and technical instruction. Contextual learning, as it is now called, has been the learning method of choice for career and technical education in order to foster "...learning that occurs *in close relationship* with actual experience" (Resource Bulletin, 1996, p. 1). Due to technological advancements, educational reform, and changing needs of the workplace, career and technical educators are counted upon to be more knowledgeable in the diversity of work place needs (Naylor, 1997).

Statement of the Problem

As employers demand higher skill levels in the technologically advanced workplace and as educational reform pushes for more integration of career and technical and academic education, career and technical educators must meet the changing needs of the classroom in order to teach in a manner that fosters student improvement. Career and technical educators must participate in professional development activities that can equip them with the needed

changing and challenging skills and knowledge to continue to educate students to join the labor force skillfully and knowledgeably prepared. In order to provide the required professional development activities, teachers should have input in the planning and preparation of such activities. The review of literature for this study revealed that there has been no formal assessment of what professional development activities are needed or perceived to be needed by secondary business education teachers employed in West Virginia.

Currently, the West Virginia Department of Education has an extensive professional development program in place for all teachers designed to enhance the educator's professional abilities to produce high achieving students (West Virginia Department of Education, 1998). This study will attempt to provide a formal assessment of secondary business education teachers' perceived professional development needs in both professional and technical competencies. This information can be used by the West Virginia State Supervisor of Business Education, teacher educators, professional organization leaders, local administrators, and others to plan and deliver professional development activities. These activities could be conducted at local, regional, and state conferences; at individual local schools; and at institutions of higher education within West Virginia.

Purpose of the Study

The purpose of this study is to determine the perceived professional development needs of business educators in secondary schools in West Virginia. This study will be limited to one area of career and technical education, business education, and will be limited to one geographic area, the state of West Virginia. The focus of the research will be to determine what secondary business education teachers in West Virginia perceive to be their professional development needs required for them to be successful in meeting the new challenges that educational reform and work place demands put on the business education curriculum.

Research Questions

The research questions addressed in this study are:

1. What do secondary business education teachers perceive as their professional development needs as related to professional competencies?
2. What do secondary business education teachers perceive as their professional development needs as related to business education content?

3. Are there differences among the perceived professional development needs related to professional competencies for (a) teachers with different numbers of years of teaching experience and (b) teachers with different educational levels?
4. Are there differences among the perceived professional development needs related to business education content competencies for (a) teachers with different numbers of years teaching experience and (b) teachers with different educational levels?

Significance of the Study

All teachers are required to participate in some form of professional development activity. Often teachers take graduate level classes, attend professional conferences, and take part in school sponsored in-service as part of their licensure renewal requirements. Teachers should continually work to update their skills and knowledge required in their curriculum area. Business education teachers constantly require updating of skills and knowledge in order to remain current, especially in the technology area related courses; however, other professional development needs that are not as obvious may also be required. The identification of the professional development needs of secondary business education teachers in West Virginia can provide a basis for planning professional development activities for teachers, as well as for assessing teacher preparation programs at state colleges and universities.

Definitions

Business education content is defined as the general body of knowledge of the business education curriculum as identified by the National Standards for Business Education (National Business Education Association, 1995).

Professional development needs are areas that educators identify as useful in the further development of their teaching and classroom skills (Weidegreen, 1994).

Professional competencies are all professional activities that are required for the teaching profession as defined by the West Virginia Board of Education's (1992) *Policy 5310: Performance Evaluation of School Personnel*.

Secondary business education teacher is one who teaches business education in a West Virginia public middle or high school that encompasses grades 5-12 (West Virginia Department of Education, 1999).

Delimitations

1. The study will be delimited to business education teachers in West Virginia.
2. The study will be delimited to business education content as defined by the National Business Education Association.
3. The study will be delimited to professional competencies as defined by the West Virginia Board of Education in Policy 5310: Performance Evaluation of School Personnel.

Limitations

1. This study will be limited to teachers' who volunteer their opinions of professional development needs.
2. Because this study will be delimited to business education teachers in the state of West Virginia, generalization to other states should be done with caution.

Summary

As educational reform movements continue and teachers are asked to create innovative teaching strategies to enhance student learning as a result of these movements, a need for professional development to enhance the teacher's ability to incorporate new techniques is essential. Without continued professional enhancement, teachers may become ineffective in facilitating the learning process for students. In Chapter 1 the problem and purpose of this study have been stated. Chapter 2 contains a literature review that further describes the necessity of professional development for teachers. Chapter 3 outlines the methodology utilized in this study to determine the professional development needs of secondary business education teachers in West Virginia. Chapter 4 reports the findings of the study, and the four research questions are addressed. Chapter 5 provides a summary of and conclusions drawn from the study based upon the research findings and includes recommendations for practice and further research.

CHAPTER 2

Review of the Literature

Improving the quality of teaching practices, from developing high-quality teacher preparation programs to providing for ongoing professional development of teachers, is needed if students are to learn and succeed in educational settings (Darling-Hammond & Rustique-Forrester, 1997). The focus of this literature review is concentrated on the growing trend for standardization in professional competencies for teachers and the need for continued professional development to ensure a qualified teaching force. In addition, there is a review of research on the professional development needs of career and technical educators and specifically business educators. The literature review includes two sections: (1) the development of national standards for the teaching profession and career and technical education and (2) a general discussion of professional development activities related to educators' professional development needs related to professional competencies and to business education content competencies.

National Standards for the Teaching Profession and Career and technical Education

The National Education Goals were established as part of an educational reform movement to improve school systems in the United States. Teacher education and professional development was added in mid-1994 as the fourth goal of the National Education Goals. The National Goal for teacher preparation is stated below:

By the year 2000, the nation's teaching force will have access to programs for continued improvement of their professional skills and the opportunity to acquire the knowledge and skills needed to instruct and prepare all American students for the next century (United States Department of Education, 1994).

Receiving such a national designation indicates that the commitment to providing effective and useful professional development to teachers is of utmost importance as educational reform practices continue in the United States. Even the federal government views the professional development of educators as a top priority. Through the Eisenhower Professional Development Program, federal assistance is made available to all school districts in the nation to help sustain high-quality professional development activities (United States Department of Education, 1996).

National Standards for the Teaching Profession

High-quality teaching practices begin with appropriate educational preparation. Many states, however, do not require schools of education to be accredited. Only Arkansas, North Carolina, and West Virginia require their schools of education be accredited through the National Council for the Accreditation of Teacher Education (NCATE) (Darling-Hammond & Rustique-Forrester, 1997). This lack of standardization results in a teaching force that is often inadequately prepared. In addition, Blackwell (1997) suggested that as a profession, it has not been understood what is required "...to attract, educate and retain able, committed people to teach our children" (p. 3). An answer to this dilemma can possibly be found in a national effort to standardize teacher preparation programs and teacher licensure renewal requirements.

The National Board for Professional Teaching Standards (NBPTS) is currently leading a national movement for an advanced teacher certification to recognize exemplary teaching. In more than 30 licensure areas, the NBPTS is developing a set of teaching standards that can be used in an assessment program by teachers to achieve NBPTS certification (National Education Association, 1998). Currently, the NBPTS certification is voluntary; however, the overall objective of the National Board is to have all states eventually adopt these standards for teachers. Many states are incorporating NBPTS standards into school improvement plans (Abdal-Haqq, 1995).

The Interstate New Teacher Assessment and Support Consortium (INTASC) is a group of state education agencies, higher education institutions, and national educational organizations dedicated to educational reform, teacher licensing, and on-going teacher professional development. The consortium has created model core standards based on NBPTS standards to represent a set of principles which should be present in all teaching regardless of the curriculum or grade level being taught. The core standards are also being used to create standards for discipline-specific teaching (Council of Chief State School Officers, 1999). NBPTS and INTASC continue to play an integral role in determining professional development needs for preservice, beginning, and experienced teachers, as dictated by new evaluation methods and standards. In fact, West Virginia Policy 5100, which governs the assessment of preservice teachers, utilizes INTASC principles in developing the professional education standards for teacher education programs for teaching specializations (West Virginia Board of Education,

1997). Also in West Virginia, Policy 5310 that is used to evaluate professional personnel incorporates INTASC standards, as well as, other national and state standards.

National Standards for Career and Technical Education

Recent educational reform movements have also influenced career and technical education. However, only a few areas such as teacher education programs have been affected at the national level. A national impact from the reform movements was the formation of a task force by the University Council for Vocational Education and the National Association of State Directors of Vocational Technical Education Consortium. The charge of this task force was to identify what was needed to design and implement "...a customer-driven learning system and an accountability system" for career and technical teacher education programs (Naylor, 1997).

A reform movement that is more common in career and technical education programs across the country is the linkage to skill standards developed by industry and presented in career and technical educational arenas (Lankard, 1995). Industry skill standards—local, state, and national—have developed over time to bridge the gap between existing skills of newly hired workers and required skills of such workers. Research conducted in North Carolina revealed that 69.4% of employers perceived a skills gap between employer needs and existing worker skills. This same study stated that employers noted a lack of reading, math, thinking, and communication skills in workers (Lankard, 1994).

The call for national skills standards was first initiated by reformers of education who argued that a standardized curriculum was needed that would demand more from students nationwide; rather than curricula that were general or less-than rigorous (Dykman, 1996). The purpose for developing skill standards in various technical and career-oriented areas is to enable educators to teach measurable, performance-based outcomes that can be comparable across industries and similar occupations.

Losh (1995) reported that an initial Skill Standards Project, funded by the Department of Education and the Department of Labor in 1992, was designed to develop a set of National Skill Standards to unify competencies required in occupational areas. This initial project resulted in standards for 22 industries and occupations. In 1994, Congress voted to create the National Skill Standards Board (NSSB) as part of the Goals 2000: Educate American Act (Dykman, 1996).

Career and technical education is leading the way in developing competency-based standards, which affect curriculum, for many of the service areas (Queeney & English, 1994).

The National Standards for Family and Consumer Sciences Education were distributed in May 1998 (NASAFACS & V-TECS, 1998). These national standards were developed to indicate the movement from home economics, which emphasized homemaking skills, to Family and Consumer Sciences Education, which has a broader focus on family and societal issues. As early as 1981, national standards were developed for industrial arts programs called the Standards for Industrial Arts Programs. In order to remain current with an evolving curriculum, in 1985 these standards were redesigned and renamed the Standards for Technology Education. The standards are continually evolving in order to improve the quality of technology education programs (Dugger, Bame, & Pinder, 1999). A current standards project, Technology for All Americans: A Rationale and Structure for the Study of Technology, is being researched and developed by the Technology for All Americans Project, with the purpose of showing how technology should be integrated into the K-12 and postsecondary core curricula and discussing the need for technological literacy (International Technology Education Association, 1996).

In 1995, the National Business Education Association (NBEA) published the *National Standards for Business Education*. This document provided a comprehensive list of standards by which all business education programs, elementary through postsecondary, can be measured. The standards were developed as a result of requests from teachers to redefine the business education curriculum to meet the new practices and strategies evolving from the business world (National Business Education Association, 1995). As a result of such national standards, professional development activities for business education teachers should be related to the needs of the new curriculum.

Like many other states, West Virginia has used the National Standards for Business Education as a basis for determining program curricula. The Business & Marketing Career Cluster Model (West Virginia Department of Education, 1999) was developed through a comprehensive process that involved input from business and industry leaders, business education teachers, other state programs, and reviewing the National Standards for Business Education (A. Reynolds, personal communication, February 22, 2000).

Summary

The National Board for Professional Teaching Standards (NBPTS), along with the Interstate New Teacher Assessment and Support Consortium (INTASC), are committed to providing and maintaining a national educational system with better teachers. The NBPTS

represents a certification that recognizes exemplary teaching. The INTASC, with influence from the NBPTS and in conjunction with NCATE, strives to create a more challenging curriculum for preservice teachers in order that they are better prepared for entering the classroom and meeting professional standards. In addition, individual areas of education are designing national curriculum standards for teachers and students.

Several areas in career and technical education have developed national skill standards that govern curriculum. The NBEA has presented the business education community with a standards model to use in designing curriculum that will enhance a student's knowledge and skills to be better prepared for the workforce. The National Skill Standards Board (NSSB) continues to develop, maintain, and improve skill standards projects in career-oriented areas that influence the curriculum in many career and technical areas.

Professional Development Activities

For many teachers, professional development is often self-administered based on their particular classroom needs (Little, 1995). Although many states direct that continual professional development is required for licensure renewal, teachers are not usually engaged in the development of the activity (Roskos & Bain, 1998). Professional development activities are often limited in content and ineffective for many teachers (French, 1997). Effective professional development activities should recognize teachers as professionals and adult learners with insight as to their learning needs (Abdal-Haqq, 1996). Appropriate professional development activities are especially critical during the formative years of a teacher's career in order to enhance one's professional growth (Heath-Camp & Camp, 1992). In fact, professional development should be an ongoing practice at every stage in a teacher's career, regardless of years of teaching experience or attained educational level.

Professional Development Needs Related to Professional Competencies

Teachers are viewed as the key factor to lead reform efforts, and this will require that they participate in professional development activities that enrich and expand their teaching experiences. Such professional development should be directly related to student performance standards and be on-going, on-site, teacher-designed, and focused on school district goals (Dilworth & Imig, 1995). Professional development should be viewed as a holistic approach to developing professional needs from the novice stage to the expert stage. Emphasis for professional development activities should be grounded in competency-based knowledge, skills,

and experiences; analytical and reflective teaching methodology; teachers learning together across disciplines; and decentralizing professional development needs from administration identification to teacher identified needs (Office of Educational Research and Improvement, 1995).

To practice as a public school educator, one must meet the licensure requirements prescribed by the state. Many states are restructuring their licensure requirements to focus on continued professional development and to establish new regulatory policies for licensing and relicensing teachers. A state's accountability function for its teachers' classroom performances is a major implication of such reform policies (Dilworth & Imig, 1995). The West Virginia Board of Education (1992) developed a performance evaluation of school personnel, Policy 5310, in January 1985. The policy was amended in 1992 as a result of legislation enacted in August 1990 and was reviewed by a committee of educators for revision in early 1999. Policy 5310 is an assessment instrument for school with the purpose of promoting professional growth and development of school personnel to assure quality performance in all aspects of West Virginia schools, as well as, providing data for making sound personnel decisions. The revised Policy 5310 was made effective February 1, 2000 (West Virginia Department of Education, 1992).

Teachers with current knowledge and skills in their subject areas are essential for student achievement. In fact, as stated above, many states now require continuing professional education for teachers as part of licensure renewal, in addition to providing an abundant of inservice activities (Roskos & Bain, 1998). Professional development activities that lead to personal growth of the teacher are essential to the professional success of the teacher; however, many teachers are not aware of their professional development needs or even professional development activities that might be available (Wiedegreen, 1994). In order for professional development to be effective, programs should have clear, specific goals and objectives established through the active involvement of teachers who will participate in such activities (Licklider, 1997).

A qualitative research study involving three teachers indicated that professional development is an on-going process which should be both unique and personal, based on teacher need (Cole, 1992). In addition, Roskos and Bain (1998) used qualitative methods to study the professional development of 15 teachers participating in a program focused on teacher learning. After working with teachers and gathering data over an 18-month period, Roskos and Bain found

that as teachers engaged in a variety of professional development activities, they evolved in their understanding of learning and in adapting conceptual context into practice. This study was conducted as part of a curriculum redesign process for a K-6 elementary school in which the teachers were involved in the structure and content of the professional development activities in order to meet the specific learning needs.

Faulkner (1990) conducted a study to determine in-service educational needs of part-time community college faculty and found that the major need stemmed from concerns such as identifying different learning styles and working with students. Further findings of the study concluded that some part-time faculty required in-service in the changing trends of teaching methodology.

A national study conducted concerning the induction of beginning career and technical education teachers found that professional development is an integral component of a beginning teacher's transition into the teaching profession (Heath-Camp & Camp, 1992). This study concluded that professional development activities for the induction of beginning career and technical teachers should be flexible to accommodate the differences among teachers, should be not only be mentor-based but also broad enough to encompass comprehensive professional development needs, and should be a collaborative effort of all educational personnel. The formation of an induction assistance program consisting of 11 components with professional development as the center focus, resulted from this study. This program is designed so that individual schools or a consortium of schools can adopt the system to aid beginning teachers in their induction process to the teaching profession.

Other studies have recommended a designed program of professional development to meet a particular curriculum or teacher educational need. Walker, Brower, and Wichowski (1995) developed a professional development process that utilized self assessment, the Status of the Integration of Academic and Vocational Education (SIAVE). The purpose of this self assessment process was to meet the professional development needs of teachers to accommodate the integration of career and technical education and academics. The designers concluded that in order for staff development to be successful it should be presented as an in-school forum and focus on the goals and needs of the school and district. This approach is essential for professional development to affect what the school is doing, not just the individual.

Professional Development Needs Related to Business Education Content

As the business education content constantly changes to keep up with technological influences, business educators rely on appropriate professional development essential to enhancing student learning (Neal, 1997). Pearson (2000) conducted a study of beginning business education teachers in Arkansas to determine the effectiveness of their teacher preparation program. Overall, all respondents reported that they were satisfied with the preparation they received from their teacher education program. However, as teachers, individuals must continue to engage in professional development activities that will provide them with the necessary knowledge and skills to remain current and actively involved in the business education field (Neal, 1997).

An earlier study conducted in 1976 revealed that business education teachers in Pennsylvania found inservice professional development programs to be lacking in relevance to their particular area (Eschenmann, 1976). A total of 512 business teachers were surveyed concerning the certification requirements in the State of Pennsylvania. One aspect of certification in that state involved the role of continued professional development. Eschenmann's study revealed that although the teachers found the option of professional development inservice programs an adequate means of maintaining certification, the majority did not agree that what was being offered by their local school system was appropriate for their area of business education. The teachers indicated that the professional development activities offered them were of no value to their classroom practices. Inservice or professional development activities need to be relevant to be successful. Teacher input is essential in the planning, preparation, and presentation of professional development activities (Office of Educational Research and Improvement, 1995). Studies continue to be conducted, based on this principle of providing teacher input to determine professional development activities that will meet teachers' needs.

Weidegreen (1994) surveyed 295 business education teachers in Virginia to assess the professional development needs they perceived to be important. Results of the study produced nine priorities for professional development as perceived by business educators. The nine professional development needs ranked in order of most important to least important were: (a) to align business education with academics; (b) to align curriculum with workforce needs; (c) to provide keyboarding support (K-12); (d) to create partnerships with business/industry; (e) to

refine curriculum; (f) to develop communication skills of students; (g) to facilitate teacher/staff development; (h) to develop, implement, and revise curriculum; and (i) to create interdisciplinary initiatives (Wiedegreen, 1994). This study identified the professional development activities that teachers thought were needed, unlike with the aforementioned Pennsylvania study which researched the satisfaction level of teachers with what was being offered for professional development activities.

Many factors can influence the professional development needs of teachers. A change in the curriculum based on educational reform can definitely influence professional development needs by introducing new educational programs. Business education has experienced many changes in its curriculum over the past decades with the influx of technology into the curriculum as well as the introduction of new programs. For example, Redmann, Kotrlik, Harrison, and Handley (1998) conducted a study of Louisiana business education teachers and found that the teachers lacked the knowledge and skills necessary to ensure classroom effectiveness in the areas of productivity software, specifically applications, Internet, utility, and instructional. Two recent studies revealed that in general teachers are concerned with technology and training in integrating teaching into teaching methodology and curriculum (Casey, 2000; Johnson, 2000).

In addition, the School-to-Work movement has prompted many studies on determining professional development needs of teachers to implement this program effectively. Finch and Moore (1997) determined 13 theme areas for professional development experiences that teachers identified as essential to preparing them for the School-to-Work program. Four of the themes identified were traditional professional development activities such as taking coursework, attending conferences, participating in professional organizations, and participating in school-sponsored inservices. The remaining nine themes depicted professional development needs directly related to the new curriculum, such as involving students in workplace experiences in order to maintain a current knowledge base of what employers require of employees and obtaining materials and equipment from the workplace to assist in instruction. All of these studies are examples of researching what professional development activities teachers need to facilitate good classroom techniques based on the curriculum being taught.

The state of Arizona passed a law that required the Department of Education to report on professional development activities (Arizona Department of Education, 1996). The Arizona Department of Education offered a variety of professional development opportunities for career

and technical educators utilizing funding from the Carl D. Perkins Vocational and Applied Technology Education Act. The three state universities were contracted to present the variety of professional development activities that covered a range of topics focused on implementing quality career and technical programs. Of the inservice activities reported for the 1995-1996 academic year, 9 of the reported 19 activities could be directly related to business education content. In addition to individual programs, a summer institute and a state conference were provided with a focus on quality career and technical programming. All topics of professional development were relevant to the pressing needs of teachers at that time.

Summary

Teachers are the keys to successful educational reform. They will be the ones to implement the plans and new curricula into the classroom and to engage students in a new form of learning. However, without proper professional development activities to prepare teachers for the changes in professional competencies as affected by reform, reform movements could prove to be ineffective.

In order for educational professional activities to be effective, they need to be relevant to the teacher's field of study or current need. Many factors can influence a teacher's professional development need. Changes in curriculum due to new content or a new program may increase specific professional development needs. Whatever the factor that creates a need for professional development activities, the activities should represent and be reflective of what is appropriate for the participating audience.

CHAPTER 3

Methodology

This chapter presents the research methodology implemented in this study to answer the research questions. Specifically, the chapter describes the design of the study, population and sample, instrumentation, data collection, and data treatment.

The purpose of the study was to identify the professional development needs that secondary business education teachers in West Virginia consider important. The following research questions were addressed:

1. What do secondary business education teachers perceive as their professional development needs as related to professional competencies?
2. What do secondary business education teachers perceive as their professional development needs as related to business education content?
3. Are there differences among the perceived professional developments needs related to professional competencies for (a) teachers with different numbers of years of teaching experience and (b) teachers with different educational levels?
4. Are there differences among the perceived professional development needs related to business education content competencies for (a) teachers with different numbers of years of teaching experience and (b) teachers with different educational levels?

Design of the Study

Two survey instruments were used to analyze the professional development needs of secondary business education teachers in West Virginia. Both surveys gathered information regarding the teachers' years of teaching experience and level of education. One survey gathered the respondents' ratings of their perceived need for professional development related to business education content, and the other survey gathered the respondents' ratings of their perceived need for professional development related to professional competencies. The independent variables used in the analysis process were the years of teaching experience and level of education, and the dependent variables were respondent's ratings of their need for professional development in each surveyed category.

Respondents were full-time business education teachers in public secondary schools in West Virginia who rated statements on the survey instruments using a rating scale with ratings from no need = 0 to critical need = 4. A frequency analysis of respondents' ratings of the

statements related to professional development needs for professional competencies and business education content was conducted. Differences among selected demographic characteristics and respondents' ratings of the statements related to professional development needs for professional competencies and business education content were examined.

Population and Sample

The data for this study were obtained by surveying full-time business education teachers in public secondary schools in West Virginia. A complete list of the 420 teachers was made available from the West Virginia Department of Education. According to Isaac and Michael (1997), an adequate number for a random sample for a population size of $N=420$ is $n=201$. The population was randomly divided into two equal samples by sorting all names alphabetically and then by assigning every other name to group one, the professional competencies group, and the remaining names to group two, the business education content competencies group. A flip of a coin determined whether to begin the assignment of the first name with group one or with group two. After the starting group number was determined, each of the names was alternately assigned a group number to determine which survey instrument they received.

Surveys were mailed to all respondents; however, three surveys from respondents were returned due to an undeliverable address. Attempts were made to deliver the surveys to the respondents, but the researcher was unable to make contact. In addition, five respondents requested not to participate in the study, two respondents were no longer working in a business education position, and two respondents were no longer employed in a West Virginia public school system. Therefore, the population was reduced from 420 to 408. The survey sample related to professional competencies was reduced to 202 respondents, and the survey sample related to business education content was reduced to 206 respondents. Forms for human subjects review were submitted to Virginia Tech's Institutional Review Board (IRB) and approved for exemption. A copy of the IRB approval is in Appendix A.

Instrumentation

The surveys were created using the evaluation statements for professional teachers as defined by the West Virginia Board of Education (1992) in Policy 5310 and the National Standards for Business Education as defined by the National Business Education Association (NBEA, 1995). West Virginia Policy 5310 outlines the professional competency requirements

for all West Virginia teachers. The NBEA defines the content standards required of all students in business education.

Survey Outline

Below is an outline of the survey instruments. The statements for Part II were generated using the list of professional competencies as defined by the State of West Virginia (1992) and a list of business education content competencies as defined the National Business Education Association (1995). Copies of the surveys are included in Appendices B and C.

- I. Demographics of respondents
 - A. Highest level of education
 1. Bachelor's degree
 2. Master's degree
 3. Educational specialist/certificate of advanced graduate studies
 4. Doctoral degree
 - B. Years of teaching experience
- II. Professional development needs statements related to professional competencies
Professional development needs statements related to business education content
- III. Open-ended item for respondents to provide additional needs for professional development or suggestions for activities

Field Test Procedures

The statements used in the surveys to determine the perceived professional development needs of teachers are cited from valid sources; therefore, the surveys were only field-tested to determine that directions and wording were clear. A group of seven business education teachers outside of West Virginia were asked to review the surveys and cover letter and offer comments as to the statement of the purpose of the survey, wording of directions, the survey stem statements, and the requests for demographic information. Also, the review panel determined an average completion time for each survey.

The seven reviewers stated that each cover letter should be personally addressed and that an endorsement of the study from the West Virginia State Supervisor for Business Education should be included. In addition, the reviewers average completion times for the professional competencies survey was 15 minutes and for the business education content competencies survey was 30 minutes. Overall, the reviewers found wording and directions of the instruments easy to follow and offered no comments on survey design.

In order to try to improve return response rates, the reviewers agreed that providing a lottery and prize for returning a completed survey would be a good incentive. Therefore, a year's membership in the National Business Education Association was used as a lottery prize for all participating respondents who completed one of the surveys and who wished to enter the drawing.

Data Collection

Collection of the data was conducted following the primary procedures in Dillman's (2000) Tailored Design Method. The three phases of this data collection process included: (a) mailing a cover letter and survey instrument to the randomly selected population of business education teachers in West Virginia, (b) mailing a postcard reminder, (c) mailing a second cover letter and a second survey instrument to those who had not responded, and (d) calling a predetermined percentage of non-respondents. In addition, a financial token incentive was offered with the initial and follow-up survey return requests.

Cover Letters and First Questionnaires

The first phase of data collection was to mail a cover letter and a questionnaire to the randomly selected samples. A description and purpose of the study was included in the letter. In addition, a statement of support of the study was included from the West Virginia State Supervisor of Business Education. The surveys were mailed directly to the sample populations using individualized school addresses. The subjects were asked to return the completed survey instrument within 11 days of the date of the letter. Copies of the cover letters for the two surveys appear in Appendix D.

Postcard

The second phase of data collection was to mail a postcard reminding the respondents to return the completed survey by the requested due date. A second purpose of the postcard was to thank those individuals who had already responded. The postcard was mailed one week after the initial mailing of the first cover letters and questionnaires. A copy of the postcard reminder appears in Appendix E.

Second Letters and Replacement Questionnaires

The third phase of data collection was to mail a second letter and replacement questionnaire to those who had not responded. The purpose of this second mailing was to remind the teachers that their participation in the study was crucial and to encourage them to

complete the survey and return it within 10 days of the dated letter. This second mailing was conducted three weeks after the initial mailing. Copies of the two versions of the second letter appear in Appendix F.

Non-respondents

A total of 194 usable combined surveys were returned, with an overall response rate of 46.2%. An analysis of non-respondents was conducted after the predetermined cut-off date for data collection. A random selection of 10% of the teachers from each group who did not respond was selected, and these individuals were contacted by telephone. From the group that received the survey to assess professional competencies, 104 (51.5%) surveys were returned; therefore 10 of the 98 non-respondents were randomly selected and contacted. From the group that received the survey to assess business education content, 89 (43.2%) surveys were returned; therefore 12 of the 117 non-respondents were randomly selected and contacted. The purpose of this data collection effort was to determine if their responses, had they returned the survey, were similar to already obtained data (Isaac & Michael, 1995).

Each non-respondent was asked to respond to the demographic information. The non-respondents for the professional competencies survey were asked to respond to six randomly selected survey questions representing each of the six professional competency areas. The non-respondents for the business education content survey were asked to respond to 11 randomly selected survey questions representing each of the 11 competency areas.

Data Analysis

The data was analyzed using the SPSS Graduate Pack 8.0 for Windows computer program. Data analysis was used to answer the four research questions.

1. What do secondary business education teachers perceive as their professional development needs as related to professional competencies?

The first analysis of data was to determine individual means of professional development statements and means by professional development category. The professional development categories were then rated highest to lowest. A frequency analysis was utilized.

2. What do secondary business education teachers perceive as their professional development needs as related to business education content?

The second analysis of data was to determine individual means of professional development statements and means by professional development category. The professional development categories were rated highest to lowest. A frequency analysis was utilized.

3. Are there differences among the perceived professional developments needs related to professional competencies for (a) teachers with different numbers of years of teaching experience and (b) teachers with different educational levels?

The third analysis was to determine if differences existed between the teachers perceived professional development needs and (a) their years of teaching experience and (b) their educational levels and their professional development needs related to professional competencies. Based on the distribution of teachers across years of teaching, the years of teaching experience were blocked into four categories: 1 to 10 years, 11 to 20 years; 21 to 30 years, and more than 30 years. A comparison of means was utilized to determine the ratings of responses from each category of the survey based on years of teaching experience and educational level. Next, an one-way analysis of variance (ANOVA) was conducted to determine if differences existed at the .05 significance level among the groups based on (a) years teaching experience and (b) educational level.

4. Are there difference among the perceived professional development needs related to business education content competencies for (a) teachers with different numbers of years of teaching experience and (b) teachers with different educational levels?

The third analysis was to determine if differences existed between the teachers perceived professional development needs and (a) their years of teaching experience and (b) their educational levels and their professional development needs related to business education content competencies. Based on the distribution of teachers across years of teaching, the years of teaching experience were blocked into four categories: 1 to 10 years, 11 to 20 years; 21 to 30 years, and more than 30 years. A comparison of means was utilized to determine the ratings of responses from each category of the survey based on years of teaching experience and educational level. Next, an one-way analysis of variance (ANOVA) was conducted to determine if differences existed at the .05 significance level among the groups based on (a) years of teaching experience and (b) educational level. It was found that the mean ratings of two competency areas were significantly different among the different groups of teachers based on their education levels and their perceived professional development needs. A post hoc

comparison, the Tukey test, was conducted to determine which groups were significantly different (Howell, 1997).

Summary

The purpose of this study was to identify what teachers perceived as needed areas of professional development related to professional competencies and business education content competencies. The study was conducted in West Virginia and was endorsed by the State Supervisor for Business Education. The population for the study consisted of full-time secondary business education teachers employed in the West Virginia public school systems.

Two surveys were created using the evaluation statements for professional teachers as defined by the West Virginia Board of Education in Policy 5310 and the National Standards for Business Education as defined by the National Business Education Association (NBEA). West Virginia Policy 5310 outlines the professional competency requirements for all West Virginia teachers. The NBEA defines the content standards required of all students in business education. The surveys were field tested by seven business education teachers outside of West Virginia to clarify survey instructions.

Data were analyzed to (a) rate the most needed professional development for professional competencies, (b) rate the most needed professional development for business education content competencies, (c) investigate if differences existed among the teachers' years of teaching experience and the teachers' educational levels and their need for professional development related to professional competencies, and (d) investigate if differences existed among the teachers' years of teaching experience and the teachers' educational level and their need for professional development related to business education content. Statistical methods were administered using the SPSS Graduate Pack 8.0 for Windows computer program.

CHAPTER 4

Results of the Study

The results of the study to assess the perceived professional development needs of business education teachers in West Virginia public schools are reported in this chapter. The population studied was 420 business education teachers employed in West Virginia public schools. Two survey instruments were used to analyze the teachers' perceived professional development needs related to: (a) professional competencies and (b) business education technical content competencies.

In this chapter, demographic information of respondents will be presented first. Then, a comparison of the non-respondents and respondents is presented. The data obtained from the survey instruments will then be reported and analyzed according to the four research questions.

Study Demographics

The entire population of 420 West Virginia public business education teachers was surveyed. The population was divided evenly so that 210 teachers received the survey regarding their professional development needs related to business education technical competencies and 210 teachers received the survey regarding their professional development needs related to professional competencies. Both surveys gathered demographic information concerning the respondents' educational level and years of teaching experience in public schools. For report purposes, teaching experience was categorized into four groups: (a) 1 through 10 years, (b) 11 through 20 years, (c) 21 through 30 years, and (d) more than 30 years. The researcher determined the categories of years of teaching experience after all surveys had been returned. The ten-year breaks were chosen to more evenly distribute the survey respondents. Although research related to beginning teachers often uses ranges of 1 to 3 or 1 to 5 years (Heath-Camp & Camp, 1992; Little, 1987), there were too few respondents to this study who reported having less than 5 years of teaching experience for that to be a meaningful category.

Professional Competencies Survey Demographics

The survey sample of 210 was reduced to 202. The reasons for the population reduction included (a) four teachers returned the survey with the request not to participate, (b) two teachers returned the survey indicating their teaching area was no longer business education, (c) one teacher was no longer employed in a West Virginia Public school system, and (d) one teacher was unable to be contacted due to an incomplete address. From the adjusted survey sample of

202, 111 teachers responded to the professional competencies survey, which represented a 55.0% return rate. Of the 111 returned surveys, 7 were unusable leaving 104 (51.5%) of the surveys to be used in the data analysis. If respondents completed only a few or no items, the surveys were determined to be unusable. The respondents' years of teaching experience in public schools ranged from 2 years to 43 years. The majority of respondents, 73 (69.5%), had teaching experience ranging from 11 to 30 years. The analysis of respondents' educational level revealed that the majority of respondents, 64 (61%), held a master's degree. Reported in Table 1 are the educational level and years of teaching experience of the respondents.

Business Education Technical Competencies Survey Demographics

The survey sample of 210 was reduced to 206. The reasons for the population reduction included (a) one teacher returned the survey with the request not to participate, (b) two teachers were unable to be contacted due to incomplete addresses, and (c) one teacher was no longer employed in a West Virginia Public school system. From the corrected survey sample of 206, 91 teachers responded to the business education technical competencies survey, which represented a 44.2% return rate. Of the 91 returned surveys, 2 were unusable, leaving 89 (43.0%) of the surveys to be used in the data analysis. If respondents completed only a few or no items, the surveys were determined to be unusable. The respondents' years of teaching experience in public schools ranged from 2 years to 35 years. The majority of respondents, 69 (77.5%), have teaching experience ranging from 11 to 30 years. The analysis of respondents' educational level revealed that the majority of respondents, 60 (67.4%), held a master's degree. The educational level and years of teaching experience of the respondents are reported in Table 1.

Survey Response Rate

Response rates for each survey were also analyzed. The first category for the response rate was defined by when the surveys from the original mailing and postcard reminders were returned; therefore, the first response rate included all mailings received on or before the first requested survey return due date. The second response rate category was defined by when the surveys from the follow-up letters with replacement questionnaires were returned on or before the second requested survey return due date. The third response rate category was defined by the survey responses received after the last requested survey return due date. The dated postmark on the return envelopes determined all survey response dates.

Table 1

Demographic Information: Educational Level and Years of Teaching Experience of Survey Respondents

Educational Level	Professional Competencies Survey		Business Education Content Competencies Survey	
	n	%	n	%
Bachelor's Degree	32	30.5	23	25.8
Master's Degree	64	60.9	60	67.4
Educational Specialist's Degree/ CAGS	8	7.6	6	6.7
Doctoral Degree	0 ^a	0.0	0	0.0
Years of Teaching Experience				
1 to 10 years	21	20.0	9	10.1
11 to 20 years	37	35.2	30	33.7
21 to 30 years	36	34.3	39	43.8
more than 30 years	11	10.5	11	12.4

Note. The total number of respondents to the Professional Competencies Survey was 104 and the total number of respondents to the Business Education Content Competencies Survey was 89.

^aOne respondent to the Professional Competencies Survey held a doctoral degree; however, this survey was determined unusable by the researcher.

Response rates for the professional competency surveys were analyzed. Seventy (66.7%) of the responses were received on or before the first survey return due date, 11 (10.5%) of the responses were received on or before the follow-up survey return due date, and 24 (22.9%) of responses were received after the second survey due date. Accordingly, response rates for the business education content competency surveys were analyzed with 54 (60.7%) of the responses received on or before the first survey return due date, 10 (11.2%) of the responses received on or before the follow-up survey return due date, and 25 (28.1%) of responses received after the second survey due date. A total of 194 (46.19%) usable surveys were included in the analysis of the data.

Analysis of Non-respondents

An effort to compare responses of the respondents with those of non-respondents was employed. The purpose of conducting the non-respondent procedure was to compare the demographic information and mean responses of perceived professional development needs of the respondents and non-respondents to determine if the two groups appeared to be different. If differences are observed, application of the research findings should be confined to the respondents. The non-respondent sample included 22 business education teachers employed in West Virginia public schools. A total of 10% of the total non-respondent population was randomly selected to participate in the non-respondent analysis. For the professional competency survey, 10 of the 98 non-respondents were asked to respond to the demographic information and six questions, one from each competency area. For the business education content competency survey, 12 of the 117 non-respondents were asked to respond to the demographic information and 11 questions, one from each competency area.

The non-respondent follow-up was conducted by telephone. The demographic information for the non-respondents was representative of the respondent population as the majority of the non-respondents had 11 to 30 years teaching experience, 14 (63.6%), and the majority of the non-respondents held a master's degree as their highest educational level, 16 (72.7%). In response to the randomly selected survey questions on professional competencies, the non-respondent sample responded similarly to the respondents in that there was no notably high need in any of the professional competency areas. The non-respondents' responses to the business education content competencies survey items also were similar to the respondents; both

groups found a high perceived professional development need in the Information Systems area. The findings in this study, therefore, may be assumed to be representative of the population.

Data Analysis Outcomes

The data analysis is organized according to the four research questions. Data were analyzed to (a) order the perceived professional development needs of teachers related to professional competencies, (b) order the perceived professional development needs of teachers related to business education content, (c) determine if a relationship existed between teachers' years of teaching experience and educational level and their professional development needs related to professional competencies, and (d) determine if a relationship existed between teachers' years of teaching experience and educational level and their professional development needs related to business education content.

Research Question One

What do secondary business education teachers perceive as their professional development needs as related to professional competencies?

The survey instrument used to study the professional development needs of teachers related to professional competencies was compiled from the West Virginia Board of Education's Policy 5310: Performance Evaluation of School Personnel (1992). The Performance Evaluation is divided into six professional categories. Across the six areas, a total of 48 individual competencies were used as a basis to determine the professional development needs of teachers related to professional content.

From the six categories presented on the survey, respondents rated items in the area of Programs of Study as their highest perceived professional development need. The areas of Classroom Climate and Instructional Management Systems were very closely rated second and third, respectively. The area of Communication was rated fourth. The final ratings of fifth and six were the areas Professional Work Habits and Student Progress. The rated orders were determined by calculating the mean per item within each category based on the five-point rating scale in which 4 = critical need, 3 = high need, 2 = moderate need, 1 = little need, and 0 = no need. Within the top four competency areas, teachers perceived more than a little need but less than a moderate need for professional development among the items within each area. The fifth and sixth rated competency areas scored above no need but less than a little need for professional

development among the items within these areas. The means per item for each area are presented in Table 2.

In looking at the individual competencies in each of the professional competency areas, 29 competencies were found to have a mean score between little need and moderate need. All competency areas, with the exception of the area of Student Progress, had at least one individual competency with a mean perceived need for professional development above the score of 1. The areas of Programs of Study and Classroom Climate had a rating above the score of 1 for all individual competencies with the exception of one competency in the area of Classroom Climate. In addition, the area of Instructional Management Systems, which had a total of 18 competencies on the survey, had 14 individual competencies with a score above 1. Table 3 lists the 29 individual professional competencies that had mean ratings of above 1.0. A complete listing of the individual competencies within the professional competency areas and the mean score for each item can be found in Appendix G.

Written Comments of Respondents

Each respondent to the Professional Competencies survey was asked to indicate any other areas of professional development they thought were needed. Twenty-five (24.0%) of the 104 respondents included at least one written comment, with a total of 41 different comments, concerning professional development needs that were not specifically stated in the survey. Only 32 of the written comments were relevant for the purposes of this study. Of the 32 relevant written comments, 13 (40.6%) specific items listed professional development needs related to computer technology updates. Most often cited was a need to provide training in the areas of computer software applications (such as Microsoft Office 2000) and computer networking. Comments related to computer networking cited needs for professional development in hardware setup and maintenance and webpage design. Nine (28.1%) of the relevant comments stated a need for professional development related to the instructional topics of integration of vocational education and academics, working with special needs students, educational reform efforts, and integrating technology into instructional methods. The remaining individual comments were related to various perceived professional development needs. A complete listing of all of the respondents' 32 relevant comments is in Appendix H.

Table 2

Mean Ratings of Professional Development Needs for Professional Competencies by Area

Professional Competency Area	Number of Items Per Competency Area	Mean Per Item in Competency Area ^a
Programs of Study	5	1.35
Classroom Climate	8	1.26
Instructional Management Systems	18	1.25
Communication	5	1.14
Professional Work Habits	7	0.83
Student Progress	5	0.82

^a Means were calculated based on the items rated on a scale in which 4 = critical need, 3 = high need, 2 = moderate need, 1 = low need, and 0 = no need.

Table 3

Highest Rated Professional Development Needs for Professional Competencies

Individual Competency	Item Mean Rating ^a	Competency Area ^b
1. Incorporates higher level thinking skills.	1.81	IMS
2. Provides remediation activities for students.	1.64	IMS
3. Accommodates individual learning differences	1.64	CC
4. Integrates a variety of technology applications and learning tools to augment student achievement.	1.62	IMS
5. Determines and utilizes appropriate community resources	1.61	COMM
6. Demonstrates accurate and current knowledge in subject field.	1.57	PS
7. Designs, delivers, and assesses students' learning activities addressing the state adopted instructional goals and objectives.	1.47	IMS
8. Presents reading, writing, speaking, and listening strategies using concepts and languages which student understand	1.44	IMS
9. Assists students to develop productive work habits and study skills.	1.43	IMS
10. Encourages students' attendance.	1.40	CC
11. Utilizes content scope and sequence in planning	1.35	PS
12. Communicates regularly and effectively with students, co-workers, parents/guardians, and the community, and exhibits appropriate interactive skills.	1.34	COMM
13. Provides instructional pacing that ensures student understanding.	1.31	IMS
14. Assigns developmentally appropriate tasks.	1.31	IMS
15. Develops appropriate lessons to teach instructional objectives	1.30	PS

Table 3 continued

Individual Competency	Item Mean Rating ^a	Competency Area ^b
16. Encourages and acknowledges individual student accomplishments and appropriate behavior.	1.28	CC
17. Sets high positive expectations for student performance.	1.28	CC
18. Provides relevant examples and demonstrations to illustrate concepts and skills.	1.26	IMS
19. Bases instruction on adopted curricula for the school.	1.26	PS
20. Encourages students to express ideas clearly and accurately	1.22	IMS
21. Establishes procedures and rules that enhance learning.	1.20	CC
22. Creates and maintains an environment that supports learning	1.18	CC
23. Participates in activities which foster professional growth	1.15	PWH
24. Follows established school discipline procedures that include the WV Student Code of Conduct.	1.12	CC
25. Makes effective transitions between instructional activities	1.10	IMS
26. Introduces the instructional activity and specifies instructional objectives.	1.04	IMS
27. Summarizes the main point(s) of the instructional activity	1.04	IMS

^aItems were rated on a scale in which 4 = critical need, 3 = high need, 2 = moderate need, 1 = low need, and 0 = no need.

^bIMS=Instructional Management Systems
 CC=Classroom Climate
 COMM=Communication
 PS=Programs of Study
 PWH=Professional Work Habits

Research Question Two

What do secondary business education teachers perceive as their professional development needs as related to business education content?

The survey instrument used to study the professional development needs of teachers related to business education content was compiled from 11 business education content areas as defined by the National Business Education Association (1995). Across the 11 areas, a total of 101 individual competencies were used as a basis to determine the professional development needs of teachers related to business education content.

To determine the rated orders of each business education content competency area, the mean per item within each category was calculated based on the respondents' ratings using a five-point rating scale in which 4 = critical need, 3 = high need, 2 = moderate need, 1 = little need, and 0 = no need. From the 11 categories presented on the survey, respondents rated items in the area of Information Systems highest as a perceived need for professional development. The areas of Career Development and International Business were rated second and third, respectively. Within these three technical content areas, respondents listed their perceived need for professional development between moderate need and high need. All of the remaining areas within the business education technical content areas received a mean score per item as a perceived need for professional development between little need and moderate need. The means for each area are presented in Table 4.

After reviewing individual competencies in each of the business education content competency areas, it is clear the highest perceived professional development needs of teachers were in the area of Information Systems. Twenty-eight individual competencies received a mean score of two or higher indicating that teachers perceived at least a moderate need for professional development. Out of these 28 individual competencies, 12 of the top-rated 14 competencies were in the area of Information Systems, and a total of 13 of the 15 competencies within the Information Systems area were rated as a mean of 2.0 or greater as a professional development need. The remaining individual competencies were listed in the areas of Career Development, International Business, Business Law, Communications, and Management. Reported in Table 5 are the individual business education content competencies that teachers rated as most important in needing some form of professional development. A complete listing of the individual

Table 4

Mean Ratings of Professional Development Needs for Business Education Content Competencies by Area

Business Education Content Competency Area	Number of Items Per Competency Area	Mean Per Item in Competency Area ^a
Information Systems	15	2.36
Career Development	6	2.07
International Business	9	2.01
Communication	5	1.99
Business Law	10	1.89
Management	11	1.80
Marketing	10	1.80
Entrepreneurship	9	1.77
Computation	6	1.62
Economics and Personal Finance	15	1.53
Accounting	5	1.47

^aMeans were calculated based on the items rated on a scale in which 4 = critical need, 3 = high need, 2 = moderate need, 1 = low need, and 0 = no need.

Table 5

Highest Rated Professional Development Needs for Business Education Content Competencies

Individual Competency	Item Mean Ratings ^a	Competency Area ^b
1. Use, select, evaluate, install, customize, plan, design, and diagnose and solve problems with communications and networking systems..	2.92	IS
2. Describe current and emerging computer architecture; configure, install, and upgrade hardware systems; and diagnose and repair hardware problems (computer architecture).	2.88	IS
3. Identify, select, evaluate, use, install, upgrade, customize and diagnose, and solve problems with various types of operating systems, environments, and utilities.	2.87	IS
4. Identify, select, evaluate, use, install, upgrade, and customize application software; diagnose and solve problems occurring from application software's installation and use.	2.78	IS
5. Enter, sort, and retrieve data from databases; evaluate media and file structures; and plan, develop, and modify file specifications and database schema (file and database management systems).	2.66	IS
6. Design and implement security plans and procedures for information systems.	2.61	IS
7. Analyze and design information systems using appropriate development tools.	2.39	IS

Table 5 continued

Individual Competency	Item Mean Ratings ^a	Competency Area ^b
8. Compare, evaluate, and demonstrate skills used in different types and levels of programming languages.	2.36	IS
9. Plan the selection and acquisition of information systems.	2.34	IS
10. Develop strategies to make an effective transition from school to work.	2.24	CD
11. Select and apply information systems across the curriculum	2.22	IS
12. Apply communication strategies necessary and appropriate for effective and profitable international business relations.	2.18	IB
13. Describe positions and career paths in information systems.	2.16	IS
14. Establish and use a personal code of ethics for information systems use and management.	2.15	IS
15. Explain the role of international business and analyze its impact on careers and doing business at the local, state, national, and international levels (awareness).	2.15	IB
16. Explain how the advances in computer technology impact upon such areas as property law, contract law, criminal law, and international law (<i>computer law</i>).	2.13	BL
17. Utilize <i>career resources</i> to develop an information base that includes global occupational opportunities.	2.13	CD
18. Use technology to enhance the effectiveness of communications (technological communication)	2.13	COMM

Table 5 continued

Individual Competency	Item Mean Ratings ^a	Competency Area ^b
19. Apply knowledge gained from individual assessment to comprehensive set of goals and an individual career plan (<i>career strategy</i>).	2.10	CD
20. Integrate all forms of communication in the successful pursuit of a career (<i>employment communications</i>).	2.09	COMM
21. Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics in <i>organizational communication</i>	2.08	COMM
22. Relate the importance of <i>lifelong learning</i> to career success.	2.07	CD
23. Select and use word processing, desktop publishing, database, spreadsheet, presentation graphics, multimedia, and imaging software and industry-and subject-specific software (<i>common applications</i>).	2.06	IS
24. Relate work ethic, workplace relationships, workplace diversity, and workplace communication skills to career development (<i>workplace expectations</i>).	2.06	CD
25. Apply <i>marketing</i> concepts to international business.	2.02	IB
26. Identify forms of business ownership and entrepreneurial opportunities available in international business (<i>organizational structure</i>).	2.01	IB

Table 5 continued

Individual Competency	Item Mean Rating ^a	Competency Area ^b
27. Analyze the role and importance of <i>agency law</i> and <i>employment law</i> as they relate to the conduct of business in the national and international marketplaces.	2.01	BL
28. Define, develop, and apply a code of <i>ethics</i> to various issues confronted by business	2.00	MGT

^aItems were rated on a scale in which 4 = critical need, 3 = high need, 2 = moderate need, 1 = low need, and 0 = no need.

^bIS=Information Systems
 CD=Career Development
 IB=International Business
 BL=Business Law
 COMM=Communications
 MGT=Management

competencies within the business education content competency areas and their rating based on the mean score per item can be found in Appendix I.

Written Comments of Respondents

Each respondent to the Business Education Content Competencies survey was asked to indicate other areas of professional development they thought were needed. Twenty (22.5%) of the 89 respondents included at least one written comment, with a total of 23 different comments concerning professional development needs that were not specifically stated in the survey. Only 13 written comments were relevant for the purposes of this study. Eight (61.5%) of the 13 relevant comments respondents listed related professional development needs for computer technology. The remaining individual comments varied from more training in instructional methods to more administrative support for professional development. A complete listing of the 13 relevant comments can be found in Appendix J.

Research Question Three

Are there differences among the perceived professional development needs related to professional competencies for (a) teachers with different numbers of years of teaching experience and (b) teachers with different educational levels?

In order to determine if differences existed, data were analyzed by comparing mean ratings per item of each professional competency area. By using the comparison of means, it was determined how the 104 respondents' perceived professional development needs were distributed based on a 5-point rating scale in which 4 = critical need, 3 = high need, 2 = moderate need, 1 = low need, and 0 = no need. The overall mean ratings for each competency area, based on years teaching experience and educational level were analyzed. A one-way analysis of variance (ANOVA) was conducted to determine if any significant differences occurred between the teachers perceived need based on (a) years of teaching experience and (b) educational level.

Years of teaching experience. The mean rating of respondents for each competency area is reported in Table 6. Overall, teachers rated the professional competency areas as basically low to moderate perceived professional development needs, with the highest mean rating represented by teachers with more than 30 years teaching experience for the Programs of Study competency area. The most noticeable development was that teachers with 11 to 20 years teaching experience had the lowest mean ratings per item for each professional competency area. Teachers with 1 to 10 and more than 30 years teaching experience each had the highest mean

Table 6

Mean Ratings of Perceived Professional Development Needs for Professional Competency Areas Based on Years of Teaching Experience

Competency Area	Overall Means		Years Teaching Experience							
			1 to 10 n=21		11 to 20 n=37		21 to 30 n=36		more than 30 n=11	
	\bar{X}	sd	\bar{X}	sd	\bar{X}	sd	\bar{X}	sd	\bar{X}	sd
Program of Studies	1.35	10.7	1.46	1.01	1.06	0.93	1.44	1.17	1.84	1.12
Classroom Climate	1.26	1.00	1.51	1.04	1.01	0.90	1.35	1.07	1.31	0.97
Instructional Management Systems	1.25	0.90	1.38	0.96	1.06	0.80	1.33	0.91	1.34	1.06
Communication	1.14	0.93	1.44	0.90	0.90	0.82	1.20	1.00	1.13	1.06
Professional Work Habits	0.83	0.87	1.04	0.96	0.58	0.68	0.84	0.90	1.14	1.05
Student Progress	0.82	0.95	0.91	1.01	0.69	0.88	0.86	0.96	1.00	1.07

Notes. Items in each competency area were rated on a scale in which 4 = critical need, 3 = high need, 2 = moderate need, 1 = low need, and 0 = no need. The total number of respondents to the professional competency survey was 104.

ratings for three different professional competency areas. The areas of Classroom Climate, Instructional Management Systems, and Communications received higher ratings from teachers with 1 to 10 years teaching experience than from the other groups. The areas of Programs of Study, Professional Work Habits, and Student Progress received higher ratings from teachers with more than 30 years teaching experience.

The one-way ANOVA was conducted to determine if differences for perceived professional development needs existed among the different years of teaching experience categories. The F values were highest for the competency areas of Professional Work Habits and Programs of Study indicating there was more variation among the mean ratings per item in each competency area. The analysis, however, did not find significant differences at the .05 level among the groups of teachers and their perceived professional development needs for the professional competency areas.

Educational level. Reported in Table 7 is the distribution of perceived professional development needs as related to educational level, based on mean ratings per items in each professional competency area. Similar to the mean ratings based on years of teaching experience, the teachers overall, regardless of educational level, rated the professional competency areas as basically low perceived professional development needs. One trend that was evident based on the data was that for the areas of Classroom Climate, Communication, Professional Work Habits, and Student Progress, the mean ratings increased as educational level increased. When comparing means, teachers with educational specialist's degrees (Ed.S.) rated these four competency areas higher than those with lower levels of education. Teachers with bachelor's degrees rated all six areas lower than the other groups, with the exception of Instructional Management Systems for which they had the same low rating as teachers with the Ed.S. degree.

The one-way ANOVA was conducted to determine if differences for perceived professional development needs existed among the different educational levels. The F value was highest for the competency area of Student Progress indicating there was more variation among the mean ratings per item in the competency area. The analysis did not find significant differences at the .05 level among the groups of teachers and their perceived professional development needs for the professional competency areas.

Table 7

Mean Ratings of Perceived Professional Development Needs for Professional Competency Areas Based on Educational Level

Competency Area	Overall Means		Educational Level					
			Bachelor's n=32		Master's n=64		Educational Specialist's n=8	
	\bar{X}	sd	\bar{X}	sd	\bar{X}	sd	\bar{X}	sd
Program of Studies	1.35	10.7	1.16	1.11	1.45	1.01	1.23	1.42
Classroom Climate	1.26	1.00	1.19	1.00	1.29	1.00	1.33	1.20
Instructional Management Systems	1.25	0.90	1.24	0.91	1.27	0.89	1.24	1.01
Communication	1.14	0.93	1.09	0.91	1.17	0.95	1.18	0.99
Professional Work Habits	0.83	0.87	0.75	0.95	0.84	0.83	0.89	0.91
Student Progress	0.82	0.95	0.63	0.98	0.90	0.93	1.10	0.97

Notes. Items in each competency area were rated on a scale in which 4 = critical need, 3 = high need, 2 = moderate need, 1 = low need, and 0 = no need. The total number of respondents to the professional competency survey was 104.

Research Question Four

Are there differences among the perceived professional development needs related to business education content competencies for (a) teachers with different numbers of years of teaching experience and (b) teachers with different educational levels?

In order to determine if a relationship existed, data were again analyzed by comparing mean ratings per item of each professional competency area. By using the comparison of means, it was determined how the 89 respondents' perceived professional development needs were distributed based on a 5-point rating scale in which 4 = critical need, 3 = high need, 2 = moderate need, 1 = low need, and 0 = no need. The overall mean ratings for each competency area, based on years teaching experience and educational level were analyzed. A one-way analysis of variance (ANOVA) was conducted to determine if any significant differences occurred between the teachers perceived need based on (a) years of teaching experience and (b) educational level.

Years of teaching experience. As reported in Table 8, overall the teachers rated the competency area of Information Systems as their highest perceived professional development need when compared to the other business education content competency areas. When comparing mean ratings for each competency area across years of teaching experience, teachers with more than 30 years teaching experience had the highest mean ratings in five of the business education content competency areas, and teachers with 1 to 10 and with 11 to 20 years teaching experience each had the highest ratings for three different competency areas. Only teachers with 21 to 30 years teaching experience did not have the highest mean ratings in any of the competency areas.

Comparing the mean ratings across teaching experience for each of the categories, it was determined which group rated each competency area highest. Less experienced teachers with 1 to 10 years teaching experience had the highest mean ratings in the three areas of Entrepreneurship, Computation, and Accounting, while teachers with 11 to 20 years teaching experience had the highest mean ratings in the three areas of Information Systems, Career Development and Communication. More experienced teachers with more than 30 years teaching experience had the highest mean ratings in the five areas of International Business, Business Law, Management, Marketing, and Economics and Personal Finance.

After reviewing the mean ratings for each competency area based on years teaching experience, the means indicate that overall teachers with more than 30 years teaching experience

Table 8

Mean Ratings of Perceived Professional Development Needs for Business Education Content Competency Areas Based on Years of Teaching Experience

Competency Area	Years Teaching Experience									
	Overall Mean		1 to 10 n=9		11 to 20 n=30		21 to 30 n=39		more than 30 n=11	
	\bar{X}	sd	\bar{X}	sd	\bar{X}	sd	\bar{X}	sd	\bar{X}	sd
Information Systems	2.36	1.00	2.13	0.66	2.52	1.08	2.26	0.99	2.45	1.10
Career Development	2.07	1.37	1.89	1.36	2.31	1.37	1.94	1.41	2.05	1.32
International Business	2.01	1.24	1.37	0.81	2.06	1.32	1.92	1.23	2.67	1.17
Communication	1.99	1.44	2.11	0.99	2.26	1.58	1.81	1.46	1.76	1.31
Business Law	1.89	1.21	2.03	0.58	1.85	1.28	1.80	1.31	2.24	0.99
Management	1.80	1.18	2.03	0.73	1.52	1.27	1.83	1.20	2.35	1.04
Marketing	1.80	1.25	1.90	0.73	1.63	1.29	1.74	1.36	2.36	0.95
Entrepreneurship	1.77	1.22	2.09	0.67	1.55	1.29	1.79	1.31	1.85	1.09
Computation	1.62	1.25	1.89	0.84	1.59	1.33	1.54	1.35	1.77	0.97
Economics and Personal Finance	1.53	1.24	1.38	0.82	1.58	1.44	1.44	1.22	1.88	1.10
Accounting	1.47	1.35	1.79	1.07	1.46	1.29	1.45	1.49	1.25	1.29

Notes. Items in each competency area were rated on a scale in which 4 = critical need, 3 = high need, 2 = moderate need, 1 = low need, and 0 = no need. The total number of respondents to the business education content competency survey was 89.

perceived a higher professional development need than the other groups, as this group had mean ratings of more than a moderate need for six of the competency areas. The teachers with 1 to 10 years teaching experience had mean ratings in five areas greater than a moderate need, and those with 11 to 20 years had mean ratings in four areas greater than a moderate need. The teachers with 21 to 30 years teaching experience had a mean rating of moderate or greater need in only one competency area, Information Systems.

A one-way ANOVA was conducted to determine if differences for perceived professional development needs existed among the different years of teaching experience categories. The F values were highest for the competency areas of International Business and Management, indicating there was more variation among the mean ratings per item in the competency areas. The analysis did not find significant differences at the .05 level among the groups of teachers by years of teaching experience and their perceived professional development needs for the business education content areas.

Educational level. Similar to the data based on years teaching experience, overall the competency area of Information Systems received the highest mean rating per item as a perceived professional development need of teachers with bachelor's and master's degrees when compared to the other mean ratings of the business education content competency areas. Teachers with educational specialist's (Ed.S.) degrees rated the area of Information Systems as more than a high need; however, this area was this group's third highest rated perceived professional need. Respondents who held Ed.S. degrees had the highest mean ratings for all of business education content competency areas when compared to the mean ratings of teachers who held bachelor's and master's degree. It should be noted, however, that only six respondents held educational specialist's degrees. Teachers who held bachelor's and master's degrees split the competency areas six to five, respectively, with their mean ratings of the competency area being second highest as a perceived professional development need. The complete listing of all mean ratings is reported in Table 9.

A one-way ANOVA was conducted to determine if differences for perceived professional development needs existed among the different educational level categories. The F values were highest for the competency areas of Accounting and Business Law indicating there was more variation among the mean ratings per item in the competency areas. The analysis did show a difference at the .05 level among the educational levels of teachers and their perceived

Table 9

Mean Ratings of Perceived Professional Development Needs for Business Education Content Competency Areas Based on Educational Level

Competency Area	Overall Mean		Educational Level						F Value	p
			Bachelor's n=23		Master's n=60		Educational Specialist's n=6			
	\bar{X}	sd	\bar{X}	sd	\bar{X}	sd	\bar{X}	sd		
Information Systems	2.36	1.00	2.45	0.77	2.34	1.08	3.04	0.93		
Career Development	2.07	1.37	1.70	1.31	2.09	1.38	3.36	0.70		
International Business	2.01	1.24	1.85	1.23	2.02	1.29	2.50	0.77		
Business Law	1.89	1.21	1.89	1.14	1.78	1.23	3.02	0.59	3.019 ^a	.054
Communication	1.99	1.44	1.76	1.18	1.95	1.53	3.23	0.92		
Management	1.80	1.18	1.79	0.93	1.73	1.28	2.52	0.74		
Marketing	1.80	1.25	1.84	1.09	1.71	1.33	2.50	0.69		
Entrepreneurship	1.77	1.23	1.82	1.00	1.66	1.31	2.70	0.82		
Computation	1.62	1.25	1.46	1.02	1.58	1.31	2.67	1.10		
Economics and Personal Finance	1.53	1.24	1.43	1.07	1.48	1.31	2.56	0.80		
Accounting	1.47	1.35	1.37	1.17	1.34	1.36	3.10	0.95	5.162 [*]	.008

Notes. Items in each competency area were rated on a scale in which 4 = critical need, 3 = high need, 2 = moderate need, 1 = low need, and 0 = no need. The total number of respondents to the business education content competency survey was 89.

^aThe F value for Business Law approached significance.

^{*}p < .05.

professional development needs in the Accounting competency area. The area of Business Law approached significance. When the educational levels were compared, teachers who held Ed.S. degrees had the highest mean ratings, teachers with bachelor's degrees had the second highest ratings, and teachers with master's degrees had the lowest mean ratings. The post-hoc analysis did reveal that teachers with Ed.S. degrees were significantly different in their perceived professional development needs from teachers with bachelor's and master's degrees for the Accounting and Business Law competency areas. It should be noted that out of the 89 respondents only 6 (6.7%) held Ed.S. degrees.

Summary

Surveys were mailed to 420 teachers, but the population was reduced to 408 because of incorrect addresses and persons having left teaching. The survey sample for the professional competency instrument was reduced to 202 teachers, and the survey sample for business education content competency instrument was reduced to 206 teachers. The survey regarding professional development needs for professional competencies had 104 responses for a return rate of 51.5%, and the survey regarding professional development needs for business education content competencies had 89 responses for a return rate of 43.2%. The follow-up of 10% of the non-respondents by telephone indicated no observable differences between the respondents and non-respondents.

The highest rated perceived professional development needs related to professional competencies were found in the areas of Programs of Study, Classroom Climate, and Instructional Management Systems. The highest rated perceived professional development needs related to business education content competencies were found in the areas of Information Systems, Career Development, and International Business.

Overall, regardless of years teaching experience or educational level, teachers rated the professional competency areas as basically low to moderate perceived professional development needs. In comparing mean ratings of teachers perceived professional development needs related to professional competencies based on years teaching experience, the data indicated that those who had 11 to 20 years had lower perceived professional development needs for all of the competency areas. The data did indicate that teachers with 1 to 10 years teaching experience rated perceived professional development needs higher in the areas of Classroom Climate, Instructional Management Systems, and Communication, while more experienced teachers with

more than 30 years experience rated the areas of Programs of Study, Professional Work Habits, and Student Progress higher than the other groups. When reviewing the data based on education level, there was a trend for professional development needs in the areas of Classroom Climate, Communication, Professional Work Habits, and Student Progress to increase as teachers' educational level increased.

In comparing mean ratings of teachers perceived professional development needs related to business education content competencies based on years teaching experience, the data indicated that teachers with more than 30 years of teaching experience had rated their perceived professional development needs higher than the other groups of teachers for 5 of the 11 business education content competency areas.

The data based on educational level did indicate a significant difference among the educational levels for perceived professional development needs of the teachers in the competency area of Accounting. The competency area of Business Law approached significance. For each of these areas, teachers who held educational specialist's degrees rated the areas highest, while the second highest rating for these areas were made by teachers who held bachelor's degrees, and the lowest ratings for these areas were noted by teachers who held master's degrees. Overall, teachers who held an educational specialist's degree had the highest mean ratings for all of the business education content competency areas.

CHAPTER 5

Summary, Conclusions, Discussions, and Recommendations

This chapter contains a summary of the study including the statement of the problem, purpose of the study, research procedures, and results. Conclusions based on the findings of the study are discussed, and recommendations for practice and further research are provided.

Summary of the Study

Meeting the challenges of the educational reform movements requires that teachers engage in professional development activities that will assist them to meet the higher standards of learning set forth in educational reform (United States Department of Education, 1996). Goal 4 of the Goals 2000: Educate America Act, emphasizes the necessity for professional development for teachers. Other national organizations have given their support for the continued professional development of teachers in order to enhance the teaching profession and to improve education in America's schools. The National Board for Professional Teaching Standards (NBPTS) was established in 1987 with its mission being to improve teaching and public education (Baratz-Snowden, 1992).

As the movement for educational reform continues, many see the answer to meeting these challenges as not only professional development of teachers, but also the standardization of teaching and learning. The move to create and adopt national standards for the teaching profession and for curriculum development is a continual effort by many professional educational organizations. The Interstate New Teacher Assessment and Support Consortium (INTASC) (Council of Chief State School Officers, 1999) and the National Council for the Accreditation of Teacher Education (NCATE) (Wise, 1999) are two major organizations that govern standards that are being utilized by higher education institutions in teacher education programs to develop professional curriculum.

Career and technical education has also been affected by the national move for educational reform and the standardization of curriculum. Several of the service areas in career and technical education have created and adopted standards for curriculum. The National Business Education Association (1995) developed the *National Standards for Business Education*. In addition to business education, standards have been developed for the areas of family and consumer sciences education and technology education (NASAFACS & V-TECS, 1998; Dugger, Bame, & Pinder, 1999).

As a result of the reform effort to move to national standards, a basic model of learning for career and technical education areas emerged as the application of knowledge in a real world situation that is known as contextual learning (Bolt & Swartz, 1997). In fact, contextual learning has been the basis for career and technical education since the early days of John Dewey who advocated that curriculum and teaching be joined to enhance students' experiences and interests (Resource Bulletin, 1996). Career and technical programs have been successful in implementing curriculum with the contextual learning model. According to several studies, employers indicated that career and technical graduates were better qualified in preparation for work than other general graduates (Lankard, 1994). However, to ensure that career and technical graduates remain superior in preparation for work, educators must be provided with professional development opportunities to learn and practice the skills and knowledge required by industry (Resource Bulletin, 1996)

In order for professional development activities to be successful, teacher input should be the focal point of consideration in planning and delivering such activities (Abdal-Haqq, 1996; Dilworth & Imig, 1995; Little, 1995; Wiedegreen, 1994). It is also essential for effective professional development activities to be relevant to the teacher's field of study or current need.

Statement of the Problem

As employers demand higher skill levels in the technologically advanced workplace and as educational reform pushes for more integration of career and technical education and academic education, career and technical educators must meet the changing needs of the classroom in order to teach in a manner that fosters student improvement. Career and technical educators must participate in professional development activities that can provide them with the needed tools and information in order to educate students to join the labor force skillfully and knowledgeably prepared. In order to provide the required professional development activities, teachers should have input in the planning and preparation of such activities. The review of literature for this study revealed that there has been no formal assessment of what professional development activities are needed or perceived to be needed by secondary business education teachers employed in West Virginia.

Purpose of the Study

The study was limited to one area of career and technical education, business education, and was limited to one geographic area, the state of West Virginia. The focus of the research

attempted to determine what secondary business education teachers in West Virginia perceived to be their professional development needs to be successful in meeting the new challenges that educational reform and work place demands put on the business education curriculum.

Research Procedures

Two survey instruments were used to analyze the professional development needs of secondary business education teachers in West Virginia. Both surveys gathered information regarding the teachers' years of teaching experience and level of education. One survey assessed the respondents' ratings of their perceived need for professional development related to professional competencies. This survey was compiled from the West Virginia Board of Education's Policy 5310: Performance Evaluation of School Personnel (1992). The Performance Evaluation is divided into six professional categories with a total of 48 individual competencies used as a basis for teachers to rate their professional development needs. The other survey collected the respondents' ratings of their perceived need for professional development related to business education content. This survey instrument was compiled from 11 business education content areas as defined by the National Business Education Association (1995). Across the 11 areas, a total of 101 individual competencies were used as a basis for teachers to rate their professional development needs.

Respondents were full-time business education teachers in public secondary schools in West Virginia who rated statements on the survey instruments using a rating scale with ratings of 0 = no need, 1 = little need, 2 = moderate need, 3 = high need, and 4 = critical need. A complete list of these 420 teachers was made available from the West Virginia Department of Education. The teachers were randomly assigned to two groups: one group responded to the professional competency survey and the other group responded to the business education content survey.

Surveys were mailed to all respondents, but the population was reduced from 420 to 408 because of incorrect addresses and persons having left teaching. The survey sample for professional competencies was reduced to 202 participants, and the survey sample for business education content competencies was reduced to 206 participants. Of these, there were 104 and 89 respondents respectively, for response rates of 51.4% and 43.2%. A follow-up of non-respondents was conducted with a 10% randomly selected sample from each survey group. Ten of the 97 non-respondents of the professional competency survey and 12 of the 117 non-

respondents of the business education content competency survey were contacted via telephone. The non-respondents' answers to selected survey items were similar to those of the respondents.

The first stage of the analysis was to (a) determine the highest rated perceived professional development needs of teachers related to professional competencies and (b) determine the highest rated perceived professional development needs related to business education content. Mean scores per item of each competency area were analyzed for respondents' ratings of the statements related to professional development needs for professional competencies and business education content competencies. The professional development categories were then listed highest to lowest based on the respondents' ratings.

Data were then analyzed to (a) determine if differences existed among the teachers' professional development needs for professional competencies based on their years of teaching experience and their educational levels, and (b) determine if differences existed among the teachers' professional development needs for business education content competencies based on their years of teaching experience and educational levels. A comparison of means was utilized to determine the ratings of responses from each category of the survey based on years of teaching experience and educational level. Next, a one-way analysis of variance (ANOVA) was conducted to determine if differences existed at the .05 significance level among the groups based on (a) years of teaching experience and (b) educational level. For the areas that were significant, a post hoc comparison, the Tukey test, was conducted to determine which groups were significantly different. The data were analyzed using the SPSS Graduate Pack 8.0 for Windows computer program.

Findings

The four research questions are listed in this section. For each question, a brief summary of the findings is provided.

Research question one. *What do secondary business education teachers perceive as their professional development needs as related to professional competencies?*

From the six categories presented on the survey, the area of Programs of Study was rated first by respondents as a need for professional development. The areas of Classroom Climate and Instructional Management Systems were very closely rated second and third, respectively. The area of Communication was rated fourth. The final ratings of fifth and six were the areas Professional Work Habits and Student Progress. Within the top four competency areas, teachers

perceived more than a little need but less than a moderate need for professional development among the items within each area. The fifth and sixth rated competency areas scored above no need, but less than a little need for professional development among the items within these areas.

Each respondent to the Professional Competency survey was asked to indicate any other areas of professional development they thought were needed. Twenty-five (24%) of the 104 respondents included at least one written comment, with a total of 41 different comments. Only 32 of the written comments were relevant for the purposes of this study. Of the 32 relevant comments, 13 (40.6%) specific items listed professional development needs related to computer technology updates. Nine (28.1%) of the relevant comments stated a need for professional development related to the instructional topics of integration of career and technical education and academics; working with special needs students; educational reform efforts, and integrating technology into instructional methods. The remaining individual comments were related to various perceived professional development needs.

Research question two. *What do secondary business education teachers perceive as their professional development needs as related to business education content?*

From the 11 categories presented on the survey, respondents rated items in the area of Information Systems highest as a perceived need for professional development. The areas of Career Development and International Business were rated second and third, respectively. All of the remaining areas within the business education technical content areas received lower ratings as perceived professional development needs.

Each respondent to the business education content competencies survey was asked to indicate other areas of professional development they thought were needed. Twenty (22.5%) of the 89 respondents included at least one written comment, with a total of 23 different comments concerning professional development needs that were not specifically stated in the survey. Only 13 written comments were relevant for the purposes of this study. Eight (61.5%) of the relevant comments respondents listed related to professional development needs for computer technology. The remaining six individual comments varied from more training in instructional methods to more administrative support for professional development.

Research question three. *Are there differences among the perceived professional development need related to professional competencies for (a) teachers with different numbers of years of teaching experience and (b) teachers with different educational levels?*

In order to determine if differences existed, data were analyzed by comparing mean ratings per item of each professional competency area. The overall mean ratings for each competency area, based on years of teaching experience and educational level were analyzed. Overall, teachers rated the professional competency areas as having low to moderate perceived professional development needs, with the highest mean rating represented by teachers with more than 30 years of teaching experience for the Programs of Study competency area. The most noticeable finding was that teachers with 11 to 20 years teaching experience had the lowest mean ratings for each professional competency area.

Similar to the mean ratings based on years of teaching experience, teachers across educational levels, rated the professional competency areas as having low perceived professional development needs. One trend that was evident based on the data was that for the areas of Classroom Climate, Communication, Professional Work Habits, and Student Progress the mean ratings increased as educational level increased. The one-way ANOVA did not find significant differences at the .05 level among the groups of teachers and their perceived professional development needs for the professional competency areas.

Research question four. *Are there differences among the perceived professional development needs related to business education content competencies for (a) teachers with different numbers of years of teaching experience and (b) teachers with different educational levels?*

In order to determine if differences existed, data were again analyzed by comparing mean ratings per item each business education content competency area. The overall mean ratings for each competency area, based on years of teaching experience and educational level were analyzed. Overall, teachers rated the competency area of Information Systems as their highest perceived professional development when compared to the mean ratings of the other business education content competency areas. When comparing mean ratings per item of each competency area across years of teaching experience, teachers with more than 30 years teaching experience had the highest mean ratings in five of the business education content competency areas, and teachers with 1 to 10 and with 11 to 20 years teaching experience each had the highest ratings for three different competency areas. When comparing means across years teaching experience categories, only teachers with 21 to 30 years teaching experience did not have the highest mean ratings in any of the competency areas.

Similar to the data based on years teaching experience, overall the competency area of Information Systems received the highest mean rating per item as a perceived professional development need of teachers with bachelor's and master's degrees when compared to the other mean ratings of the business education content competency areas. Teachers with educational specialist's degrees rated the area of Information Systems as more than a high need; however, this area was this group's third highest rated perceived professional need. Respondents who held educational specialist's degrees had the highest mean ratings in all the business education content competency areas when compared to the mean ratings of teachers who held bachelor's and master's degree.

The one-way ANOVA did not find significant differences at the .05 level among the perceived professional development needs for the business education content competency areas of groups of teachers with different numbers of teaching experience. The one-way ANOVA for the groups of teachers with different educational levels did show that the F values were highest for the competency areas of Accounting and Business Law indicating there was more variation among the mean ratings per item in the competency areas and that there was a significant difference at the .05 level among the teachers and their perceived professional development needs in the area of Accounting with the area of Business Law approaching significance. The post-hoc analysis revealed that teachers with educational specialist's degrees were significantly different in their perceived professional development needs for the Accounting and Business Law content areas from teachers with bachelor's and master's degrees. It should be noted that out of the 89 respondents only 6 (6.7%) held educational specialist degrees.

Conclusions and Discussion

Based on the findings of this study, several conclusions were formulated. One conclusion was that overall, teachers did not indicate a strong perceived need for professional development for the professional competency areas. The competency areas are part of Policy 5310 (West Virginia Department of Education, 1992), *Performance Evaluation of School Personnel*. The policy has two major purposes: "to promote professional growth and development and assure quality performance in West Virginia schools, and to provide evaluation data as one basis for sound personnel decisions" (p.2). The competency areas were formulated using a variety of national and state standards for the teaching profession including NCATE and INTASC standards. A rationale for this lack of need could be that business teachers in West

Virginia feel they were adequately prepared for the teaching profession by their teacher education programs. West Virginia is only one of three states that requires teacher education programs to be accredited by NCATE (Darling-Hammond & Rustique-Forrester, 1997). For this reason, there is more standardization among teacher education programs. Also, teachers may regard current professional development activities in the professional competency areas as providing adequate in-service training.

Another conclusion was that the highest-rated perceived professional development needs of teachers in West Virginia Public schools related to business education content competencies were in the areas of Information Systems, Career Development, and International Business. These competency areas are part of a set of national standards, *National Standards for Business Education* (National Business Education Association, 1995), which were developed to respond to a growing demand for a more adequately prepared workforce and as a response to the Goals 2000: Educate America Act (National Business Education Association, 1999). The content of these competency areas indicated that technology-driven subject matter, technology integration into classroom learning, and general economic awareness and career awareness of international and technological occupations are professional development needs that teachers feel are needed to remain current in their subject area.

A third conclusion that can be drawn from the findings indicates that teachers who held Educational Specialist's degrees perceived a greater need for professional development in both the professional competencies and the business education content competencies. Teachers with these degrees, although not specifically asked, could have administrative responsibilities such as being department heads or program leaders, which might relate to their perceptions of more need for professional development. Whereas, the study revealed that teachers with 11 to 20 years of teaching experience did not perceive a high need in either the professional competency areas or the business education content competency areas. These teachers could possibly be experiencing a mid-career comfort level, in that they feel they are fully prepared to teach the curriculum as presented. Overall, it can be concluded that some teachers are interested in providing information about professional development needs based on the survey response rates of 51.5% for the professional competency areas and 43.0% for the business education content competency areas and from the written comments they provided. Teachers must view professional development as an ongoing process of the teaching profession (Cole, 1992; Little 1995). The

West Virginia Board of Education (1998) declared as a goal of its professional development program to provide staff development that adds to the educators' ability to motivate and generate high achieving students. With the State's commitment to professional development, it seems apparent that the business education teachers in West Virginia regard professional development activities of any nature as pertinent to professional growth.

A fourth conclusion was that teachers' perceived professional development needs were greater for their content area rather than the general areas of professional competencies. The respondents to the business education content competency survey rated all of the competency areas well above a low to moderate need with the lowest rating being a mean of 1.47 and the highest rating being a mean of 2.36, on a rating scale in which 4 = critical need, 3 = high need, 2 = moderate need, 1 = low need, and 0 = no need. The respondents to the professional competency survey only rated the areas as basically a low need, with the lowest rating being a mean of 0.82 and the highest rating being a mean of 1.35.

The ratings of the respondents' needs for professional development in the 11 business education content competency areas presented in the survey indicate that technology-driven subject matter and technology integration into classroom learning are defined as areas in which the respondents feel they need the most professional development services. According to several researchers (Abdal-Haqq, 1996; Cole 1992, Little, 1995; Weidegreen, 1995) professional development should be relevant and based on the needs of teachers. Business education content is constantly changing, and educators must be prepared to meet the changes in curriculum in order to adequately prepare students for the workforce, which is the ultimate goal of any career and technical education area.

Recommendations for Practice

Results and recommendations of this study will be disseminated through publications and presentations. A target audience will be department of education personnel, specifically the State Supervisor of Business Education at the West Virginia Department of Education, to assist in the planning of professional development activities for business educators in West Virginia. Additionally, professional organization leaders and local administrators can glean information from the study's results to plan and deliver needed professional development activities. Teacher education programs at higher education institutions could also utilize this information as a reference for program review in developing pre-service and in-service teacher education.

Although there were two surveys designed and submitted for purposes of data collection, the perceived professional development needs of business educators cannot be totally dichotomized into just two groups related to professional competencies and business education content competencies. Obviously, a teacher is an integrated individual bringing a complete set of strengths and weaknesses to the classroom. This study provided a formal assessment of secondary business education teachers' perceived professional development needs related to professional competencies and business education content competencies. Based upon the findings and conclusions of this study, the following practices are recommended.

By addressing the professional competency area of Information Systems, professional development activities should be developed to advantageously promote the use of technology in the classroom. There was a clear indication in the Information Systems competencies of a need for ongoing professional development regarding computer applications and computer technology. Moreover, the written comments of respondents often cited the need for professional development related to the specific use of application software such as Microsoft Office 2000. In addition, when planning professional development activities, developers should ensure that activities are anchored in practice, with hands-on applications rather than a traditional lecture format. This type of teaching methodology will assist teachers in developing their skills and knowledge to ensure successful dissemination of content to students in a contextual-learning environment (Resource Bulletin, 1996).

West Virginia school divisions should include, as part of the cost for hardware and software selection and acquisition, funds needed to conduct professional development activities to accompany the introduction and use of any software and hardware. Classroom instruction will be strengthened when teachers are adequately prepared to instruct students in software applications, the use and maintenance of technical hardware, and integration of the technology into the learning environment

Although teachers did indicate that their perceived professional development needs for basic knowledge and skills from the education field is fairly low, these areas cannot be dismissed when planning professional development activities. In order to be effective in the business education content competency areas, teachers must first be effective in the basic professional competency areas that should be included as underlying measures in professional development activities. Sound teaching techniques and classroom management strategies should form a basic

framework for planning professional development activities. The successful teacher must be able to systematically identify and convey the content information to be learned in an effective learning environment utilizing the most effective teaching model (Naylor, 1997).

Recommendations for Further Research

Based upon the findings and conclusions of this study, the following suggestions for further research are recommended:

1. The written comments that participants provided for this study revealed that teachers perceive professional development needs in a variety of areas, some of which are not directly related to professional and business education content competencies as was the scope of this study. In order to address all self-reported professional development needs of teachers, research could be conducted to determine specifically the types of professional development activities business educators would find engaging. Particular attention should be paid to the preferred delivery style for professional development activities.
2. Given the focus on state assessment programs as a measure of student success and professional accountability, there is a heightened awareness of the need for meaningful and relevant professional development activities. In order to assess all areas of education, a comparison of the professional development needs among different content areas in career and technical education, as well as academic education, would assist other disciplines with the identification of needed professional development, activity planning, and evaluation.
3. A national study could provide professional development planners with in-service for professional organization conferences, workshops, and/or seminars, as well as publications that would be useful to teachers. Given that this study was confined to West Virginia business educators, additional research involving a national sampling could determine whether differences exist among states regarding professional development needs.
4. Curriculum constantly changes in response to meeting educational reform practices, and for business education specifically, curriculum updates are in response to industry practices and needs; therefore, professional development needs of teachers will change. In order to offer relevant professional development activity with teacher input, this study should be replicated at least every five years.
5. This study was limited to teachers' self-reported perception of professional development needs. Further research could be conducted using observations of teachers, in-depth discussions

and focus groups, and measures of students outcomes to ground their professional development needs in factors beyond their self reports.

Summary

This study identified the perceived professional development needs of business educators in secondary schools in West Virginia related to professional competency areas and business education content competency areas. The highest rated perceived professional development needs related to professional competencies were found in the areas of Programs of Study, Classroom Climate, and Instructional Management Systems. The highest rated perceived professional development needs related to business education content competencies were found in the areas of Information Systems, Career Development, and International Business. The data did not indicate differences among teachers' perceived professional development needs for professional competencies or for business education content professional and numbers of years of teaching experience or educational level. There was, however, a difference in the perceived needs of teachers and their educational level with the business education content competency areas of Accounting and Business Law. In both of these areas, the statistical analysis did reveal that there were differences among teachers who held educational specialist's degrees and those who held bachelor's and master's degrees and their perceived professional development needs for these two areas. Overall, teachers perceived a higher need for the content areas regardless of years of teaching experience or educational level.

Recommendations formulated from the conclusions and findings of the study indicate that professional development activities should be developed that are based on teacher input and relevant to teachers' needs. All professional development activities need to be planned to provide business education teachers with hands-on applications so that teachers are prepared to effectively disseminate the information to ensure student learning in an appropriate learning environment. Finally, a study similar to this, could be conducted at determined intervals to ensure that the professional development needs of teachers based on curriculum are continually met.

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APPENDIX A:

Institutional Review Board Approval

MEMORANDUM

TO: Susan Robinett, Daisy Stewart
Teaching and Learning (0313)

FROM: H. T. Hurd 
Director

DATE: December 15, 1999

SUBJECT: IRB EXEMPTION APPROVAL/"Perceived Professional
Development Needs of Business Education Teachers in the West"-
IRB #99-0333

I have reviewed your request to the IRB for exemption for the above referenced projects. I concur that the research falls within the exempt status.

Best wishes.

HTH/baj

cc: Jan Nespor

APPENDIX B

Professional Competencies Instrument

Professional Development Needs Analysis of Business Education Teachers Professional Competencies

All responses will be treated confidentially and will be revealed in group data only.

PART I: DEMOGRAPHIC INFORMATION

Answer each demographic question in the blank provided.

1. What is your highest level of education? (please check one)
 - bachelor's degree
 - master's degree
 - educational specialist degree/certificate of advanced graduate studies
 - doctoral degree

2. Number of years (including the current year) you have taught business education courses in a public high school system. _____

PART II: RATING PROFESSIONAL DEVELOPMENT NEEDS

Rate your needs for professional development activities by circling the number that best indicates the extent of your need. A rating of 0 indicates no need, and a rating of 4 indicates critical need. Use the following scale:

0 = no need 1 = little need 2 = moderate need 3 = high need 4 = critical need

1. PROGRAMS OF STUDY

a. Bases instruction on adopted curricula for the school.	0	1	2	3	4
b. Demonstrates accurate and current knowledge in subject field.	0	1	2	3	4
c. Develops appropriate lessons to teach instructional objectives.	0	1	2	3	4
d. Employees appropriate lessons to teach instructional objectives.	0	1	2	3	4
e. Utilizes uses content scope and sequence in planning.	0	1	2	3	4

2. CLASSROOM CLIMATE

a. Follows established school discipline procedures which that include the WV Student Code of Conduct.	0	1	2	3	4
b. Establishes procedures and rules that enhance learning.	0	1	2	3	4
c. Encourages students' attendance.	0	1	2	3	4
d. Sets high positive expectations for student performance.	0	1	2	3	4
e. Encourages and acknowledges individual student accomplishments and appropriate behavior.	0	1	2	3	4
f. Treats students in a fair and equitable manner.	0	1	2	3	4
g. Accommodates individual learning differences.	0	1	2	3	4
h. Creates and maintains an environment that supports learning.	0	1	2	3	4

3. INSTUCTIONAL MANAGEMENT SYSTEMS

a. Prepares and implements lesson plans.	0	1	2	3	4
b. Begins lesson or instructional activity with a review of previous material as appropriate.	0	1	2	3	4
c. Has materials; supplies and equipment ready at the start of the lesson or instructional activity.	0	1	2	3	4
d. Introduces the instructional activity and specifies instructional objectives.	0	1	2	3	4
e. Directs students to be on task quickly at the beginning of each instructional activity.	0	1	2	3	4

0 = no need
3 = high need

1 = low need
4 = critical need

2 = moderate need

f. Presents reading, writing, speaking, and listening strategies using concepts and language which students understand.	0	1	2	3	4
g. Provides relevant examples and demonstrations to illustrate concepts and skills.	0	1	2	3	4
h. Assigns developmentally appropriate tasks.	0	1	2	3	4
i. Provides instructional pacing that ensures student understanding.	0	1	2	3	4
j. Maximizes student time-on-task.	0	1	2	3	4
k. Make effective transitions between instructional activities.	0	1	2	3	4
l. Summarizes the main point(s) of the instructional activity.	0	1	2	3	4
m. Encourages students to express ideas clearly and accurately.	0	1	2	3	4
n. Incorporates higher level thinking skills.	0	1	2	3	4
o. Assists students to develop productive work habits and study skill.	0	1	2	3	4
p. Provides remediation activities for students.	0	1	2	3	4
q. Designs, delivers, and assesses students learning activities addressing the state adopted instructional goals and objectives.	0	1	2	3	4
r. Integrates a variety of technology applications and learning tools to augment student achievement.	0	1	2	3	4

4. STUDENT PROGRESS

a. Follows grading policies and regulations	0	1	2	3	4
b. Maintains accurate and complete student records	0	1	2	3	4
c. Monitors and evaluates student progress	0	1	2	3	4
d. Provides feedback on student work.	0	1	2	3	4
e. Monitors student attendance	0	1	2	3	4

5. COMMUNICATION

a. Communicates student progress according to established procedures and policies.	0	1	2	3	4
b. Communicates regularly and effectively with students, co-workers, parents/guardians, and the community, and exhibits appropriate interactive skills.	0	1	2	3	4
c. Follows confidentiality procedures regarding students, parents/guardians, and fellow staff members.	0	1	2	3	4
d. Speaks and writes standard English clearly, correctly, and distinctly.	0	1	2	3	4
e. Determines and utilizes appropriate community resources	0	1	2	3	4

6. PROFESSIONAL WORK HABITS

a. Adheres to established laws, policies, rules, and regulations.	0	1	2	3	4
b. Interacts appropriately with other educational personnel.	0	1	2	3	4
c. Participates in activities which that foster professional growth.	0	1	2	3	4
d. Is punctual with reports, grades, records, and in reporting to work.	0	1	2	3	4
e. Performs assigned duties.	0	1	2	3	4
f. Strives to meet county/school goals.	0	1	2	3	4
g. Commands respect by example in appearance, manners, behavior and language.	0	1	2	3	4

Please indicate any additional areas in professional competencies that you would need as professional development activities. Also, indicate any suggestions for providing professional development activities.

Note: In actual instrument, more space was provided for respondents to write open-ended comments.

Please return this survey to the researcher within one week using the enclosed envelope.

**Susan Robinett
Concord College
P.O. Box 1000
Athens, WV 24712**

THANK YOU FOR YOUR COOPERATION!!

SOURCE: West Virginia Board of Education. (1992). Policy 5310: Performance Evaluation of School Personnel.

APPENDIX C

Business Education Technical Competencies Instrument

Professional Development Needs Analysis of Business Education Teachers
Business Education Technical Competencies

All responses will be treated confidentially and will be revealed in group data only.

PART I: DEMOGRAPHIC INFORMATION

Answer each demographic question in the blank provided.

3. What is your highest level of education? (please check one)
 - _____ bachelor's degree
 - _____ master's degree
 - _____ educational specialist degree/certificate of advanced graduate studies
 - _____ doctoral degree

4. Number of years (including the current year) you have taught business education courses in a public high school system. _____

PART II: RATING PROFESSIONAL DEVELOPMENT NEEDS

Rate your needs for professional development activities by circling the number that best indicates the extent of your need. A rating of 0 indicates no need, and a rating of 4 indicates critical need. Use the following scale:

0 = no need 1 = little need 2 = moderate need 3 = high need 4 = critical need

1. ACCOUNTING						
a.	Complete the various steps of the <i>accounting cycle</i> and explain the purpose of each step.	0	1	2	3	4
b.	Determine the value of assets, liabilities, and owner's equity according to generally accepted principles, explaining when and why they are used (<i>accounting process</i>).	0	1	2	3	4
c.	Prepare, interpret, and analyze <i>financial statements</i> using manual and computerized systems for service, merchandizing, and manufacturing business.	0	1	2	3	4
d.	Apply appropriate accounting principles to various forms of ownership, payroll, income taxation, and managerial systems (<i>special applications</i>).	0	1	2	3	4
e.	Use planning and control principles to evaluate the performance of an organization and apply differential analysis and present value concepts to make decisions (<i>interpretation and use of data</i>).	0	1	2	3	4

2. BUSINESS LAW						
a.	Analyze the relationship between ethics and the law and describe the sources of the law, the structure of the court system, the different classifications of procedural law, and the different classifications of substantive law (<i>basics of the law</i>).	0	1	2	3	4
b.	Analyze the relationship among <i>contract law</i> , <i>law of sales</i> , and <i>consumer law</i> .	0	1	2	3	4
c.	Analyze the role and importance of <i>agency law</i> and <i>employment law</i> as they relate to the conduct of business in the national and international marketplaces.	0	1	2	3	4
d.	Describe the major types of <i>business organizations</i> operating within the socio-economic arena of the national and international marketplace today and in the future.	0	1	2	3	4
e.	Explain the legal rules that apply to personal property and real property (<i>property law</i>).	0	1	2	3	4

0 = no need
3 = high need

1 = low need
4 = critical need

2 = moderate need

f. Analyze the functions of <i>commercial paper, insurance, secured transactions, and bankruptcy</i> .	0	1	2	3	4
g. Explain how the advances in computer technology impact upon such areas as property law, contract law, criminal law, and international law (<i>computer law</i>).	0	1	2	3	4
h. Determine appropriateness of <i>wills and trusts</i> in estate planning.	0	1	2	3	4
i. Explain the legal rules that apply to marriage, divorce, and child custody (<i>domestic relations law</i>).	0	1	2	3	4
j. Explain the legal rules that apply to <i>environmental law and energy regulation</i> .	0	1	2	3	4

3. CAREER DEVELOPMENT

a. Assess personal strengths and weaknesses as they relate to career exploration and development (<i>self awareness</i>).	0	1	2	3	4
b. Utilize <i>career resources</i> to develop an information base that includes global occupational opportunities.	0	1	2	3	4
c. Relate work ethic, workplace relationships, workplace diversity, and workplace communication skills to career development (<i>workplace expectations</i>).	0	1	2	3	4
d. Apply knowledge gained from individual assessment to comprehensive set of goals and an individual career plan (<i>career strategy</i>).	0	1	2	3	4
e. Develop strategies to make an effective <i>transition from school to work</i> .	0	1	2	3	4
f. Relate the importance of <i>lifelong learning</i> to career success.	0	1	2	3	4

4. COMMUNICATIONS

a. Communicate in a clear, courteous, concise manner on personal and professional levels (<i>foundations of communication</i>).	0	1	2	3	4
b. Apply basic <i>social communication</i> skills in personal and professional situations.	0	1	2	3	4
c. Use technology to enhance the effectiveness of communications (<i>technological communications</i>).	0	1	2	3	4
d. Integrate all forms of communication in the successful pursuit of a career (<i>employment communications</i>).	0	1	2	3	4
e. Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics in <i>organizational communication</i> .	0	1	2	3	4

5. COMPUTATION

a. Apply basic mathematical operations to solve problems (<i>computational skills</i>).	0	1	2	3	4
b. Solve problems containing whole numbers, decimals, fractions, percents, ratios, and proportions (<i>number relationships</i>).	0	1	2	3	4
c. Use algebraic operations to solve problems (<i>patterns, functions, and algebra</i>).	0	1	2	3	4
d. Use common international standards of measurement in solving problems.	0	1	2	3	4
e. Analyze and interpret data using common statistical procedures (<i>statistics and probability</i>).	0	1	2	3	4
f. Use mathematical procedures to <i>analyze and solve business problems</i> for such areas as taxation, investments, payroll, financial statements, and credit management.	0	1	2	3	4

6. ECONOMICS AND PERSONAL FINANCE

a. Identify opportunity costs and trade-offs involved in making choices about how to use scarce economic resources (<i>scarcity, choice, and opportunity costs</i>).	0	1	2	3	4
b. Use a rational <i>decision-making</i> process as it applies to the roles of citizens, workers, and consumers.	0	1	2	3	4
c. Explain the importance of <i>productivity</i> ; and discuss how specialization, division of labor, saving, investment in capital goods and human resources, and technological change effect productivity.	0	1	2	3	4
d. Explain why societies develop <i>economic systems</i> , identify the basic features of different economic systems, and discuss the major features of the U.S. economy.	0	1	2	3	4

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e. Explain the role of core <i>economic institutions</i> and <i>incentives</i> in the U.S. economy.	0	1	2	3	4
f. Explain the role of <i>exchange</i> and <i>money</i> in an economic system and describe the effect of <i>interdependence</i> on economic activity.	0	1	2	3	4
g. Describe the role of <i>markets</i> and <i>prices</i> in the U.S. economy.	0	1	2	3	4
h. Analyze the role of <i>supply</i> and <i>demand</i> in the U.S. economy.	0	1	2	3	4
i. Describe different types of competitive structures and illustrate the role of competitive markets in the U.S. and other economies (<i>competition</i>).	0	1	2	3	4
j. Manage limited personal resources and recognize that more of the wants and needs of members of a society can be satisfied if wise consumer decisions are made (<i>role of consumers</i>).	0	1	2	3	4
k. Explain how the U.S. economy functions as a whole and describe macroeconomics measures of economic activity such as gross domestic product, unemployment, and inflation (<i>aggregate supply and demand</i>).	0	1	2	3	4
l. Discuss the <i>role of government</i> in an economic system, especially the necessary and desirable role of government in the U.S. economy.	0	1	2	3	4
m. Describe rights and responsibilities of citizens in the U.S. economy, including their role in making decisions that affect individual and societal needs and wants (<i>role of citizens</i>).	0	1	2	3	4
n. Examine the importance of economic relationships among nations and discuss the role of <i>international</i> trade and investment and international monetary <i>relations</i> in the global economy.	0	1	2	3	4
o. Relate personal interests, wants, and abilities to career choices and assess how conditions in the labor market may affect <i>career choices</i> .	0	1	2	3	4

7. ENTREPRENEURSHIP

a. Identify unique <i>characteristics</i> of an entrepreneur and evaluate the degree to which one possesses those characteristics.	0	1	2	3	4
b. Develop a <i>marketing</i> plan for an entrepreneurial venture.	0	1	2	3	4
c. Apply <i>economic concepts</i> when making decisions for an entrepreneurial venture.	0	1	2	3	4
d. Identify and use the necessary <i>financial</i> competencies needed by an entrepreneur.	0	1	2	3	4
e. Identify, establish, maintain, and analyze appropriate records to make business decisions (<i>accounting</i>).	0	1	2	3	4
f. Develop a <i>management</i> plan for an entrepreneurial venture.	0	1	2	3	4
g. Describe how cultural differences, export/import opportunities, and current trends in a <i>global marketplace</i> can affect an entrepreneurial venture.	0	1	2	3	4
h. Describe how ethics, government, and different forms of business ownership affect the entrepreneurial venture (<i>legal</i>).	0	1	2	3	4
i. Develop a <i>business plan</i> .	0	1	2	3	4

8. INFORMATION SYSTEMS

a. Describe current and emerging computer architecture, configure, install, and upgrade hardware systems; and diagnose and repair hardware problems (<i>computer architecture</i>).	0	1	2	3	4
b. Identify, select, evaluate, use, install, upgrade, and customize <i>application software</i> ; diagnose and solve problems occurring from application software's installation and use.	0	1	2	3	4
c. Identify, select, evaluate, use, install, upgrade, customize, and diagnose, and solve problems with various types of <i>operating systems, environments, and utilities</i> .	0	1	2	3	4
d. Enter, sort, and retrieve data from databases; evaluate media and file structures; and plan, develop, and modify file specifications and database schema (<i>file and database management systems</i>).	0	1	2	3	4
e. Use, select, evaluate, install, customize, plan, design, and diagnose and solve problems with <i>communications and networking systems</i> .	0	1	2	3	4
f. Use touch-keyboarding skills to enter and manipulate text and data.	0	1	2	3	4

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g. Select and use word processing, desktop publishing, database, spreadsheet, presentation graphics, multimedia, and imaging software and industry- and subject-specific software (<i>common applications</i>).	0	1	2	3	4
h. Plan the <i>selection and acquisition</i> of information systems.	0	1	2	3	4
i. <i>Analyze and design</i> information systems using appropriate development tools.	0	1	2	3	4
j. Compare, evaluate, and demonstrate skills used in different types and levels of <i>programming</i> languages.	0	1	2	3	4
k. Design and implement <i>security</i> plans and procedures for information systems.	0	1	2	3	4
l. Establish and use a personal code of <i>ethics</i> for information systems use and management.	0	1	2	3	4
m. Assess the <i>impact</i> of information systems on society.	0	1	2	3	4
n. Select and apply information systems <i>across the curriculum</i> .	0	1	2	3	4
o. Describe positions and <i>career paths</i> in information systems.	0	1	2	3	4

9. INTERNATIONAL BUSINESS

a. Explain the role of international business and analyze its impact on careers and doing business at the local, state, national, and international levels (<i>awareness</i>).	0	1	2	3	4
b. Apply <i>communication strategies</i> necessary and appropriate for effective and profitable international business relations.	0	1	2	3	4
c. Describe the social, cultural, political, legal, and economic factors that shape and impact the international business environment (<i>environment</i>).	0	1	2	3	4
d. Describe the environmental factors that define what is considered <i>ethical</i> business behavior.	0	1	2	3	4
e. Explain the role, importance, and concepts of international <i>finance</i> and risk management.	0	1	2	3	4
f. Address special challenges in operations and <i>management</i> of human resources in international business.	0	1	2	3	4
g. Apply <i>marketing</i> concepts to international business.	0	1	2	3	4
h. Relate <i>balance of trade</i> concepts to the <i>import/export</i> process.	0	1	2	3	4
i. Identify forms of business ownership and entrepreneurial opportunities available in international business (<i>organizational structure</i>).	0	1	2	3	4

10. MANAGEMENT

a. Illustrate how the <i>functions of management</i> are implemented and explain why they are important.	0	1	2	3	4
b. Compare and contrast the basic tenets of <i>management theories</i> and explain why they are important.	0	1	2	3	4
c. Analyze financial data influenced by internal and external factors in order to make long-term and short-term management decisions (<i>financial decision making</i>).	0	1	2	3	4
d. Justify the need to gain and maintain competitive advantage through the use of internal comparisons and external research services (<i>competitive analysis and marketing strategy</i>).	0	1	2	3	4
e. Describe the activities of human resources managers and their importance to the successful operation of the organization (<i>human resource management</i>).	0	1	2	3	4
f. Identify various <i>organizational structures</i> and discuss the advantages and disadvantages of each.	0	1	2	3	4
g. Develop and use <i>general managerial skills</i> .	0	1	2	3	4
h. Define, develop, and apply a code of <i>ethics</i> to various issues confronted by businesses.	0	1	2	3	4
i. Identify, describe, and analyze the impact and relationship of <i>government regulations</i> and community involvement to business management decisions (<i>and social responsibility</i>).	0	1	2	3	4

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j. Describe the role of <i>organized labor</i> and its influence on government and business.	0	1	2	3	4
k. Apply generally accepted <i>operations management</i> principles and procedures to the design of an operations plan.	0	1	2	3	4

11. MARKETING

a. Identify marketing roles and analyze the impact of marketing on the individual, business, and society.	0	1	2	3	4
b. Define, develop, and apply a code of <i>ethics</i> to various marketing issues.	0	1	2	3	4
c. Identify and explain how <i>external factor</i> influence/dictate marketing decisions.	0	1	2	3	4
d. Explain the role of <i>pricing</i> in the marketing process and describe the use of various pricing strategies.	0	1	2	3	4
e. Apply distribution processes and methods to develop distribution plans (<i>place</i>).	0	1	2	3	4
f. Identify the four general forms of <i>promotion</i> and determine how each contributes to marketing.	0	1	2	3	4
g. Develop, implement, and evaluate a <i>marketing research</i> project.	0	1	2	3	4
h. Identify numerous marketing variables and strategies in dealing with a diversified marketplace (<i>characteristics of a market</i>).	0	1	2	3	4
i. Develop a <i>marketing plan</i> encompassing all of the necessary components.	0	1	2	3	4
j. Apply <i>forecasting</i> principles and methods to determine sales potential for specific products.	0	1	2	3	4

Please indicate any additional areas in technical competencies that you would need as professional development activities. Also, indicate any suggestions for providing professional development activities.

Please return this survey to the researcher within one week using the enclosed envelope.

Susan Robinett
Concord College
P.O. Box 1000
Athens, WV 24712

THANK YOU FOR YOUR COOPERATION!!

SOURCE: Adapted from National Business Education Association. (1995). *National Standards for Business Education*.

APPENDIX D

First Letters to Two Groups of Business Education Teachers



CONCORD COLLEGE
ATHENS, WEST VIRGINIA 24712

Division of Business and Economics
"PROGRAM OF EXCELLENCE"

March 20, 2000

Mr. John Doe
West Virginia High School
City, WV 24000

Dear Mr. Doe:

I am conducting research on the professional development needs of secondary business education teachers in West Virginia public school systems. This research project will fulfill the requirements necessary for the completion of my doctoral program. This is an important project, and I have received the endorsement for completing this research from Abby Reynolds, State Supervisor for Business Education.

As you are introduced to new educational practices both in general professional competency areas and in specific business education technical competency areas, receiving appropriate professional development in-service training will assist you in your continuance of providing high quality instruction to the students in West Virginia's public secondary schools. Although the State Department of Education has an extensive professional development program in place, by participating in this research project you will be to identify your specific professional development needs. The information obtained from the research will be compiled and used to offer you relevant professional development activities at local, regional, and state conferences; at individual local schools; and at institutions of higher education in West Virginia.

Two survey instruments have been developed for this research project. All business education teachers in West Virginia are being asked to complete one of the surveys; therefore, you may receive a survey instrument that is different from that received by your colleagues. One survey will gather responses of your need for professional development related to business education content as defined by the *National Standards for Business Education* compiled by the National Business Education Association. **You have been selected to complete a survey to gather responses of your need for professional development related to professional competencies as defined by the West Virginia Department of Education's Policy 5310: Performance Evaluation of School Personnel.** It should take you approximately **15 minutes** to complete this survey.

I would appreciate your completing and returning the enclosed survey by **March 31, 2000**. As a participant in this study, you may be assured of complete confidentiality. The survey has been numbered for **mailing purposes only**. This number will be checked off of my mailing list when the survey is returned, and your name will not appear on the survey instrument.

Through your participation in this research project, you will provide valuable information to planners of professional development activities to provide you with the necessary training and information that you need to continue your successful teaching career. If you would like to receive a copy of the results of this study, fill out the enclosed card and mail it with your completed survey in the enclosed, postage-paid envelope. Also, when you complete the card for the project results you will be entered into a drawing in which you can win a free year's membership to the National Business Education Association.

I appreciate your participation in this exciting and worthwhile research project, and look forward to hearing from you. Your willingness to support this study is needed. Feel free to write or call me at (304) 385-5321 or e-mail me at robinett@concord.edu if you have any questions.

Sincerely,
Susan Robinett
Assistant Professor of Business
Doctoral Candidate, Virginia Tech



CONCORD COLLEGE
ATHENS, WEST VIRGINIA 24712

Division of Business and Economics

"PROGRAM OF EXCELLENCE"

March 20, 2000

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I would appreciate your completing and returning the enclosed survey by **March 31, 2000**. As a participant in this study, you may be assured of complete confidentiality. The survey has been numbered for **mailing purposes only**. This number will be checked off of my mailing list when the survey is returned, and your name will not appear on the survey instrument.

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Sincerely,
Susan K. Robinett
Assistant Professor of Business
Doctoral Candidate, Virginia Tech

APPENDIX E

Postcard Reminder to Business Education Teachers

March 27, 2000

Last week a survey asking for your assessment of needs for professional development activities was mailed to you. If you have already completed and returned the survey, please accept my thanks. If you have not, please do so today. It is important that your input is included in the results to accurately report what professional development activities are needed for business education teachers.

If you need another survey, please call me at (304) 384-531 or e-mail me at robinett@concord.edu and I will get another one to you.

Thank you.

Susan Robinett

APPENDIX F

Second Letters to Two Groups of Business Education Teachers



CONCORD COLLEGE
ATHENS, WEST VIRGINIA 24712

Division of Business and Economics
"PROGRAM OF EXCELLENCE"

April 11, 2000

Mr. John Doe
West Virginia High School
School Drive
City, WV 24000

Dear Mr. Doe:

About three weeks ago, I wrote to you asking for your input concerning professional development activities that you feel would assist you in your continuance of providing high quality instruction to the students in West Virginia's public secondary schools. **You were selected to complete a survey to gather responses of your need for professional development related to professional competencies as defined by the West Virginia Department of Education's Policy 5310: Performance Evaluation of School Personnel.** It should take you approximately **15 minutes** to complete this survey.

The information obtained from the research will be compiled and used by a variety of professional development planners to offer you relevant professional development activities at the local, regional, and state levels. Abby Reynolds, the State Supervisor for Business Education, has endorsed this project in order to plan professional development activities for all business education teachers.

I would appreciate your completing and returning the enclosed survey by **April 21, 2000**. Once again I want to assure you that as a participant in this study, your responses will remain anonymous. The survey has been numbered for **mailing purposes only**. This number will be checked off of my mailing list when the survey is returned, and your name will not appear on the survey instrument or in the project results. If you would like to receive a copy of the results of this study, fill out the enclosed card and mail it with your completed survey in the enclosed, postage-paid envelope. Also, when you complete the card for the project results you will be entered into a drawing in which you can win a free year's membership to the National Business Education Association.

For your convenience, I have enclosed a replacement survey and return envelope. Your cooperation in completing and returning the survey is appreciated. If you have recently mailed the survey, thank you for your assistance.

Sincerely,

Susan K. Robinett
Assistant Professor of Business
Doctoral Candidate, Virginia Tech



CONCORD COLLEGE
ATHENS, WEST VIRGINIA 24712

Division of Business and Economics
"PROGRAM OF EXCELLENCE"

April 11, 2000

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Sincerely,

Susan K. Robinett
Assistant Professor of Business
Doctoral Candidate, Virginia Tech

APPENDIX G

Complete List of Professional Competencies Rated Highest to Lowest by Mean Per Item

Complete Listing of All Professional Development Needs Related to Professional Competencies by Individual Competency

Individual Competency	Item Mean Rating ^a	Competency Area ^b
Incorporates higher level thinking skills.	1.81	IMS
Provides remediation activities for students.	1.64	IMS
Accommodates individual learning differences	1.64	CC
Integrates a variety of technology applications and learning tools to augment student achievement.	1.62	IMS
Determines and utilizes appropriate community resources	1.61	COMM
Demonstrates accurate and current knowledge in subject field.	1.57	PS
Designs, delivers, and assesses students' learning activities addressing the state adopted instructional goals and objectives.	1.47	IMS
Presents reading, writing, speaking, and listening strategies using concepts and languages which student understand	1.44	IMS
Assists students to develop productive work habits and study skills.	1.43	IMS
Encourages students' attendance.	1.40	CC
Utilizes content scope and sequence in planning	1.35	PS
Communicates regularly and effectively with students, co-workers, parents/guardians, and the community, and exhibits appropriate interactive skills.	1.34	COMM
Provides instructional pacing that ensures student understanding.	1.31	IMS
Assigns developmentally appropriate tasks.	1.31	IMS
Develops appropriate lessons to teach instructional objectives	1.30	PS
Encourages and acknowledges individual student accomplishments and appropriate behavior.	1.28	CC
Sets high positive expectations for student performance.	1.28	CC
Employs appropriate lessons to teach instructional objectives.	1.28	PS
Maximizes student time-on-task.	1.27	IMS
Provides relevant examples and demonstrations to illustrate concepts and skills.	1.26	IMS
Bases instruction on adopted curricula for the school.	1.26	PS
Encourages students to express ideas clearly and accurately	1.22	IMS
Establishes procedures and rules that enhance learning.	1.20	CC
Creates and maintains an environment that supports learning	1.18	CC
Participates in activities which foster professional growth	1.15	PWH
Follows established school discipline procedures that include the WV Student Code of Conduct.	1.12	CC
Introduces the instructional activity and specifies instructional objectives.	1.04	IMS

Complete Listing of All Professional Development Needs Related to Professional Competencies by Individual Competency (Continued)

Individual Competency	Item Mean Rating ^a	Competency Area ^b
Summarizes the main point(s) of the instructional activity	1.04	IMS
Begins lesson or instructional activity with a review of previous material as appropriate.	.98	IMS
Adheres to established laws, policies, rules, and regulations	.96	PWH
Treats students in a fair and equitable manner.	.96	CC
Directs students to be on task quickly at the beginning of each instructional activity.	.96	IMS
Communicates student progress according to established procedures and policies.	.95	COMM
Provides feedback on student work.	.94	SP
Follows confidentiality procedures regarding students, parents/guardians, and fellow staff members.	.93	COMM
Prepares and implements lesson plans.	.91	IMS
Monitors and evaluates student progress.	.91	SP
Interacts appropriately with other educational personnel.	.85	PWH
Speaks and writes standard English clearly, correctly, and distinctly.	.85	COMM
Has materials; supplies and equipment ready at the start of the lesson or instructional activity.	.81	IMS
Commands respect by example in appearance, manners, behavior and language.	.79	PWH
Monitors student attendance	.78	SP
Communicates regularly and effectively with students, co-workers, parents/guardians, and the community, and exhibits appropriate interactive skills	.73	SP
Maintains accurate and complete student records	.73	SP
Strives to meet county/school goals.	.71	PWH
Is punctual with reports, grades, records, and in reporting to work.	.70	PWH
Performs assigned duties.	.66	PWH
Summarizes the main point(s) of the instructional activity	1.04	IMS

^aItems were rated on a scale in which 4 = critical need, 3 = high need, 2 = moderate need, 1 = low need, and 0 = no need.

^bIMS=Instructional Management Systems

CC=Classroom Climate

COMM=Communication

PS=Programs of Study

PWH=Professional Work Habits

SP=Student Progress

APPENDIX H

Written Comments of Respondents to the Professional Competency Survey

Relevant Written Comments from Respondents to the Professional Competency Survey

Comments Related to Computer Technology

1. Microsoft Word/Office training
 2. I feel that workshops in technology updates (ex: computer web page design) would be very helpful.
 3. I would like to see in-service on maintaining a windows NT network.
 4. Intensified training sessions in new computer programs as the come out – for instance, WordPerfect 8, Microsoft Word, Presentations, etc. Too often we are given broad knowledge of several areas at once – leads to a “jack of all trades, master of none.” We have so little time to now to learn a new program on our own. I would appreciate intensified training in one area at a time.
 5. Using technology in education – multimedia equipment
 6. Technology
 7. New word processing software
 8. I specifically need more instruction in computer setup and technical troubleshooting equipment and problem knowledge.
 9. Keeping up with constantly changing technology/software.
 10. Providing training in newly adopted school/county software.
 11. The use of advanced technology and software would be helpful
 12. I need more hands-on training in MS Office 2000, use of digital camera, etc.
 13. We need staff development for computers – using the programs, lab management (simple troubleshooting tips).
-

Comments Related to Instruction Methods

1. Integration activities
 2. How to teach courses to special ed. students.
 3. I would also like to see a workshop that shows how business education will or should be integrated into the School-to-Work movement.
 4. Internships on time off to understand new concepts in the business world.
 5. Also, it would be nice if workshops could be given on instructional goals and objectives for individual classes. Teachers could pool ideas about how to meet these objectives.
 6. More help on setting up a business curriculum for grades 7-12. (We are changing from 10-12 to 7-12).
 7. Motivational methods in the classroom.
 8. Test taking strategies.
 9. HSTW programs want integration and collaboration – we need staff development time to attain these goals.
-

Relevant Written Comments Related to the Professional Competency Survey (Continued)

Miscellaneous Comments Related to Professional Development Activities

1. Articulated credit for all state voc ed student in all state institutions.
 2. More help promoting the business programs in high school.
 3. Counseling skills.
 4. Handling problem students – in class.
 5. Coping with classes that contain BD, ADD, LD, MI, accelerated, and average students.
 6. Opportunities provided for professional development through active participation in professional organizations, presentations, etc.
 7. I would like to have professional development seminars in teaching keyboarding, intro to business, bus law, and communication.
 8. We need CE that explains legal consequences for acting or refusing to act in certain student situations (for example, breaking up a fight).
 9. Working with students with special needs continues to frustrate me. We need more training in these areas.
 10. Also, grant writing.
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APPENDIX I

**Complete List of Business Education Content Competencies Rated
Highest to Lowest by Mean Per Item**

Complete Listing of All Professional Development Needs Related to Business Education
Content Competencies by Individual Competency

Individual Competency	Item Mean Rating ^a	Competency Area ^b
Use, select, evaluate, install, customize, plan, design, and diagnose and solve problems with communications and networking systems..	2.92	IS
Describe current and emerging computer architecture; configure, install, and upgrade hardware systems; and diagnose and repair hardware problems (computer architecture).	2.88	IS
Identify, select, evaluate, use, install, upgrade, customize and diagnose, and solve problems with various types of operating systems, environments, and utilities.	2.87	IS
Identify, select, evaluate, use, install, upgrade, and customize application software; diagnose and solve problems occurring from application software's installation and use.	2.78	IS
Enter, sort, and retrieve data from databases; evaluate media and file structures; and plan, develop, and modify file specifications and database schema (file and database management systems).	2.66	IS
Design and implement security plans and procedures for information systems.	2.61	IS
Analyze and design information systems using appropriate development tools.	2.39	IS
Compare, evaluate, and demonstrate skills used in different types and levels of programming languages.	2.36	IS
Plan the selection and acquisition of information systems.	2.34	IS
Develop strategies to make an effective transition from school to work.	2.24	CD
Select and apply information systems across the curriculum	2.22	IS
Apply communication strategies necessary and appropriate for effective and profitable international business relations.	2.18	IB
Describe positions and career paths in information systems.	2.16	IS
Establish and use a personal code of ethics for information systems use and management.	2.15	IS
Explain the role of international business and analyze its impact on careers and doing business at the local, state, national, and international levels (awareness).	2.15	IB
Explain how the advances in computer technology impact upon such areas as property law, contract law, criminal law, and international law (<i>computer law</i>).	2.13	BL
Utilize <i>career resources</i> to develop an information base that includes global occupational opportunities.	2.13	CD

Complete Listing of All Professional Development Needs Related to Business Education
Content Competencies by Individual Competency (Continued)

Individual Competency	Item Mean Rating ^a	Competency Area ^b
Use technology to enhance the effectiveness of communications (technological communication)	2.13	COMM
Apply knowledge gained from individual assessment to comprehensive set of goals and an individual career plan (<i>career strategy</i>).	2.10	CD
Integrate all forms of communication in the successful pursuit of a career (<i>employment communications</i>).	2.09	COMM
Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics in <i>organizational communication</i>	2.08	COMM
Relate the importance of <i>lifelong learning</i> to career success.	2.07	CD
Select and use word processing, desktop publishing, database, spreadsheet, presentation graphics, multimedia, and imaging software and industry-and subject-specific software (<i>common applications</i>).	2.06	IS
Relate work ethic, workplace relationships, workplace diversity, and workplace communication skills to career development (<i>workplace expectations</i>).	2.06	CD
Apply <i>marketing</i> concepts to international business.	2.02	IB
Identify forms of business ownership and entrepreneurial opportunities available in international business (<i>organizational structure</i>).	2.01	IB
Analyze the role and importance of <i>agency law</i> and <i>employment law</i> as they relate to the conduct of business in the national and international marketplaces.	2.01	BL
Define, develop, and apply a code of <i>ethics</i> to various issues confronted by business	2.00	MGT
Address special challenges in operations and <i>management</i> of human resources in international business.	1.99	IB
Explain the role, importance, and concepts of international <i>finance</i> and risk management.	1.98	IB
Describe the environmental factors that define what is considered <i>ethical</i> business behavior.	1.97	IB
Assess the <i>impact</i> of information systems on society.	1.96	IS
Develop, implement, and evaluate a <i>marketing research</i> project.	1.94	MKT
Develop a <i>business plan</i> .	1.94	ENT
Describe the social, cultural, political, legal, and economic factors that shape and impact the international business environment (<i>environment</i>).	1.93	IB

Complete Listing of All Professional Development Needs Related to Business Education
Content Competencies by Individual Competency (Continued)

Individual Competency	Item Mean Rating ^a	Competency Area ^b
Develop a <i>marketing</i> plan for an entrepreneurial venture.	1.92	ENT
Explain the legal rules that apply to marriage, divorce, and child custody (<i>domestic relations law</i>).	1.91	BL
Apply <i>forecasting</i> principles and methods to determine sales potential for specific products.	1.91	MKT
Explain the legal rules that apply to <i>environmental law</i> and <i>energy regulation</i> .	1.89	BL
Develop a <i>marketing plan</i> encompassing all of the necessary components.	1.88	MKT
Develop a <i>management</i> plan for an entrepreneurial venture.	1.88	ENT
Analyze financial data influenced by internal and external factors in order to make long-term and short-term management decisions (<i>financial decision making</i>).	1.88	MGT
Assess personal strengths and weaknesses as they relate to career exploration and development (<i>self awareness</i>).	1.87	CD
Analyze and interpret data using common statistical procedures (<i>statistics and probability</i>).	1.85	COMP
Identify numerous marketing variables and strategies in dealing with a diversified marketplace (<i>characteristics of a market</i>).	1.85	MKT
Identify, describe, and analyze the impact and relationship of <i>government regulations</i> and community involvement to business management decisions (<i>and social responsibility</i>).	1.84	MGT
Relate <i>balance of trade</i> concepts to the <i>import/export</i> process.	1.84	IB
Analyze the relationship among <i>contract law</i> , <i>law of sales</i> , and <i>consumer law</i> .	1.84	BL
Describe the activities of human resources managers and their importance to the successful operation of the organization (<i>human resource management</i>).	1.84	MGT
Illustrate how the <i>functions of management</i> are implemented and explain why they are important.	1.84	MGT
Communicate in a clear, courteous, concise manner on personal and professional levels (<i>foundations of communication</i>).	1.84	COMM
Define, develop, and apply a code of <i>ethics</i> to various marketing issues.	1.83	MKT
Explain the legal rules that apply to personal property and real property (<i>property law</i>).	1.83	BL

Complete Listing of All Professional Development Needs Related to Business Education
Content Competencies by Individual Competency (Continued)

Individual Competency	Item Mean Rating ^a	Competency Area ^b
Analyze the relationship between ethics and the law and describe the sources of the law, the structure of the court system, the different classifications of procedural law, and the different classifications of substantive law (<i>basics of the law</i>).	1.83	BL
Analyze the functions of <i>commercial paper, insurance, secured transactions, and bankruptcy</i> .	1.83	BL
Apply generally accepted <i>operations management</i> principles and procedures to the design of an operations plan.	1.82	MGT
Apply <i>economic concepts</i> when making decisions for an entrepreneurial venture.	1.82	ENT
Develop and use <i>general managerial skills</i> .	1.82	MGT
Determine appropriateness of <i>wills and trusts</i> in estate planning.	1.81	BL
Justify the need to gain and maintain competitive advantage through the use of internal comparisons and external research services (<i>competitive analysis and marketing strategy</i>).	1.80	MGT
Apply basic <i>social communication</i> skills in personal and professional situations.	1.80	COMM
Use mathematical procedures to <i>analyze and solve business problems</i> for such areas as taxation, investments, payroll, financial statements, and credit management.	1.79	COMP
Identify the four general forms of <i>promotion</i> and determine how each contributes to marketing.	1.79	MKT
Identify and use the necessary <i>financial</i> competencies needed by an entrepreneur.	1.78	ENT
Describe how cultural differences, export/import opportunities, and current trends in a <i>global marketplace</i> can affect an entrepreneurial venture.	1.76	ENT
Describe the role of <i>organized labor</i> and its influence on government and business.	1.76	MGT
Identify various <i>organizational structures</i> and discuss the advantages and disadvantages of each.	1.75	MGT
Identify marketing roles and analyze the impact of marketing on the individual, business, and society.	1.73	MKT
Describe the major types of <i>business organizations</i> operating within the socio-economic arena of the national and international marketplace today and in the future.	1.73	BL

Complete Listing of All Professional Development Needs Related to Business Education
Content Competencies by Individual Competency (Continued)

Individual Competency	Item Mean Rating ^a	Competency Area ^b
Compare and contrast the basic tenets of <i>management theories</i> and explain why they are important.	1.72	MGT
Use planning and control principles to evaluate the performance of an organization and apply differential analysis and present value concepts to make decisions (<i>interpretation and use of data</i>).	1.70	ACCT
Explain the role of <i>pricing</i> in the marketing process and describe the use of various pricing strategies.	1.69	MKT
Apply distribution processes and methods to develop distribution plans (<i>place</i>).	1.69	MKT
Identify and explain how <i>external factor</i> influence/dictate marketing decisions.	1.69	MKT
Use common international standards of measurement in solving problems.	1.69	COMP
Identify unique <i>characteristics</i> of an entrepreneur and evaluate the degree to which one possesses those characteristics.	1.67	ENT
Examine the importance of economic relationships among nations and discuss the role of <i>international</i> trade and investment and international monetary <i>relations</i> in the global economy.	1.66	ECON
Prepare, interpret, and analyze <i>financial statements</i> using manual and computerized systems for service, merchandizing, and manufacturing business.	1.65	ACCT
Apply appropriate accounting principles to various forms of ownership, payroll, income taxation, and managerial systems (<i>special applications</i>).	1.64	ACCT
Explain how the U.S. economy functions as a whole and describe macroeconomics measures of economic activity such as gross domestic product, unemployment, and inflation (<i>aggregate supply and demand</i>).	1.63	ECON
Use algebraic operations to solve problems (<i>patterns, functions, and algebra</i>).	1.63	COMP
Describe how ethics, government, and different forms of business ownership affect the entrepreneurial venture (<i>legal</i>).	1.62	ENT
Describe different types of competitive structures and illustrate the role of competitive markets in the U.S. and other economies (<i>competition</i>).	1.62	ECON

Complete Listing of All Professional Development Needs Related to Business Education
Content Competencies by Individual Competency (Continued)

Individual Competency	Item Mean Rating ^a	Competency Area ^b
Relate personal interests, wants, and abilities to career choices and assess how conditions in the labor market may affect <i>career choices</i> .	1.61	ECON
Identify, establish, maintain, and analyze appropriate records to make business decisions (<i>accounting</i>).	1.61	ENT
Identify opportunity costs and trade-offs involved in making choices about how to use scarce economic resources (<i>scarcity, choice, and opportunity costs</i>).	1.56	ECON
Use a rational <i>decision-making</i> process as it applies to the roles of citizens, workers, and consumers.	1.56	ECON
Explain the role of core <i>economic institutions</i> and <i>incentives</i> in the U.S. economy.	1.54	ECON
Describe the role of <i>markets</i> and <i>prices</i> in the U.S. economy.	1.53	ECON
Explain the role of <i>exchange</i> and <i>money</i> in an economic system and describe the effect of <i>interdependence</i> on economic activity.	1.53	ECON
Analyze the role of <i>supply</i> and <i>demand</i> in the U.S. economy.	1.52	ECON
Manage limited personal resources and recognize that more of the wants and needs of members of a society can be satisfied if wise consumer decisions are made (<i>role of consumers</i>).	1.48	ECON
Use touch-keyboarding skills to enter and manipulate text and data.	1.46	IS
Explain the importance of <i>productivity</i> ; and discuss how specialization, division of labor, saving, investment in capital goods and human resources, and technological change effect productivity.	1.46	ECON
Describe rights and responsibilities of citizens in the U.S. economy, including their role in making decisions that affect individual and societal needs and wants (<i>role of citizens</i>).	1.46	ECON
Discuss the <i>role of government</i> in an economic system, especially the necessary and desirable role of government in the U.S. economy.	1.46	ECON
Explain why societies develop <i>economic systems</i> , identify the basic features of different economic systems, and discuss the major features of the U.S. economy.	1.44	ECON
Solve problems containing whole numbers, decimals, fractions, percents, ratios, and proportions (<i>number relationships</i>).	1.39	COMP

Complete Listing of All Professional Development Needs Related to Business Education
Content Competencies by Individual Competency (Continued)

Individual Competency	Item Mean Rating ^a	Competency Area ^b
Apply basic mathematical operations to solve problems (<i>computational skills</i>).	1.37	COMP
Determine the value of assets, liabilities, and owner's equity according to generally accepted principles, explaining when and why they are used (<i>accounting process</i>).	1.20	ACCT
Complete the various steps of the <i>accounting cycle</i> and explain the purpose of each step.	1.15	ACCT

^aItems were rated on a scale in which 4 = critical need, 3 = high need, 2 = moderate need, 1 = low need, and 0 = no need.

^bIS=Information Systems
 CD=Career Development
 IB=International Business
 BL=Business Law
 COMM=Communications
 MGT=Management
 MKT=Marketing
 ENT=Entrepreneurship
 COMP=Computation
 ACCT=Accounting
 ECON=Economics and Personal Finance

APPENDIX J

Written Comments of Respondents to the Business Education Content Competency Survey

Relevant Written Comments from Respondents to the Business Education Content Competency Survey

Comments Related to Computer Technology

1. More professional development on technology and computers.
 2. Prepare for MOUS certification training.
 3. Computer troubleshooting.
 4. Design and maintain a web page for a business.
 5. Using NT, Poledit, etc. to set up classes, users, apply security, etc.
 6. Training to meet BCA 17 – demonstrate an understanding of office scheduling and organizing (calendars, appointments, and addresses) software.
 7. Also, desktop publishing training would be useful, as well as training on Access, and the WVEIS email system.
 8. My teaching assignments are currently in Intro. to Business Computer Applications & Keyboarding. If my fields were to change, I would need “critical” training in most other areas! However, if you’re asking me what training I need right now, most answers would reflect “little” need with the exception of Information Systems.
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Miscellaneous Comments Related to Professional Development Activities

1. I feel that teachers who teach keyboarding and computer oriented class the entire school day should try to incorporate more teaching strategies than they do. Students must be able to interact with each other during a tutorial briefing or after a tutorial briefing. More cooperative learning/grouping should be in place. As more students should be able to create typing documents for their everyday life it is even more important to keep students interested in higher communication skills within a computer setting.
 2. With the information that has been provided to me, I see a lot of opportunities in the career development area. I need more in Business Law and communications.
 3. It would be nice to have some help/tips on counseling students and helping them face situations and difficulties they encounter. We only have a counselor ½ time – what do these students do the other ½ time?
 4. I feel that now the biggest concern is keeping Business Ed teachers. One school in our county has gone from 8 to 2.
 5. Upbeat seminars provided by competent, respectable business professionals in all areas listed.
-

VITA

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EDUCATION:

Ph.D. in Education in Vocational and Technical Education, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, May 2001.

M.S. in Education in Vocational and Technical Education, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, May 1991.

B.S. in Business Education, Radford University, Radford, Virginia, August 1987.

PROFESSIONAL EXPERIENCES:

Assistant Professor of Business, Concord College, Athens, West Virginia (July 1992–present). Teach courses in the Business Education and Office Administration Department of the Division of Business and Economics. Additional faculty responsibilities include participating in College and Division committees, advising students, conducting assessment measures for the Department, participating in recruitment and retention activities, participating in the Division's mission for AACSB accreditation.

Adjunct Instructor, Northampton Area Community College, Bethlehem, Pennsylvania (August 1991–May 1992). Taught secretarial, office procedures, and computer application courses in the Office Administration Department of the Division of Business and Technology.

Secondary Business Education Teacher, Tazewell County Public Schools, Tazewell, Virginia (August 1988-June 1990). Taught a variety of secondary business education courses including keyboarding, computer applications, and office procedures courses. Conducted an adult introductory word processing course.

Secondary Business Education Teacher, Russell County Public Schools, Lebanon, Virginia (August 1987-June 1988). Taught a variety of secondary business education courses including keyboarding and introduction to business courses. Conducted an adult introductory computer course.

INDUSTRY AND ADULT TRAINING EXPERIENCE:

Instructor, Center for Economic Action, Concord College, Athens, West Virginia (1994). Conducted a training course in the application software, Lotus 123, to area business people.

Instructor, Center for Business and Industry, Northampton Area Community College, Bethlehem, Pennsylvania (1991-1992). Conducted several off-site computer application workshops for area businesses.

Instructor, YMCA University Open Adult Classes, Montgomery County Public Schools, Blacksburg, Virginia (1991). Conducted a nine-week introductory computer course.

RELATED WORK EXPERIENCE:

Graduate Project Assistant, National Center for Research in Vocational Education, Virginia Tech Site, Blacksburg, Virginia (Spring Semester 1991). Responsibilities included managing a database of the National Center's activities (a total of six sites), publishing a quarterly calendar of national events, and conducting research to develop materials for a nationally broadcast teleconference.

Internship, New River Community College Center for Training and Development, Dublin, Virginia (Spring Semester 1991). Responsibilities included designing a survey of training needs for area businesses and participating in the regular duties of my supervisor.