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# Reading Skill Integration In High School Business Courses: Perceptions Of Business Teacher Educators In The United States

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READING SKILL INTEGRATION IN HIGH SCHOOL BUSINESS COURSES:  
PERCEPTIONS OF BUSINESS TEACHER EDUCATORS IN THE UNITED STATES

by

Frederick William Polkinghorne

B.S.E., University of Central Missouri, 2003

M.S., Emporia State University, 2006

A Dissertation

Submitted in Partial Fulfillment of the Requirements for the  
Doctor of Philosophy Degree in Education

Department of Workforce Education and Development  
in the Graduate School  
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DISSERTATION APPROVAL

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## AN ABSTRACT OF THE DISSERTATION OF

Frederick William Polkinghorne, for the Doctor of Philosophy of Education degree in Workforce Education and Development, presented on June 4, 2009, at Southern Illinois University Carbondale.

**TITLE: READING SKILL INTEGRATION IN HIGH SCHOOL BUSINESS COURSES: PERCEPTIONS OF BUSINESS TEACHER EDUCATORS IN THE UNITED STATES**

**MAJOR PROFESSORS:** Dr. Marcia A. Anderson, Ph.D.  
Dr. Barbara E. Hagler, Ph.D.

The problem of this research was to determine (a) perceptions of business teacher educators regarding the nature of integrated reading skill instruction in high school business courses, (b) the professional development background of business teacher educators for integrated reading skill instruction, and (c) the influence of selected variables on business teacher educators' perceptions of reading skill integration in high school business courses. The study population included 188 business teacher educators in 36 states. Data were gathered through the use of a survey instrument that was validated by a panel of experts and pilot tested.

Conclusions state that business teacher educators perceive it is important to explicitly integrate reading skills in business courses. They reported the frequent integration of reading skills could improve the business and reading knowledge of learners. Study participants felt they were adequately prepared to instruct business education teacher candidates in methods of integrating reading skills in business courses.

The study participants indicated they could use additional training to prepare business education teacher candidates to integrate reading skills in business courses. The same group indicated the most influential training to integrate reading skills occur during

classroom practice, university coursework, and/or professional development conferences/workshops.

Extensive participant characteristics were collected. The focus (research, teaching, or a combination of the two) of the participants' university and the duration of their teaching experience had a significant impact on their perception of the importance and outcome of integrating reading skills in business courses.

It is recommended that business teacher educators be exposed to professional development opportunities focused on preparing business teacher educators in methods of integrating reading skills in business courses. Further research is recommended that determines if business teacher educators are actually preparing business teacher educators to integrate reading skills in business courses, the methods of preparation, and the impact on student reading and business skill achievement as a result of the integration of reading skills in business courses.

## DEDICATION

Joyce, thank you for your assurance that I could leave town, make it past the county line, and earn an education. I will never forget the way you could rescue me from my own self-destruction, dust-off my knees, and push me back out into the halls of our little country school. I wish you could have been here to see this.

## ACKNOWLEDGEMENTS

The light at the end of the tunnel is now quite bright and I am confident I will be there to make it to the finish line. I am much different now, both personally and physically, after the long and tenacious journey across the Midwest to earn the highest of academic degrees. I could not have made it this far without the support of many academicians, colleagues, and friends. This section of my dissertation will not do them justice in thanking and honoring them for propping me up when I fell (which was more often than I would like to admit). However, given the context this short passage will have to do.

First and foremost, I would like to recognize Drs. Marcia Anderson and Barbara Hagler at Southern Illinois University Carbondale. I must have driven you both to the point of delirium with my incessant questions and appeal for assistance. Your patronage is appreciated. You both have left a major impression on my personal being. Without your support this dissertation would not have been written nor would I have completed degree requirements at Southern Illinois University Carbondale.

Secondly, I am forever indebted to Dr. Nancy Groneman-Hite from Emporia State University for entertaining my desire to construct a thesis. Without this early experience in research my terminal education would not have been quite so rewarding. Thirdly, Dr. Zinnia Bland of the University of Central Missouri inspired me to enter the publication world with an unannounced visit to the halls of Field Kindley Memorial High School in Coffeyville, Kansas. Thank you.

Mary Hilgeman and Lindsey Moore, both graduate assistants at Valdosta State University gratefully assisted me in the location of participants and coding of data.



Without these two competent individuals the construction of this dissertation would not have been quite so rewarding and the process certainly would have taken much more time to complete. I am forever grateful.

It is only fitting that I acknowledge my best friend, Chris. It was his wisdom and confidence that guided me down the path when I could not see. It was the rather lengthy phone calls to discuss current and future events that let me know, that while I might have felt rather lonely, I had a friend close in spirit.

Finally, the students from Sedalia School District, Field Kindley Memorial High School, Winfield R-IV Middle School, Southern Illinois University Carbondale, and Valdosta State University have provided me with more knowledge than they will ever know.

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## CHAPTER 1

### INTRODUCTION

#### Background of the Study

The education paradigm emphasized during the early part of the 21<sup>st</sup> Century clearly called for an emphasis on basic skills (*No Child Left Behind*, 2001). The term “*basic skill*” is widely recognized as skill in reading, writing, or math. In fact, the United States national assessment of educational achievement assesses students in two basic skill areas: mathematics and reading. The term reading refers to the ability of a subject to phonemically announce and comprehend written or symbolic material. The focus in this document is on reading and its place in Career and Technical Education (CTE) programs.

A review of literature illustrated the evolution of CTE over the last century. CTE had responded to the dynamic economic needs of the United States. During the current decade politicians, parents, and educators have demanded accountability. In an effort to hold CTE programs accountable, the National Assessment of Vocational Education (NAVE, 2004), a report, was produced and submitted by the U.S. Department of Education to Congress.

The latest National Assessment of Vocational Education (2004) sounded an alarm throughout the country with a clear statement that “secondary vocational [Career and Technical] education itself is not likely to be a widely effective strategy for improving [basic skills]” (NAVE, 2004, p. 264). The same report claimed CTE had “0 effect” on the basic skill achievement of secondary school students (p. 265). Finally, it clearly called for “a greater focus on [basic skills]” (p. 266).

Research that profiled the reading skills of youth in the United States began to illuminate major problems. In fact, the National Center for Education Statistics (2005) indicated that about 92% of secondary school sophomores lacked the ability to make connections between multiple sources of information. About 90% of students were only able to make simple connections in a single document.

Perie, Grigg, and Donahue (2005) indicated little improvement in reading skills occurred between 1992 and 2005. The authors emphasized the lack of basic skill progress in spite of billions of dollars of spending on educational research. In response to the disheartening basic skill performance of United States youth, the federal government had implemented the *No Child Left Behind Act* (2001). This legislation held public schools accountable for improvement in the reading skills of school children.

By 2004, 40 states had developed basic skill standards in reading (Education Commission of the States, 2007). The Education Commission of the States (2007) further reported only 30 states were assessing students in reading and language arts. In 2007, the Commission on No Child Left Behind released a landmark study that began to draw attention to the early results of the *No Child Left Behind Act*. The study indicated “substantial” changes in nearly every aspect of the high school educational process (Education Commission of the States, 2007, p. 12). Also, the reading skills of adolescents had improved between 2003 and 2005. Unfortunately, the improvement in reading skills seemed to have stalled after 2005 (Education Commission of the States, 2007).

Collegiate institutions responsible for teacher preparation began to recognize the paradigm used to prepare teacher education candidates for school classrooms must respond to political legislation. In effect, teacher educators began to realize that the

curricula used to prepare teacher education candidates must be developed to meet the requirements of legislation like the *No Child Behind Act* (2001), which required improvement in reading skills. Hamel and Merz (2005) indicated the potential positive impact on student achievement emphasized through legislation seemed “reasonable enough” (p. 158). In fact, they indicated that teacher education institutions should work with federal policy makers to find the best way to improve student achievement.

The *Higher Education Act* (1998) called for the reform of teacher education program models. The act called for teacher education programs that would improve high school student achievement. Teacher education institutions, who received federal funding through the *Higher Education Act*, spent about \$830,000 per year in 1998, on reforming their teacher education programs (Levine, 2006).

By 2006, Levine reported there were still serious issues in the way teachers were prepared. Levine (2006) went so far as to explicitly state, “taken as a whole the nation’s teacher education programs would have to be described as inadequate” (p. 27). Levine reported that teacher educators were pressured to conduct research that was “not meaningful” nor would lead to improvement in high school student achievement (p. 18). The report authored by Levine (2006) was highly criticized by teacher education colleges, as a result of his research paradigm. However, the report nonetheless drew attention to the way teachers were being prepared.

The emphasis placed on poor educational research, in light of more in-depth meaningful studies, emphasized that teacher educators were often focused on the publication of research rather than engaging in continual professional development. In fact, Calhoun (1983) recommended that teacher education institutions should explicitly



focus on faculty development. The National Association for Business Teacher Education (NABTE) underscored Calhoun's concern when it claimed that business teacher educators should be involved in continual professional development activities (NABTE, 1997)

NABTE highlighted the importance of professional development in its publication, *Business Teacher Education Curriculum Guide & Program Standards* (1997). Earlier research into the professional development needs of business teacher education had been conducted by Tyner (1996). The author supported the idea that business teacher educators did indeed need additional professional development. One of the areas reported by Tyner (1996) that teacher educators felt they needed more preparation in the development of new teaching methods. This seemed to echo the same perception of practicing business teachers (Polkinghorne, 2006).

Graves, Pauls, and Salinger (1996) contended that all teachers, including content area teachers, must teach reading skills. As a result, Boatright (2005) reported that all teachers must receive "adequate preparation" to work with an "integrated curriculum" (p. x). The National Business Education Association (2007), the largest organization of business teachers in the United States, listed reading skill development as a goal in all content courses taught by business teachers. At the same time, the Agnew Group (2007) reported that business educators should be creating a "shift towards [integrated] instruction" (p. 56). The questions that remained open are do business teacher educators perceive (a) they have the preparation for instructing business education teacher candidates in integrated reading skill methods and (b) instructing business education teacher candidates in integrated reading skill methods to be important?

### Purpose of the Study

The purpose of this research was to contribute to the knowledge base regarding views of business teacher educators in regards to the integration of reading skill instruction in high school business education courses.

Increased pressure from federal policymakers to integrate high school business education curricula with reading skill content requires that business education teacher candidates be prepared to enhance their curricula. Requiring high school business teachers to show evidence that their curriculum increases the reading skills of learners, without preparing those same teachers with methods to enhance their curriculum, could be a significant barrier to increased student reading skill achievement. Those interested in improving the reading skill achievement of high school learners should consider the results of this study to develop or review teacher education programs and provide professional development opportunities to teacher educators and teachers alike.

### Statement of the Problem

The problem of this research was to determine (a) perceptions of business teacher educators regarding the nature of integrated reading skill instruction in high school business courses, (b) the professional development background of business teacher educators for integrated reading skill instruction, and (c) the influence of selected variables on business teacher educators' perception of reading skill integration in high school business courses.

### Justification for the Study

Adolescents are increasingly identified with low-level reading skills. Jacobs (2008) reported there is a crisis in the United States education system. The author

contended that adolescents are short-changed in their development of reading skills.

Jacobs (2008) reported that instruction in content area reading skill development, when it occurs, is often without students understanding why reading skills are important or how they should read. As a result, students fail to develop necessary reading skills.

Business teachers proclaim they do not have the training necessary to increase the reading skills of adolescents, or the time to do so (Jacobs, 2008). Who should provide the additional instruction in reading skills to high school learners; “remains an open question” (Jacobs, 2008, p. 22).

Unfortunately, teacher education programs lack focus on how teachers should integrate reading skill development in their courses across the content areas (Conley, 2008). Leading reading researchers, such as Conley (in press), have reported that teacher education programs have failed to understand that the purpose of teaching is to promote student understanding of the content. As a result, teacher education programs fail to recognize the connection between content areas and compartmentalize what could be a holistic learning environment. Draper (2008) stated that all teacher educators could benefit from taking a course in content area reading methods.

Draper (2008) contended a content area reading course should be taught by someone who deeply understands the content and connections between teaching the content and providing the necessary reading methods for continued exploration of the material. The same author reported that the problem was that content area teacher educators lack the understanding of the importance of reading skills, lack the preparation to instruct preservice teachers in the methods of reading instruction, and are unwilling to expand the preservice curricula for teacher education candidates.

### Limitations/Delimitations

1. Research study participants consisted of business teacher educators whose primary responsibility was to instruct teacher strategy and/or methodology courses at collegiate institutions in the United States. Because of the nature of business teacher education programs, teacher educators may instruct more than one content area in instructional methods. Consequently, data may not necessarily be solely representative of business teacher education programs.
2. In an effort to preserve the population of eligible participants in the study, family and consumer science teacher educators pilot tested the survey instrument; the procedures section provides an explanation for using this group of teacher educators.
3. Because of the nature of descriptive perception studies, results from the survey instrument consisted of self-reported data. It was assumed that participants would not be influenced by the Hawthorne Effect, which is the tendency to change their response or action when under observation.
4. Because of the decreasing number of business teacher education programs, in the United States, the population for the study was relatively small (n=188).
5. Questionnaire items utilized the term “rarely” and “frequently”. As such, the questions are open to the interpretation of the participant.
6. All participants’ data were treated equally. As such, participant data from those other than active in the profession were treated as being salient. Therefore, the perception of those individuals in terms of the national status may have influenced the overall data set.

## Definition of Terms

*Basic skills* - are widely recognized as skill in reading, writing, or math.

*Experience* - factors that include (a) degree earned, (b) degree field of study, (c) institutional type of experience (i.e. high school, middle school, two-year or four-year institution), (d) number of years of experience in each category of educational institution, and (e) last year of full-time practice in secondary/middle school environments.

*Explicit method* - an instructional technique that occurs with students being knowledgeable about the process and purpose.

*Implicit method* - an instructional technique that occurs without students being knowledgeable about the process and purpose.

*Integration* - refers to teaching basic skills in the context of business education courses in a manner that goes beyond what might normally occur in the delivery of business content.

*Reading* - the ability of a subject to phonemically announce and comprehend written or symbolic material.

*Teacher education candidate* - the term teacher education candidate is used in the study to refer to teachers who have not yet earned full teacher certification/licensure to practice in elementary, middle, and/or secondary schools.

## CHAPTER 2

### REVIEW OF LITERATURE

#### Introduction

Current research reported that the reading skills of adolescents are in crisis (Jacobs, 2008). The problem of this research was to determine (a) perceptions of business teacher educators regarding the nature of integrated reading skill instruction in high school business courses, (b) the professional development background of business teacher educators for integrated reading skill instruction, and (c) the influence of selected variables on business teacher educators' perception of reading skill integration in high school business courses.

An exhaustive review of literature was conducted to gather information about the preparation and perceptions of business teacher educators in regards to the integration of reading methods in business courses. Specifically, literature was reviewed in the areas of (a) conceptual frameworks for content-reading instruction, (b) conceptual frameworks for CTE instruction, (c) combined conceptual frameworks for content area reading in CTE programs, and (d) teacher education institution professional development models.

#### Conceptual Frameworks for Content-Reading Instruction

The foundation of content-reading research indicated that reading, the ability of a subject to phonemically announce and comprehend written or symbolic material, was taught in a three-fold methodology. The three steps associated with reading development include "subject-matter knowledge, instructional methods, and social contexts" (Kehe, 2003, p. 18). The three-fold methodology for content area reading contains the necessary components for cognitive learning theory. Both Piaget (1988) and Vygotsky (1978)

reported students develop through a continuum of psychological and cognitive development.

Vygotsky (1978) reported learners rely on social contexts and societal tools to form an in-depth understanding of knowledge. The same author indicated that coupling reading skill development in meaningful contexts assisted learners in retaining information and assimilating the knowledge within their existing schematically arranged experiences.

Piaget (1988) indicated learners advance through four distinct stages of cognitive development. Piaget's hierarchy of cognitive development includes (a) sensorimotor, (b) preoperational, (c) concrete, and (d) formal operational modes. The hierarchy was likened to a continuum that begins at birth and progresses into the early adult years. The concrete operation mode of cognitive development included the adolescent years. During the concrete stage, students began to assimilate information into their experiences. At the same time, contextualization (or relating new knowledge to experience) becomes increasingly important.

Cognitive psychology researchers began to recognize the need for active involvement in the learning process. Prior to the movement for cognitive psychology research, educational leaders relied on the work of Skinner (1945). Skinner reported students exposed to repetitive activity in a passive format would learn. The same research found students did not need to be active in the learning process. This movement was referred to as behaviorist theory. Behavioral theory guided United States educational institutions into the late 1970s.

Theoretical shifts during the late 1970s began to recognize the behavioral learning theory proposed by Skinner was not sufficient in increasing student reading comprehension in content area courses (Herber, 1970). Reading researchers began to examine the impact of teaching reading in the context of content area courses. This theoretical shift from a behaviorist to a cognitive perspective propelled a research agenda aimed at understanding the connection between students' existing knowledge and the text itself (Lester, 1997).

A myriad of social science researchers indicated subject-matter knowledge is an important component of effective teaching (Draper, 2008; Kehe, 2003; Stone et al, 2008). A teacher's ability to contextualize abstract content-knowledge to authentic learning opportunities is essential to the student's ability to retain and apply knowledge to unique situations (Piaget, 1988; Vygotsky, 1978). Contextualizing subject-matter knowledge in social context is supported in both content area reading and cognitive research.

Early content area reading research focused on students' ability to pronounce written materials. For example, reading experts had referred to this stage as learning to read. The content area reading movement began to call for the explicit teaching of reading methods in content courses. Later, content area research began to focus on reading comprehension. Reading comprehension is when students are able to understand what they have read and how it applies to abstract situations. The ability to relate materials previously read to unique learning situations is referred to as the reading-to-learn stage of reading development.

A growing body of research had pointed to a longitudinal trend of decreased reading skills as students advance through the United States high school education



system. As early as 1941, the first textbook aimed at addressing reading at the upper grade levels was published (Bond & Bond, 1941). The assumption of the authors was that teachers needed to understand the unique needs of adolescent content learners and provide formal instruction. This shift in reading education had resulted from research that indicated isolated reading skill development would not increase reading comprehension in content courses (Herber, 1970).

The highly visible and cited report *Becoming a Nation of Readers: The Report of the Commission on Reading* recommended teachers spend additional time on direct reading comprehension instruction in United States middle and upper level classrooms (Anderson, Hiebert, Scott, & Wilkinson, 1985). The report served as a catalyst for the investigation of the impact of direct reading instructional methods on students' content-reading comprehension skills. Research validating the importance of reading methods in content area courses was conducted.

Research began to converge on findings that supported the integration of reading comprehension instructional methods in social contexts by highly literate high school content area teachers. Many high school educators failed to respond. Research reported the perception of high school content area teachers was that teaching reading was the job of English and reading teachers (Lester, 1997).

### Conceptual Frameworks for CTE Instruction

A societal economic shift during the 1990s resulted in the apparent need for increased reading, to be able to phonemically announce and comprehend written or symbolic material, and for developed skills for a technologically evolving United States workforce. The predominant responsibility for educating learners to enter the workforce

was charged to career and technical educators. The overarching philosophy of CTE since its United States launch in the early 1900s was to prepare students for work.

The roots of CTE were traced to 19th century Europe. The foundation for the United States system of CTE is traced to the passage of the *Smith-Hughes Act* (1917). This 1917 legislation relied on the philosophy that learners required education for work. The exact nature of work education was heavily debated by educational philosophers Dewey, Prosser, Quigley, and Snedden.

Dewey (1916), Snedden (1910), and Prosser and Quigley (1949) conceptualized CTE differently. The philosophy of those educators converged on the finding that CTE was crucial to the economic development of the United States. Their differences were most notable in the administration of CTE programs, specifically in the area of basic skill studies.

Dewey (1916) argued for a system of education where all students had the opportunity to pursue an education of their choice including coursework in basic skills and CTE. The philosopher indicated the separation of basic skills and CTE would make it difficult for individuals to gain proficiency in both areas. Dewey argued for an integrated format where students would gain both basic and CTE skills. Dewey indicated an education through occupations would benefit all students.

However, Prosser and Quigley (1949) converged on the ideology that some students would benefit from CTE while others would benefit from a basic skills education. Prosser and Quigley (1949) supported a dual-track education system. The same philosophers indicated blending career and technical and basic skills education would prevent the maximum effectiveness of either system.

The passage of the *Smith-Hughes Act* (1917) favored the philosophy of Prosser and Quigley. Not until the launch of Sputnik in the 1950s was federal support for CTE questioned. During the 1950s, politicians, employers, and citizens called for an emphasis on science and mathematics. The launch of Sputnik resulted in the perception that the United States was falling behind their foreign competitors in the basic skill preparation of adolescents.

Between 1950 and 1980, support for CTE began to shift with the political zeitgeist. Zeitgeist refers to the political party (democrat, independent, liberal, or republican) in control of the federal and/or state government in the United States. The Commission for Equality in Educational Opportunities released the *A Nation at Risk* report in 1983. The report claimed that the United States education system was failing the needs of the United States population. Ravitch (1983) likened the support for CTE to a pendulum. The researcher indicated that support for CTE would continue to shift, as the economic needs of the United States changed.

The *A Nation at Risk* (1983) report fueled an education reform movement centered on accountability. Reform efforts centered on the development of standards and assessments. Educators indicated standards were essential skills that all students should possess. In response to the development of standards, education reform leaders began to call for the assessment of students' progress in meeting benchmarks.

The first two national assessments of students' progress in meeting basic skill standards were called the *National Assessment of Education Progress* (Perie, Grigg, & Donahue, 2005) and *Trends in International Mathematics and Science* (Gonzales, Guzman, Partelow, Pahlke, Jocelyn, Kastberg, et al., 2004). Data from the assessments

indicated student achievement in reading and mathematics was subpar to that of foreign competitors. The United States public, government, and education leaders immediately called for reform.

The reformation of the United States education system was fueled by encouragement from the federal government. Government legislation promised increased funding for research, assessment, and education reform efforts. As early as 1984, the *Carl D. Perkins Vocational Education Act* highlighted the importance of basic skill integration in CTE programs. Subsequent reauthorizations of the *Perkins Act* (1990, 1998, 2000, 2006) continued to call for increased basic skill and CTE integration.

The National Assessment of Vocational Education (2004) indicated that CTE had little benefit to learners. At the same time, the commission found the efforts from the *Carl D. Perkins Act* (1998) did little in transitioning CTE programs to an integrated format, where learners could increase both content and basic skills. Few research studies indicated significant results in basic skill improvement of CTE program enrollees (NAVE, 2004). The national assessment reported the purpose of CTE was not clearly defined - converging on findings from Johnson, Charner and White (2003) who reported current legislation had done little in the way of defining integration or providing suggestions as to what methods and procedures for effective integration might look like.

As CTE moved into the 21<sup>st</sup> Century, politicians, employers, and the public began an outcry for a system of accountability for student achievement. The most visible legislation, the *No Child Left Behind Act* (2001) called for the assessment of basic skill achievement in mathematics and reading. Reports from schools on their progress in meeting the legislation had resulted in an increased awareness of schools that were not

providing students with a sound foundation in reading (Perie, Grigg, & Donahue, 2005; Thompson & Barnes, 2007).

Politicians relied on the National Assessment of Vocation Education results to call for the end of federal support for CTE (*Carl D. Perkins CTE Improvement Act*, 2006). However, efforts from the CTE community had prevented the end of federal support. Legislators agreed to continue funding CTE programs contingent on development of programs that showed an improvement in the basic skill attainment of youth.

CTE programs had historically been described as a pendulum that swings from basic skills to career development (Ravitch, 1983). The *Carl D. Perkins Act* (2006) tied federal support for CTE to *No Child Left Behind* (2001) assessments, an indication that the current political zeitgeist was calling for increased basic skills. The *Carl D. Perkins Act* (2006) called for CTE programs to improve the reading and mathematical skills of program enrollees.

#### Basic Skill Integration in CTE

Overwhelming pressure had been exerted to increase the reading skills of United States high school students. In fact, the paradigm during the 21<sup>st</sup> Century called for implementation of scientifically-based programs that encouraged reading (Forrest, 2006). The same report indicated that a “balanced approach to develop” reading skills must be adopted “across content [-] areas” (p. 108). Moore, Bean, Birdyshaw, and Rycik (1999) reported that “adolescents are being short-changed” in reading education research (p. 1). While adolescents had largely been ignored in reading research, Kamil (2003) identified

that 62% of the studies in adolescent reading reported significant effects on students who were instructed in methods of reading as compared to control groups.

In light of few research findings on the impact of integrating reading and CTE skills, Stone, Alfeld, Pearson, Lewis, and Jensen (2006) researched the impact of mathematics integration in CTE course content. The authors reported that students benefited from the integration of math skills in CTE courses.

In fact, Stone et al. (2006) found a significant ( $p=.003$ ) difference in students exposed to an integrated basic skills curriculum. The treatment therefore could account for an increase in basic skills achievement. The report echoed earlier findings where about 75% of students increased their basic skills performance in integrated coursework (Bentivolio, 2001).

Darvin (2006) indicated that while little research had been conducted to validate the impact of integrated reading practices in CTE programs, the researcher's ethnographic qualitative study revealed that nearly 75% of CTE teachers were utilizing some of the "best documented methods of teaching reading in the content areas" (p. 17). Parks and Osborne (2007) found that students instructed with explicit reading methods had a significant .66 positive correlation between reading skill improvement and content-specific test scores. Jacobs (2008) reported that students required explicit reading instruction that went beyond having students simply read, to including an explanation of how and why students read. This seemed to indicate increases in reading skills tied to explicit instruction resulted in improvement in content-specific assessment scores.

The significant increase in reading skills scores reported by Parks and Osborne (2007) may be unique to reading skills. In contrast to reading skill integration, Merrill

(2001) found no significant difference in achievement when students were exposed to courses where mathematics was integrated in a CTE course. While there seems to be some disagreement on the outcome of reading skill integration in content area courses, Polkinghorne (2006) reported that the majority (92.7%) of high school teachers of business perceived reading integration to be important. The same report identified less than 30% of business teachers received training to integrate reading in business courses during their teacher preparation programs.

Exponential growth in integration research was beginning to shed light on the need for integrated learning (Cornford, 2002; Jacobs, 1989). Integrated learning was widely recognized as the seamless teaching of two or more contents in a unified format (Johnson et al., 2003). This new form of integration called for content area contextualization. The contextualization of content courses called for a curriculum where students learned basic skills in relation to content courses (Darvin, 2006; Kamil, 2003).

Educators began to accept the philosophy of integrated programs. The Policy Commission for Business and Economic Education (PCBEE, 2006) issued Policy Statement 78. The statement aligned business educators at all levels including the middle school, high school, and postsecondary levels on the importance of integrated business and basic skills.

The PCBEE recognized the need for integrated learning. Research from the National Center for CTE Research indicated integrated learning in CTE increased the basic skills achievement of high school graduates (Stone, 2003; Stone et al., 2006). The same research indicated a need for clearly defined methods of integrated learning.

Experts continued to call for integration as the key to basic skills success (Mathison & Freeman, 1997). However, Stone (2003) and Stone et al. (2006) indicated little descriptive research existed in methods of basic skills integration. The same research reported few methods existed to quantify the effectiveness of basic skills integration in CTE courses.

Research indicated teacher education candidates lacked preparation in methods of integrating CTE with reading skills (Levine, 2006; Polkinghorne, 2006; Polkinghorne & Bland, 2007). Reading integration was described as the teaching of a unique content with simultaneous instruction in reading methods (Grubb, Davis, Lum, Plihal, & Margaine, 1991; Johnson et al., 2003; Mathison & Freeman, 1997; Pring, 1973).

Jorgenson (2000) reported the perception that teaching reading was the job of English and reading teachers. However, Meltzer (2002) indicated English and reading teachers were inadequately trained to teach content area reading.

McEwen (2006) reported a philosophical paradigm for business education, a division of CTE, lacked clarity. As career and technical educators began to recognize the need for a unified philosophical foundation, efforts were being exerted with national leadership to define the needs of a 21<sup>st</sup> Century workforce. Career and technical educators began to converge on the philosophy of programs. Descriptive studies began to indicate integration was important for employment.

Former Federal Reserve Board Chairman Greenspan at the 2000 National Skills Summit suggested workers were being encouraged and required to strengthen their basic skills (Greenspan, 2000). This change in the workforce required students who could pass the pre-employment assessment of basic skills, to later engage in some form of



continuing education (Judy, D'Amico & Geipel, 1997). In addition, the culture of the workforce had shifted from providing stable employment, reasonable wages, and fringe benefits to a highly competitive global era of employee lay-off, plant closure and streamlined manufacturing processes (NASWB, 2002).

Carnevale and Fry (2001) indicated employers will soon have to make a difficult choice between investing in the “least skilled” and “most skilled” workers (p. 6). In the early 1900s, manufacturing was the industry for which the greatest numbers of high school graduates were trained in the early development of business and technology education. However, the most sought after jobs in the early 21<sup>st</sup> Century were technical jobs, which was a shift away from manufacturing positions (Imel, 1999; Judy, D'Amico & Geipel, 1997).

In the current decade of increased global competitiveness, the need for highly skilled workers with both technical and basic skills is igniting a new philosophical debate in CTE. This debate is centered on the idea of an integrated curriculum. The philosophy of an integrated curriculum is much like the foundation suggested by Davenport (1909), then a professor of agriculture education at the University of Illinois, who indicated the education system must be designed to meet the needs of both “learned professions” and “train[ing] for common things” (p. 1).

It is suggested the key to remaining economically competitive in America is the ability to distribute education and training in America's schools (Carnevale & Fry, 2001). In response to the decrease in number of high-wage low-skilled American manufacturing jobs, the American workforce had required schools to shift their curriculum to an

integrated approach where students could acquire both basic and technical skills (Judy, D'Amico, & Geipel, 1997; Plucker, Zapf, & Spradlin, 2004).

The philosophy of CTE continued to be defined as “education for work” (McEwen, 2006). The nature of work had changed in response to economic shifts in the United States. The shift in economic needs resulted in a clear call for CTE content integrated with a strong foundation in reading and mathematical skills.

#### Combined Conceptual Frameworks for Reading Research in CTE Programs

“It is generally felt that the educational theories that a discipline embraces shape its basic philosophy of education and drives its approaches to teaching and learning” (McEwen, 2006, p. 61). Converging content area reading research with CTE research forms the conceptual framework that teaching reading skills in the CTE content could benefit the reading skills of learners. Stone et al. (2006) espoused a conceptual framework for CTE that was grounded in cognitive learning theory.

Predominant learning theory in the 21<sup>st</sup> Century relied on the work of Vygotsky (1978) and Piaget (1988). The researchers had indicated students benefited by learning new skill through the active assimilation of knowledge in the context of experience. Embedding abstract basic skills in the context of CTE requires learners to participate in the learning process. Active participation in the learning process requires students to arrange new skills in relation to contextual experiences.

Stone et al. (2006) indicated career and technical educators are knowledgeable in their subject matter and could provide instructional methods in a social context. Reading researchers indicated that effective reading instruction required knowledge of subject

matter, social context, and instructional methods (Kehe, 2003). Stone et al. (2006) found the integration of basic skills in CTE benefited learners.

The Agnew Group (2007) called for a conceptual framework for business education embedded in a shift from teaching to learning. O'Connor (2007) indicated research that draws upon findings from other content areas was necessary in CTE. Research from education psychology, reading, and CTE guides the conceptual framework for the foundation of future research in integrated reading in CTE.

The conceptual framework for the foundation of CTE research and content area reading was embedded in cognitive learning theory and education for work. Research from education psychology, content area reading, and CTE supported a conceptual framework for embedded content area reading instruction in CTE. The conceptual framework guides the foundation for research in content area reading in CTE programs.

#### Models for Teacher Professional Development

Darling-Hammond and Cobb (1996) indicated that massive changes were underway in the way that teachers were prepared in United States' teacher education programs. Specifically, the authors contended that changes in the contexts of school, societal shifts, and the changing nature of the teaching occupation had influenced the methods utilized to prepare the United States' teaching force. In 2007, Camp and Heath-Camp indicated that regardless of the perceptions of education legislation, in particular, the controversial *No Child Left Behind Act* (2001), the purpose of the education legislation was to improve public schools, increase student skills, and place qualified teachers in all classrooms.

Teacher education candidates are increasingly being called on to address the needs of a multi-cultural student population. Students in 21<sup>st</sup> Century schools are derived from diverse backgrounds. Camp and Heath-Camp (2007) indicated that historic teacher preparation models may have been appropriate for a “different time and situation; but they may not be adequate today” (p. 19). Many students throughout the United States, particularly in coastal and urban populations (where there is a greater population of English language learners), have difficulty speaking and/or understanding the English language. In addition to language barriers, nearly 25% of adolescent learners are raised in impoverished households (Darling-Hammond & Cobb, 1996). Both minority and low socio-economic status students struggle disproportionately in their reading skills compared to their majority counterparts (ECS, 2007).

The problem with the research base for reading integration in CTE programs is that nearly all the current research describes models for reading instruction and does not provide an analysis of who should be preparing CTE teacher candidates to integrate basic skills (Grubb et al. 1991; Stone et al. 2006). All the while, the newest paradigm for CTE in United States high schools is to place an emphasis on the integration of basic skills.

If all learners were to be taught in schools, teachers would require a “rich and varied repertoire of teaching methods” (Darling-Hammond & Cobb, 1996, p. 16). The same authors indicated that teachers needed help creating integrated connections and a more holistic understanding of their content (Darling-Hammond & Cobb, 1996).

Teachers have reported that they did not have the necessary education to integrate reading skills in their content areas (Jacobs, 2008). In the current era of increased

accountability, for high schools, an increased focus in teacher preparation programs must address the improvement of instructional methods (Draper, 2008).

A model for preparing high school reading educators was needed. Until increased foci were placed on the development of a model, adolescent reading would continue to take a back seat in content area classrooms (Stevens, 2008). As a result, little could be done to systematically develop content area high school reading educators. In 2008, the *Harvard Educational Review* devoted an entire issue to adolescent reading.

As colleges of teacher education moved toward increasing the pedagogy and methods of teacher education candidates, a renewed focus for those programs was to develop innovative methods in professional education coursework. In fact, “only about one-fifth of the total program” for secondary education majors included studies in pedagogy, methodology, and adolescent learning development (Darling-Hammond & Cobb, 1996, p. 36). Teacher education programs were reported to need a major overhaul (Conley, 2008).

Levine (2006) indicated that teacher preparation curriculums throughout the United States lacked the kinds of linkages necessary for teacher development. As a result, a number of scholars reported that teacher education programs were inadequate (Conley, 2008; Darling-Hammond & Cobb, 1996; Levine, 2006).

In business teacher education, Polkinghorne (2006) reported that nearly 92.7% of high school business teachers felt unprepared to teach integrated-basic skills in business courses. The researcher’s findings were significantly different from the findings of McEwen, McEwen, and Anderson-Yates (1992), who reported that overall business teachers did not find concern with their preparation to enhance business curriculum with

basic skills content. However, both studies determined that business teachers felt more training would be beneficial for teachers attempting to enhance their curriculum with basic skills content (McEwen et al., 1992; Polkinghorne, 2006).

Schmidt, Finch, and Oliver (1994) reported that while business teachers typically had more college hours in basic skills courses than all other teachers, “knowing the skills and being able to teach them to others are two different abilities” (p. 11). Researchers were clearly sounding an alarm that teachers needed additional emphasis placed on methods of enhancing business curriculum with basic skills content (Draper, 2008; Jacobs, 2008).

Haynes, Law, and Pepple (1991) indicated that nearly 80% of the participants in their study increased their use of integrated basic skills in business courses when they were provided methods. The researchers’ findings seem to support the idea that teacher education candidates need additional coursework in integrating basic skills in the high school curriculum (Draper, 2008).

In fact, Schmidt et al. (1994) determined that less than 14% of the coursework of business teachers occurred in professional education courses. Business education teacher candidates take approximately 43% of their coursework in basic skills areas. The fact that business teachers have a significant amount of education outside of professional education courses indicates that they have had the opportunity to gain a thorough understanding of basic skills knowledge, but little time had been dedicated during their teacher preparation on how to actually teach basic skills content (Schmidt et al., 1994). Business teachers were not alone in their lack of reading skills methods; teachers across the content areas indicated they too were underprepared (Conley, 2008; Draper 2008).

## Conclusions

The conceptual framework for integrated reading and business education coursework was conducive to improving student basic skills achievement. Both areas relied on social context, subject-matter knowledge, and instructional methods. However, there were few results that indicated integrated reading skills in high school business education courses would increase high school students' basic skills achievement.

Business teachers supported integrated learning. Research indicated that business teachers, when prepared, would integrate their content with basic skills. Likewise, teachers across the content areas indicated they would integrate reading skills if they were informed of the process to increase adolescent reading skills. However, there were few results that indicated if teacher educators were prepared or who had prepared them to instruct business education teacher candidates in methods to integrate CTE and reading skills.

## CHAPTER 3

### RESEARCH QUESTIONS AND JUSTIFICATION

An exhaustive review of relevant theoretical and research literature directly justified this study. The problem of this research was to determine (a) perceptions of business teacher educators regarding the nature of integrated reading skill instruction in high school business courses, (b) the professional development background of business teacher educators for integrated reading skill instruction, and (c) the influence of selected variables on business teacher educators' perception of reading skill integration in high school business courses. Specific research questions were derived from a thorough review of business teacher education research. The rationale for the inclusion of the particular research questions that supported the problem of the study follows.

Answers to the following research questions are sought in the study:

*Research Question #1:* What are perceptions of business teacher educators regarding the integration of reading skills in high school business courses?

*Rationale and Support:* Little research had examined how business teacher educators perceive the importance of reading instruction in high school business education classrooms. Several studies examined the perception of business teachers in high schools. A myriad of those studies reported that business teachers felt it important to teach those skills, but much like their colleagues in other content areas, felt unprepared to teach reading skills (Polkinghorne, 2007; Polkinghorne, Railsback, & Hite, 2008). This question serves to report the perceptions of business teacher educators regarding the integration of reading skills in business teacher education coursework.



*Research Question #2:* What are perceptions of business teacher educators regarding their preparation to instruct business education teacher candidates in methods of integrating reading skills in high school business courses?

*Rationale and Support:* If business teacher educators are to prepare business education teacher candidates to integrate methods of reading instruction in high school business courses, the question that arises is how are business teacher educators prepared to instruct business education teacher candidates in methods of reading instruction? Reading education research contends that it is the responsibility of content area teacher educators to prepare their students to integrate reading in the teacher's specialty area; however, are business teacher educators prepared to instruct business education teacher candidates in methods of integrating their curriculum (Draper, 2008)? The question serves to report the perception of the level of preparation business teacher educators have to prepare business education teacher candidates to utilize integrated instructional methods.

*Research Question #3:* What are perceptions of business teacher educators regarding their role in preparing business education teacher candidates to integrate reading skills in high school business courses?

*Rationale and Support:* Research indicated that reading skill development in content area courses required students to be explicitly taught how and why they should read (Jacobs, 2008). Given that business education teacher candidates are increasingly being called on to improve the reading skills of their students, who is responsible for preparing business education teacher candidates to integrate reading skill development methods in their courses (Jacobs, 2008; Stone et al., 2006)? Reading teacher educators have indicated the responsibility for providing methods to improve the reading skills of

high school learners is the responsibility of content area teacher educators (Draper, 2008). The question that remains is, do business teacher educators perceive it to be their responsibility to prepare business education teacher candidates with methods to improve high school student reading skills?

*Research Question #4:* Is there a relationship of business teacher educators' perception regarding implicit or explicit reading skill integration with their perceived frequency of reading skill integration in high school business courses?

*Rationale and Support:* Believing that integration should occur is only part of a potential solution to a reading skill problem; providing a model to remedy poor reading skills is required if business teacher educators believe reading integration improves student basic skills achievement. Little research existed that posited there is any impact on student achievement in courses where reading and content skills are integrated (Stone, et al., 2006). If business teacher educators perceive that business education teacher candidates should integrate reading in the business education classroom, how should business education teacher candidates integrate reading in their classrooms? Research contends that reading should be explicitly taught in the content areas (Draper, 2008). However, how do business teacher educators perceive integration should occur? Understanding how business teacher educators perceive reading skills should be integrated sheds light on how business teacher educators are preparing business education teacher candidates to integrate reading skills in the high school business education classroom

*Research Question #5:* What are perceptions of business teacher educators regarding the national status of preparing business education teacher candidates to integrate reading skills in high school business courses?

*Rationale and Support:* The research question seeks to understand the perception of business educators in regards to the preparation of business education teacher candidates on a national level. Current assessment data reports student reading skill development had stalled after 2005 (ECS, 2007). A national reflection could indicate if resources are needed to improve the training of business education teacher candidates in the methods of integrating reading skills in high school business education curriculum.

*Research Question #6:* What is the influence of (a) highest degree earned, (b) highest degree emphasis, (c) length of teaching experience, (d) last year of teaching experience, (e) focus of the university (whether the mission is teaching or research, or a combination), and (f) current position on perceptions of business teacher educators regarding the integration of reading skill in high school business courses?

*Rationale and Support:* Understanding the demographic variables that influence business teacher educators' perceptions of (a) the integration of reading skills in high school business courses, (b) their preparation to instruct business education teacher candidates in integrated reading methods, (c) their role in preparing business education teacher candidates to integrate reading skills in business courses, and (d) the type of reading skills (implicit v. explicit) that should be primarily integrated in business courses could help in providing professional development to those individuals with the most critical need (Tyner, 1996).

## CHAPTER 4

### RESEARCH PROCEDURES

#### Research Design

The problem of this research was to determine (a) perceptions of business teacher educators regarding the nature of integrated reading skill instruction in high school business courses, (b) the professional development background of business teacher educators for integrated reading skill instruction, and (c) the influence of selected variables on business teacher educators' perception of reading skill integration in high school business courses.

Descriptive research was utilized in this study because little existing research exploring perceptions of business teacher educators regarding their perceived importance of reading skill integration was available. As a result, it is widely accepted that descriptive research should be utilized in instances where little existing knowledge is available. Therefore, descriptive data were obtained through the application of a questionnaire.

Humphries (1983) suggested survey research affords the investigator a low-cost opportunity to collect data, include geographically diverse populations, provide the participant adequate time to reflect on the question/statement, standardize question presentation, minimize bias, and capitalize on time, and the format lends itself quite well to quantification. The survey method of research was chosen for this study because the participants of the study were geographically diverse, and it allowed the researcher to gather, as precisely as possible, the information needed to answer the research questions given in this study (Nesbary, 2000).

## Variables

The dependent variables in this research study were participants' perceptions. Perceptions included the participants' response to questions that researched the importance of and preparation to instruct business education teacher candidates for grades 6-12 in methods to integrate reading skills in business courses. The variables were measured using a mixed-measure questionnaire. The independent variables in the study were the following characteristic variables: (a) highest degree earned, (b) emphasis of highest degree earned, (c) length of teaching experience, (d) last year of teaching experience, (e) focus of the university (whether the mission of the university is to conduct research, teach, or a combination of the two), and (f) current position.

## Research Participants

### *Selection of Schools*

Institutions selected for this study had functioning business teacher education programs and were located in the United States. Two distinct groups were identified. The first group of institutions consisted of members of the National Association of Business Teacher Education (NABTE), as of 2007. The second group consisted of non-NABTE institutions. A directory of non-NABTE institutions was derived from the research by Moore (2005). The researcher was primarily interested in locating collegiate institutions with state approved business teacher education programs; 194 institutions – 68-NABTE institutions and 126 non-NABTE institutions in 36 states reported functioning state approved business teacher education programs at the time of this study.

An analysis of business teacher education programs listed by Moore (2005) was conducted as part of the study. The analysis involved reviewing Moore's (2005) list and updating the list to reflect existing programs at the time of the study. The following two-

step model was utilized to update the directory; (a) the institutional Internet homepage was located and (b) the university's home page was searched for a current business teacher education program.

### *Selection of Participants*

Participants were selected from the institution population of 194 collegiate institutions offering a business teacher education major/minor in the United States. Participants who were eligible to participate in the study were located through a comprehensive review of the coursework offered at eligible collegiate institutions. Participants were identified based on searching each eligible institution's university records to obtain the methods of teaching business or similar course(s') title(s) and number(s). Finally, each university's schedule of courses was searched for the instructor of record of the methods of teaching business course over the Fall 2007 through Summer 2008 academic terms.

As a result of the review, 219 participants were identified (some institutions had more than one instructor for the methods of teaching business course, which explains why there were more participants than functioning programs). Specifically, 90 participants were selected at NABTE institutions and 129 participants were selected from non-NABTE institutions. Therefore, the total subject population included 219 participants.

### Research Instrument Development

The research instrument utilized in the study was a questionnaire. A thorough review of literature did not yield a suitable instrument; however, existing research did provide intuitive information that proved to be useful in instrument development (Polkinghorne et al. 2008; Tyner, 1996). The instrument included three sections.

Section one, *general information about you, the professional*, asked the participant primarily characteristic questions. Data elicited were primarily nominal in nature, with the exception of data that pertained to the years of teaching experience of the participant. The instrument included lists, with options for open-ended responses for situations in which the provided responses did not adequately represent the participant.

Section two, *reading integration in high school business education courses*, asked the participant questions that pertained to the need or lack of need of reading skill integration in high school business courses. The data elicited were ordinal in nature and were measured with either likert-type questions or numerical rank scales.

Section three, *professional development: reading integration in business education courses*, elicited responses from study participants that primarily pertained to the strategy training of business education teacher candidates. Much like previous sections of the instrument, ordinal data were collected through the use of likert-type questions and numerical rank scales. The instrument was subjected to both reliability and validity procedures.

#### *Validity and Reliability*

Validity was established with (a) the creation of a table of specifications, (b) a thorough review of the instrument by a panel of experts, and (c) an instrument pilot-test.

*Table of specifications.* The table of specifications (Table 1) links instrument items with research questions. Subsequently, a group of nine content area experts formed a panel of experts to review the instrument. In order to be eligible to participate in the panel of experts content validation process, the participant had to have produced one or more research-based article(s) or report(s) that explicitly looked at the process of integrating basic skills in content area courses.

Table 1

*Table of Specifications Relating Instrument Items and Research Questions*

Research Question	Instrument Item #'s	Data Analysis
What are perceptions of business teacher educators regarding the integration of reading skills in high school business courses?	6 - 13	Descriptive numbers and percents
What are perceptions of business teacher educators regarding their preparation to instruct business education teacher candidates in strategies of integrating reading skills in high school business courses?	17 - 23	Descriptive numbers and percents
What are perceptions of business teacher educators regarding their role in preparing business education teacher candidates to integrate reading skills in high school business courses?	14 – 15; 23	Descriptive numbers and percents
Is there a relationship of business teacher educators' perceptions regarding implicit or explicit reading skill integration with their perceived frequency of reading skill integration in high school business courses?	8 – 11	Chi-square
What are perceptions of business teacher educators regarding the national status of preparing business education teacher candidates to integrate reading skills in high school business courses?	16	Descriptive numbers and percents

*(Table 1 continues)*



Research Question	Instrument Item #'s	Data Analysis
What is the influence of (a) highest degree earned, (b) highest degree emphasis, (c) length of teaching experience, (d) last year of teaching experience, (e) focus of the university (whether the mission is teaching or research, or a combination of the two), and (f) current position on perceptions of business teacher educators regarding the integration of reading skills in high school business courses?	1 – 5; 6 -23	Kruskal-Wallis & Mann-Whitney

### *Institutional Affiliation*

*Panel of experts.* Eighteen nationwide experts in the field of integration and content reading from academia, recognized for publication of articles or reports, were contacted via e-mail and then sent via USPS a request to serve on a panel of experts to assist in establishing instrument validation (Appendix A).

Nine of those experts, identified in Appendix A, indicated they were willing and subsequently served on a panel of experts. Members of the panel of experts received some background information from the study that included (a) a statement of the problem, (b) research questions, (c) a letter of instruction, (d) an instrument review form, and (e) the draft instrument (Appendix A). The nine expert members reviewed the questionnaire to establish face validity, content validity, and writing clarity.

The panel of experts provided extremely useful suggestions that improved the research instrument prior to the pilot study. The panel of experts critiqued the likelihood of the instrument to adequately measure the perceptions of content area teacher educators

and provided extensive suggestions for instrument improvement. The most notable changes on the questionnaire were related to the vocabulary. In fact, the most visible change was a switch from the term literacy to reading. The panel felt the term literacy was too complex for the problem under investigation in the study. Subsequently, the instrument was modified based on the feedback of the panel.

*Pilot test.* The revised instrument was sent for pilot testing to 40 participants chosen at random from the population of family and consumer science, hereafter referred to as FCS, teacher educators (whose primary responsibility it was to instruct FCS teacher education candidates in FCS education instructional methods). The FCS teacher educators were chosen to pilot test the instrument in an effort to keep the population of collegiate business teacher educators eligible for participation in the final study.

FCS teacher educators were chosen because both business and FCS teachers receive certification to teach consumer economics at the high school level. Since FCS teachers and business teachers share some content, it was expected that they would receive a similar teacher education. However, because the instrument was pilot-tested by FCS teacher educators in lieu of business teacher educators, the researcher recognized this as a limitation of the study.

The pilot study participants received (a) a letter of instruction, (b) a follow-up letter, (c) a questionnaire review form, and (d) the pilot instrument (Appendix B). The pilot study instrument included three sections, in addition to qualifying statements. The qualifying statements required that study participants were currently employed at a university with a family and consumer science (FCS) teacher education program. The other three sections included: (a) general information, (b) integration in high school FCS

education courses, (c) integration in FCS education courses, and (d) overall perceptions of curriculum integration.

The pilot study resulted in 32 returned surveys for an 80% return rate. Overall, participants indicated that 96.29% of the questionnaire instructions were clear and 92.59% of the participants indicated the questions were clear. Most (75%) thought the questionnaire was either “extremely easy” or “easy” to complete.

Open-ended comments were provided by the pilot study participants to aid in the formulation of the final instrument. The data from the pilot study instrument validation tool pertained to the grammar, clarity, and relevance of the pilot study questionnaire instrument. Additional improvements in the study instrument resulted from suggestions from pilot study participants.

### *Reliability*

To establish reliability, some inherent redundancy was built into the questionnaire. Specifically, eight questions (four in section two and four in section three) were included on the instrument that measured polar opposites. A correlation was calculated with the Spearman’s rho statistic.

In the first section of the instrument, correlations were calculated for items eight and nine and ten and eleven. Items eight and nine were negatively correlated at the strength of  $-.695$  and items 10 and 11 were negatively correlated at the  $-.366$  level, both of which were significant at the  $.000$  level.

Section two correlations were calculated on items 17 - 18, and 19 - 20. Items 17 and 18 were negatively correlated at the strength of  $-.937$  and items 19 and 20 were negatively correlated at the  $-.944$  level, both of which were significant at the  $.000$  level.

Because of the limitations of ordinal likert-type perception questions, reliability utilizing measures like Cronbach's alpha was not used (Clason & Dormody, 1994).

#### Data Collection Procedures

Data collection to answer the research questions in this study followed a timeline. The following timeline and description of actions reveal the preparations made for the administration of the instrument to the accessible population of 219 participants at 194 institutions across the United States; ultimately, the timeline covered a period of approximately six months.

1. November, 2008 – A draft prototype research instrument was approved by the Committee for Research Involving Human Subjects at Southern Illinois University Carbondale, for distribution to participants.
2. December, 2008 – A nationwide prospective panel of experts in academia were contacted via email and USPS mail to solicit assistance with the prototype instrument review. Materials were sent to the panel of experts. The panel of experts was given two weeks to complete the instrument and instrument review form.
3. January, 2009 – A letter was sent to 40 family and consumer science teacher educators, who were randomly chosen for the pilot study, to inform them of the study and request their assistance in completion and review of the instrument. Simultaneously, the pilot study participants received (a) the questionnaire, (b) cover letter, and (c) an evaluation form for both the cover letter and questionnaire, and (d) asked to review the instrument by January 30, 2009.

4. February, 2009 – Because of initial low response rate (17.86%) on the pilot study, a second mailing was sent to the pilot group. After the second mailing, 32 (80%) members of the pilot study had responded.

Subsequently, modifications were made to the cover letter and questionnaire (Appendix C). The survey was printed on university letterhead and a label was included that stated “I support doctoral dissertation research.” The modified documents were sent to 219 research participants. Mailings that were returned by USPS were checked for invalid addresses, and every attempt was made to forward returned mail with corrected or updated information. In final, 217 (99.09 %) surveys were sent and assumed delivered.

5. March, 2009 –79 (36.41%) completed instruments had been returned by March 19. A follow-up survey was sent to non-responders on March 20, 2009. The follow-up survey participants were asked to return their responses by April 14, 2009.
6. April, 2009 – By April 20, 2009, a total of 154 (70.97 %) surveys had been returned.

#### Treatment of Data

Data were elicited from 217 participants; 154 (70.97 %) surveys were returned; 29 participants indicated that their institution no longer offered a business teacher education program; 14 participants indicated they no longer taught a methods of teaching business course. In final, 111 (59.04 %) were returned and useable. Bartlett, Kotrlik, and Higgins (2001) suggested a 67.02% minimum response rate for this study.

Because the response rate was less than suggested by Bartlett, Kotrlik, and Higgins (2001), the Mann-Whitney U statistical test was utilized to determine if a

significant difference existed between responders from the initial and follow-up survey. No significant differences were reported (appendix D). The Mann-Whitney procedure was not as stringent as actually collecting data from non-responders; however, it did suggest that accuracy was reached in the analysis.

### *Data Analysis*

Research questions 1, 2, 3, and 5 were analyzed with descriptive numbers and percents. The descriptive analysis allowed for overall answers to the research questions. The mean measure of central tendency is reported. However, it is important to note that as a result of the skewed nature of the data, the mean measure could increase the risk of over or understating the real value of the variable (Russ-Eft & Preskill, 2001).

Research question 4 was analyzed with the Chi-Square analysis, by recoding the ordinal data to categorical data by implementing a discrete coding scheme. The data were coded as either favoring implicit or explicit instruction and as either rarely or frequently integrating reading skills in business courses. The decision allowed the researcher to determine, as precisely as possible, if there was a difference between individual's perceptions on method of instruction on the frequency in which those skills should be taught.

Finally, data were analyzed with the Kruskal-Wallis statistical test and a post-hoc Mann-Whitney test to find significant influences. The Kruskal-Wallis statistical test was selected because the data (a) were ordinal, (b) violated the normality assumption, (c) compared more than three independent-groups, and (d) resulted in similar frequency distributions. Significant differences, between groups, were explored with the Mann-Whitney U test. Both the Kruskal-Wallis and Mann-Whitney statistical test were set at

alpha level of  $p < .05$ . Chapter 5 details the results by research question and data analysis performed.

## CHAPTER 5

### RESULTS AND DISCUSSION

#### Presentation of Findings

The problem of this research was to determine (a) perceptions of business teacher educators regarding the nature of integrated reading skill instruction in high school business courses, (b) the professional development background of business teacher educators for integrated reading skill instruction, and (c) the influence of selected variables on business teacher educators' perception of reading skill integration in high school business courses.

The descriptive survey research method was implemented in the study, and the data collected were treated to statistical analysis with SPSS software. In an effort to provide useable and meaningful data for conclusions and recommendations for future study, findings are presented in two major groups: (a) data to describe research participant characteristics, and (b) findings by specific research questions. Chapter 6 provides a summary, conclusions, and recommendations drawn from the data reported in the study.

#### *Participant Characteristics*

Data were elicited from 217 participants; 154 (70.97 %) surveys were returned; 29 participants indicated their institution no longer offered a business teacher education program; 14 participants indicated they no longer taught a methods of teaching business course. In final, 111 (59.04 %) were returned and useable. Data from the participants were collected via the 25-item instrument. The data is summarized in two subsequent sections.



Participants' characteristic data are presented first. This data includes the participants' (a) current position, (b) highest degree earned, (c) emphasis of highest degree, (d) institutional focus of employment, and (e) experience teaching business education. Table 2 shows that the largest category of participants were employed at NABTE affiliated institutions (65 or 58.60%), were employed at the professorial level (32 or 28.80%), held Ph.D.'s (44 or 39.60%), earned their highest degree from colleges of education (82 or 73.90%), and were employed at universities focused on research and teaching (58 or 52.30%).

Table 2

*Participant Characteristics*

Category	n	%
<i>Institutional Affiliation</i>		
NABTE	65	58.6
Non-NABTE	46	41.4
Total	111	100.0
<i>Current Position</i>		
Professor	32	28.8
Associate Professor	26	23.4
Assistant Professor	27	24.3
Adjunct	11	9.9
Other <sup>a</sup>	15	13.5
Total	111	99.9 <sup>b</sup>

*(Table 2 continues)*

Category	n	%
<i>Highest Degree Earned</i>		
Ph.D.	44	39.6
Master's	34	30.6
Ed.D.	31	27.9
Education Specialist	2	1.8
Total	111	99.9 <sup>b</sup>
<i>Emphasis of highest degree</i>		
Education	82	73.9
Business	13	11.7
Information technology	1	0.9
Other <sup>a</sup>	11	9.9
Not provided	4	3.6
Total	111	100.0
<i>Focus of Employment Institution</i>		
Research/Teaching	58	52.3
Teaching	49	44.1
Research	3	2.7
Not provided	1	0.9
Total	111	100.0

<sup>a</sup> Responses classified as "Other" are shown in Appendix D

<sup>b</sup> Data did not equal 100.0% as a result of rounding

About 44% of the participants had only taught in four-year universities/colleges. However, the largest group of participants had taught between 6 and 10 years in four-year universities/colleges, as shown in Table 3.

Table 3

*Participants' Post-Secondary Teaching Experience*

Category	n	%
<i>Category of Teaching Experience</i>		
Four-year university/college (only)	49	44.14
Two-year college	22	19.82
Total	149 <sup>c</sup>	
<i>Four-Year University/College Experience (in years)</i>		
6-10	27	26.73
1-5	20	19.80
11-15	15	14.85
16-21	13	12.87
22-26	10	9.90
27-31	9	8.91
32 and over	7	6.93
Total	111	99.99 <sup>a</sup>
<i>Two-Year College (in years)</i>		
1-5	12	54.55
6-10	4	18.18
11-15	3	13.64
22-26	2	9.09
16-21	1	4.55
Total	22	100.01 <sup>a</sup>

<sup>a</sup> As a result of rounding, data did not equal 100.00%

The largest category of participants reported that they had taught in secondary schools. As shown in Table 3, 27 of the participants who reported they had taught in secondary schools had done so for fewer than six years. The least number of participants

(18 or 16.22%) had taught in middle schools; however, of these the majority (15 or 83.3%) had done so within the last five years.

Table 4

*Participants' Middle/Secondary Teaching Experience*

Category	n	%
Secondary school	60	19.82
Middle school	18	16.22
Total	78	
<i>Secondary-School (in years)</i>		
1-5	27	45.00
6-10	18	30.00
11-15	9	15.00
16-21	3	5.00
22-26	2	3.33
27-31	1	1.67
Total	60	100.00
<i>Middle School</i>		
1-5	15	83.30
6-10	1	5.56
11-15	1	5.56
16-21	1	5.56
Total	18	99.98 <sup>a</sup>

<sup>a</sup> As a result of rounding, data did not equal 100.00%

Table 5 presents the survey participants' last decade of practice by institutional category. The largest category of participants at each level who had taught outside of four-year colleges reported their last decade of teaching experience in other than four-year colleges/universities was within the past ten years, except for those practicing in

secondary schools. Those practicing in secondary schools had done so within the past 20 years.

Table 5

*Participants' Last Decade of Practice by Institutional Category*

Category	n	%
<i>Two-Year College</i>		
2000	9	40.9
1990	6	27.3
1980	7	31.8
Total	22	100.0
<i>Secondary School</i>		
1990	27	45.0
2000	14	23.3
1980	11	18.3
Prior to 1980	8	13.3
Total	60	100.0
<i>Middle School</i>		
2000	9	50.0
1990	3	16.7
1980	3	16.7
Prior to 1980	3	16.7
Total	18	100.0

*Findings by Specific Research Question*

*Research Question #1:* What are perceptions of business teacher educators regarding the integration of reading skills in high school business courses?

Table 6 reveals the majority (99 or 89.1%) of business teacher educators believed that reading skill instruction should be integrated in business courses. However, the

majority 64 (58.7%) believed that business teacher educators should not be held accountable by assessments, like those required by the *No Child Left Behind Act*.

The largest category (70 or 67%) of business teacher educators reported reading skills should be primarily integrated explicitly and the majority (100 or 90%) indicated that business teacher educators should frequently integrate reading skills in business courses.

Table 6

*Participants' Perception on Integration of Reading Instruction in High School Business Education Courses*

Response	Strongly Agree		Agree		Strongly Disagree		Disagree		No Response		$\mu$	$\sigma$
	n	%	n	%	n	%	n	%	n	%		
High school business educators <u>should</u> integrate reading instruction in business courses.	51	45.9%	48	43.2%	9	8.1%	3	2.7%	0	0.0%	1.68	.741
High school business educators <u>should be held accountable</u> by assessments, like those required by the <i>No Child Left Behind Act</i> , for teaching reading in business courses.	15	13.8%	30	27.5%	48	44.0%	16	14.7%	2	0.18%	2.60	.904
High school business educators should <u>frequently</u> integrate reading skills in business courses.	52	46.8%	48	43.2%	10	9.0%	1	0.9%	0	0.0%	1.64	.685
High school business educators should <u>rarely</u> integrate reading skills in business courses.	6	5.4%	48	43.2%	0	0.0%	57	51.4%	0	0.0%	3.46	.600

*(Table 5 continues)*

Response	Strongly Agree		Agree		Strongly Disagree		Disagree		No Response		$\mu$	$\sigma$
	n	%	n	%	n	%	n	%	n	%		
High school business educators should <b>PRIMARILY</b> integrate reading skills <u>implicitly</u> with business content.	16	14.5%	48	43.6%	36	32.7%	10	9.1%	1	0.1%	2.36	.843
High school business educators should <b>PRIMARILY</b> integrate reading skills <u>explicitly</u> with business content.	23	23.9%	47	43.1%	28	25.7%	8	7.3%	2	0.2%	2.17	.843
Preparing business education teacher candidates to integrate reading skills in high school business courses will help them to improve the literacy skills of their students.	55	50.0%	52	47.3%	2	1.8%	1	0.1%	1	0.1%	1.54	.585
Preparing business education teacher candidates to integrate reading skills in business courses will help them to improve the business <u>knowledge</u> and skills of their future students.	45	40.9%	57	51.8%	7	6.4%	1	0.1%	1	0.1%	1.67	.637



*Research Question #2: What are perceptions of business teacher educators regarding their preparation to instruct business education teacher candidates in strategies of integrating reading skills in high school business courses?*

Table 7 reveals the majority of participants (63 or 57.8%) reported they are prepared to instruct business education teacher candidates in methods of teaching reading skills in business courses. The majority of participants (65 or 59.6%) also indicated they could use additional preparation to instruct business education teacher candidates in methods of teaching reading skills in business courses.

Table 7

*Participants' Perceptions on Their Preparation for Instructing Integrated Methods of Reading Skills in Business Education Courses*

Response	Strongly Agree		Agree		Strongly Disagree		Disagree		No Response		$\mu$	$\sigma$
	n	%	n	%	n	%	n	%	n	%		
I am <u>prepared</u> to instruct business education teacher candidates in methods of teaching reading skills in business courses.	17	15.6%	46	42.2%	36	33.0%	10	9.2%	2	0.18%	2.36	.856
I am <u>not</u> prepared to instruct business education teacher candidates in methods of teaching reading skills in business course	6	65.5%	39	35.8%	41	37.6%	23	21.1%	2	0.18%	2.74	.854
I <u>need</u> additional preparation to instruct business education teacher candidates in methods of teaching reading skills in business courses	13	11.9%	52	47.7%	30	27.5%	14	12.8%	2	0.18%	2.41	.863
I <u>do not need</u> additional preparation to instruct business education teacher candidates in methods of teaching reading skills in business courses.	15	14.0%	27	25.2%	52	48.6%	13	12.1%	4	0.36%	2.59	.879

Participants were asked to identify the methods of training they had actually received. If they had received training to integrate reading skills in the context of business courses they were asked to identify the method of training they had received. Only 79 (71.17 %) indicated they had received training to integrate reading skills in the context of business courses.

Table 8 reflects the methods in which business teacher educators received their training to integrate reading skills in business courses and the methods they perceived to be the most influential. The largest category of participants, (16 or 22.2%) had received their training through collaboration with a reading teacher education or at a professional conference.

However, 18 (22.8%) reported that the most influential method of preparing business teacher education candidates in methods to integrate reading skills in business courses occurred in university coursework. In addition, 17 (21.5%) reported that the second most influential place for preparing business teacher education candidates is at professional conferences.

Table 8

*Participant Training for Integrating Reading Skills in Business Education Courses*

Category	n	%
<i>Participant Training Methods</i>		
Collaboration with a reading teacher educator	16	22.2
Professional conference	16	22.2
Classroom practice	13	18.1
University coursework	13	18.1
Other <sup>a</sup>	15	1.1
Review of research	6	8.3
Total	79	100.0
<i>Most Effective Training Methods</i>		
Classroom practice	19	24.1
University coursework	18	22.8
Professional conference	17	21.5
Collaboration with a reading teacher educator	13	16.5
Review of research	6	7.6
Other <sup>a</sup>	6	7.6
Total	79	100.0

<sup>a</sup>Responses classified as “Other” are shown in Appendix D1

*Research Question #3:* What are perceptions of business teacher educators regarding their role in preparing business education teacher candidates to integrate reading skills in high school business courses?

Table 9 reflects the majority (65 or 60.7%) of participants reported the primary responsibility to prepare business education teacher candidates in methods of teaching reading skills in business courses is the responsibility of reading teacher educators. Most participants (53, 50.5%) reported that business education teacher candidates should be

prepared to integrate reading skills in pre-service coursework integrated in general instructional methods courses.

Table 9

*Participants' Perception of Their Role in Preparing Business Educators to Integrate Reading Instruction in High School Business Education Courses.*

Responsibility and Context	n	%
<i>Primary Responsibility for Integration</i>		
Reading teacher educators	65	58.6
Business teacher educators	36	32.4
Other teacher educators	6	5.4
No response	4	3.6
Total	111	100.0
<i>Most Influential Context for Integration</i>		
Pre-service coursework integrated in general instructional methods coursework	53	47.7
Pre-service business education methods coursework	29	26.1
In-service professional development conferences/workshops	9	8.1
In-service graduate coursework	6	5.4
Other <sup>a</sup>	8	7.2
No response	6	5.4
Total	111	99.9 <sup>b</sup>

<sup>a</sup> Responses classified as "Other" are shown in Appendix D1

<sup>b</sup> As a result of rounding, data did not add to 100%

*Research Question #4:* Is there a relationship of business teacher educators' perception regarding implicit or explicit reading skill integration with their perceived frequency of reading skill integration in high school business courses?

Responses were collapsed into two categories (a) strongly agree/agree and (b) strongly disagree/disagree. Then, participants were coded dichotomously into two groups: (a) favors implicit instruction or (b) favors explicit instruction based on their response to the following statements: (a) high school business educators should primarily integrate reading skills explicitly with business content and (b) high school business educators should primarily integrate reading skills implicitly with business content. Data were analyzed with the chi-square test of significance. Table 10 indicates no statistically significant relationship was found.

Table 10

*Relationship of Participants' Perception of Type of Integration on Frequency of Integration*

Type	Implicit (n = 64)	Explicit (n = 46)	$\chi^2$
Frequent	57	42	0.70
Rarely	7	4	0.11

*Research Question #5: What are the perceptions of business teacher educators regarding the national status of preparing business education teacher candidates to integrate reading skills in business education courses?*

The largest group of participants (56 or 47.7%) indicated that they strongly disagreed or disagreed with the statement that the training of business education teacher candidates to integrate reading in business education courses is adequate. Therefore, the participants reported they perceived the training of business education teacher candidates to integrate reading business education courses to be other than adequate.

*Research Question #6:* What is the influence of (a) highest degree earned, (b) highest degree emphasis, (c) length of teaching experience, (d) last year of teaching experience, (e) focus of the university (whether the mission is teaching or research, or a combination), and (f) current position on perceptions of business teacher educators regarding the integration of reading skill in high school business courses?

The Kruskal-Wallis test was utilized in the study to determine if participant demographic variables influenced the perception of reading skill integration in business courses. The alpha level for significance testing was set at  $p \Rightarrow .05$ . Full Kruskal-Wallis data by survey item number is presented in Appendix D.

In events where the Kruskal-Wallis test reported significance the Mann-Whitney U test was utilized to explore the characteristics which had a statistically significant impact on participants' responses. The alpha level for the Mann-Whitney U test was set at  $p \Rightarrow .05$ . Full statistical data is presented in Appendix D.

The Kruskal-Wallis test reported significance in three demographic categories on three instrument responses. The data is reported with the instrument question as a heading.

*High school business educators should integrate reading instruction in business courses*

The Kruskal-Wallis test reported an overall statistical significance level of  $\chi^2 (5, N = 60) = 11.397, p > .04$  to the participants' response to the survey item. Further analysis with the Mann-Whitney U Test,  $U (N = 30) = 8.50, p > .02, r = 1.55$ , found a significant difference between the responses of participants with 16 – 20 years of experience teaching in secondary schools. Those with 16 – 20 years of experience were more likely to report that they strongly disagreed or disagreed with the survey item than

their counterparts. However, the group of participants with 16 – 20 years experience was small attributing to a high likelihood that a type I error had occurred.

*High school business educators should rarely integrate reading skills in business courses*

Two demographic variables reported statistical significance using the Kruskal-Wallis test. The first variable, interval of teaching experience in four year college/university, reported an overall statistical significance of  $\chi^2(6, N = 101) = 13.718$ ,  $p > .033$ . Further analysis with the Mann-Whitney U test indicated the group of participants who had between 6 and 10 years of experience were significantly more likely,  $U(N = 40) = 107.5$ ,  $p > .05$ ,  $r = -.34$ , to agree or strongly agree with the survey item than their peers.

The second area of statistical significance reported with the Kruskal-Wallis test was found between participants' employing institution type (teaching, research, or research/teaching). The overall statistical significance indicated by the Kruskal-Wallis test was reported at  $\chi^2(2, N = 110) = 6.56$ ,  $p > .046$ . Further analysis with the Mann-Whitney U test indicated that participants employed at universities focused on teaching were significantly,  $U(N = 107) = 1078.5$ ,  $p > .015$ ,  $r = -.23$ , more likely to agree or strongly/agree with the survey item.

*Preparing business education teacher candidates to integrate reading skills in high school business courses will help them to improve the literacy skills of their future students*

The Kruskal-Wallis test indicated an overall statistical significance level of  $\chi^2(2, N = 109) = 6.640$ ,  $p > .036$  regarding the perception of survey participants employed by teaching, research, or research/teaching universities in terms of their agreement with the statement. Further analysis with the Mann-Whitney U test indicated that participants



employed at four-year universities focused on teaching were significantly,  $U(N = 106) = 1044.0$ ,  $p > .012$ ,  $r = -.24$ , more likely to report they disagree or strongly disagree with the statement than their peers at universities focused on research and teaching.

## CHAPTER 6

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

Prior research had indicated that content area literacy skill development improved student literacy skills. As a result, teacher preparation programs across the country rushed to provide teacher candidates with coursework in content area literacy. Little research had indicated that teacher candidates exposed to a specific context of teaching improved their student literacy skills at an increased level as compared to teachers who were taught literacy skills development in the context of their teaching discipline.

Draper (2008) reported that teachers should be prepared to teach reading skills in the context of their unique content areas. Further, the same author reported content area educators should be preparing teacher education candidates in the context of their content area. The researcher supported her argument by espousing a conceptual framework for reading skills development that relied on social context, teaching methods, and knowledge of the content. Her argument rested upon the idea that content area teacher educators were experts in their content and the content of a course would drive the type of instructional methods and the context in which students should receive intervention.

The purpose of the study was to contribute to the knowledge base regarding views of business teacher educators regarding the integration of reading skill instruction in business education courses. Therefore, the results of this study should not be generalized to CTE areas other than business. The problem of this research was to determine (a) perceptions of business teacher educators regarding the nature of integrated reading skill instruction in high school business courses, (b) the professional development background

of business teacher educators for integrated reading skill instruction, and (c) the influence of selected variables on business teacher educators' perception of reading skill integration in high school business courses.

The series of research questions, that underlie the problem and were subsequently discussed, were examined with descriptive survey research data collected from business teacher educators who were primarily responsible for preparing business education teacher candidates in methods of teaching business content.

A population of 188 business teacher educators primarily responsible for preparing business education teacher candidates in methods of instruction was surveyed with an instrument that had been subjected to review by a panel of experts and subsequently pilot tested. The participants, that were eligible to participate, provided data on instrument questions. The results and conclusions of the study are presented by research question.

### Results and Discussions by Research Question

*Research Question #1: What are perceptions of business teacher educators regarding the integration of reading skills in high school business courses?*

An individual's perception impacts their performance. It is a rare event when someone perceives a variable to be other than desirable and yet still practices the event. The focus of this research question was to determine if business teacher educators perceived it important to integrate business content with reading skills and which methods they perceived to be most effective in the business classroom.

Data indicated a wide majority of participants reported that high school business educators should frequently integrate reading instruction in business courses. Likewise, the participants reported that the integration of reading skills in business content would

improve both the literacy and business knowledge and skills of business education learners. A slightly narrower majority (67%) reported that reading skills should be explicitly integrated with business content and an even smaller percentage (41.3%) indicated that business educators should be held accountable to improve the reading skills of business education students.

The data indicated that the integration of reading skills in business courses was supported by business teacher educators responsible for preparing business education teacher candidates in methods of teaching business content. However, there still seems to be a disagreement on how (implicit v. explicit) business teacher candidates should integrate reading skills in the business content.

*Research Question #2: What are perceptions of business teacher educators regarding their preparation to instruct business education teacher candidates in strategies of integrating reading skills in high school business courses?*

The data indicated that the majority (57.8%) of business teacher educators felt they were prepared to instruct business education teacher candidates in methods of teaching reading skills in business courses. At the same time, a majority (59.6%) also reported they needed additional preparation to instruct business education teacher candidates in methods of teaching reading skills in business course.

Of those who had received training to integrate reading skill in business content the methods most useful had occurred by collaborating with a reading teacher educator and/or at professional conference. The same participants further indicated they perceived the most influential methods of preparation to occur during classroom practice, university coursework, and professional conferences.

In conclusion, the data indicated that the majority of business teacher educators perceived themselves prepared but also reported they needed additional training in preparing business education teacher candidates in methods of integrating business content with reading skills. Further, the most influential methods to prepare business teacher educators were reported to occur during classroom practice and university coursework, which were not the methods reported by business teacher educators as the most common methods they had been exposed to during their own preparation.

*Research Question #3: What are perceptions of business teacher educators regarding their role in preparing business education teacher candidates to integrate reading skills in high school business courses?*

The perception of business teacher educators, in regards to their role in preparing business education teacher candidates with methods to integrate reading skills in business content, is believed to ultimately impact the probability that business education teacher candidates will receive preparation to integrate reading skills in business instructional strategy courses. The study investigated the perceptions of business teacher educators in regards to the individual they perceived to be responsible to prepare business education teacher candidates with methods to integrate reading skills in business content.

The majority of participants (60.7%) indicated that it was the responsibility of a teacher educator other than business to prepare business education teacher candidates to integrate reading instruction in high school business education courses. Following that perception was a majority (82.4%) of participants who reported the most influential context to prepare business education teacher candidates to integrate reading skills in business courses to occur in an environment other than pre-service business education methods course.

In conclusion, the data indicated that although the majority of participants felt that integrating reading skills in business content could improve both the literacy and business skills of learners, it was the responsibility of a teacher educator other than business to prepare business education teacher candidates to integrate reading skills in business content.

*Research Question #4:* Is there a relationship of business teacher educators' perception regarding implicit or explicit reading skill integration with their perceived frequency of reading skill integration in high school business courses?

The purpose of research question #4 was to determine if the method of instruction impacted the frequency in which reading skills should be integrated in business content. It was determined earlier in the study that the majority of participants felt that reading skills should be explicitly integrated and integrated frequently in business courses. Based on the chi-square statistical test, it was determined that the participants' perception of the frequency in which reading skills should be integrated did not have a significant impact on the methods in which they perceived reading skills should be integrated in business courses.

In conclusion, the data indicated that the majority of participants felt reading skills should be explicitly and frequently integrated in business courses. Further, the method of integration (explicit v. implicit) had little significant impact on the method in which reading skills should be integrated.

*Research Question #5:* What are the perceptions of business teacher educators regarding the national status of preparing business education teacher candidates to integrate reading skills in business education courses?

The purpose of research question #5 was to determine if business teacher educators, overall, felt the preparation of business education teacher candidates was adequate. The data indicated that a narrow majority (51.0 %) of participants perceived the training of business education teacher candidates to integrate reading skills in business courses to be other than adequate.

In light of the number of participants that indicated the training of business education teacher candidates to integrate reading skills in business courses to be other than adequate, it appears there is room to improve the preparation of business education teacher candidates to integrate reading skills in business courses.

*Research Question #6:* What is the influence of (a) highest degree earned, (b) highest degree emphasis, (c) length of teaching experience, (d) last year of teaching experience, (e) focus of the university (whether the mission is teaching or research, or a combination), and (f) current position on perceptions of business teacher educators regarding the integration of reading skill in high school business courses?

The purpose for research question #6 was to indicate which factors influenced the perception of study participants. Statistical testing followed with post-hoc analyses indicated there were two significant variables that influenced the perception of study participants (a) interval of time teaching in four-year universities/college and (b) the institutional focus (research, teaching, research and teaching).

The data indicated that those with 16 – 20 years of teaching experience at the four-year university/college level were significantly more likely to report that high school business educators should not integrate reading skills in business courses.

Further, the data indicated that those participants employed at institutions focused on teaching were more likely to report that high school business educators should rarely

integrate reading skills in business course. Finally, participants employed at teaching universities were more likely to report that preparing business education teacher candidates to integrate reading skills in high school business courses would not improve the business knowledge and skills of future students.

### Conclusions

In conclusion, the study described the findings and conclusions via research questions derived from an extensive review of literature. Previous research had been conducted that analyzed the perceptions of practicing business teachers and the overall professional development needs of business teacher educators (Polkinghorne, 2006; Tyner, 1996).

Research that analyzed the perceptions of business teacher educators indicated that practicing business teachers believed that integrating reading skills with business courses were important; the findings of this study reported business teacher educators also felt it were important to integrate reading skills in business courses (Polkinghorne, 2006). Polkinghorne (2006) reported that business teachers lacked the preparation to integrate reading skills, the findings of this study indicated that business teacher educators perceive they are adequately trained to integrate reading skills.

Draper (2008) reported that instructing teacher education candidates to integrate reading skills in content area courses was the responsibility of content area teacher educators. The findings of Draper (2008) are in disagreement with the findings of this study and concurred with the findings of Lester (1997) that the responsibility of teaching reading was the job of someone other than content area teacher.

The majority of participants in Polkinghorne (2006) indicated they did not receive training in their teacher education programs, and the findings of this study seem to



indicate that preparing business education teacher candidates to integrate reading skills is the responsibility of teacher educators other than those of business.

. However, studies that examined the professional development needs of business teacher educators indicated they needed additional training to instruct business education teacher candidates to integrate business curricula with reading skills (Tyner, 1996). The findings of this study concurred with the earlier findings.

This study determined that the participants' interval of teaching experience and the focus of the employing institution seemed to report less favorable perceptions in regards to the integration of reading skills in business courses. However, business teacher educators perceived themselves prepared to instruct and that it was very important for business education teacher candidates to integrate reading skills in business course.

While the findings of this study indicated that business educators should not be held responsible for increasing student reading skills the 2006 reauthorization of the *Carl D. Perkins Act* requires CTE to be held accountable in increasing student reading skills through the assessments tied to *No Child Left Behind* (2001).

#### Recommendations for Practice

This study was an initial effort to determine the needs of business teacher educators and their perceptions towards integrating reading skills in business courses. As such, recommendations for practice should be implemented while additional research is undertaken to more fully understand the practices of business teacher educators, in regards to the integration of reading skills in business courses.

The following recommendations are derived from the results of this initial study:

1. Business teacher educators reported the most influential training to integrate reading skills in business courses occurred either during classroom practice,

university coursework, or professional conferences. It is therefore recommended that those responsible for preparing business education teacher candidates have classroom experience and opportunities for professional development through university coursework and professional conferences.

2. Because there is some disagreement on the primary method (implicit v explicit) of reading skill integration in business courses it is recommended that business teacher educators prepare business education teacher candidates in both methods of reading skill integration until further research can be conducted to determine the impact of the distinct methods on student reading and business skill achievement.
3. Business educators should receive training to integrate reading skills in business courses during classroom practice or at professional development conferences/workshops.
4. Because there is a lack of agreement on the responsibility to prepare business education teacher candidates in methods of but a high level of agreement on the importance of integrating reading skills in business courses; it is recommended that business teacher educators take the lead in preparing business education teacher candidates in methods of integrating reading skills in business courses.

#### Recommendations for Further Research

Suggestions for further research are summarized as follows:

1. It is recommended that additional research be conducted that analyzes the practices of high school business educators, link relevant psychological theories to their practices, and determine where the teachers learned the methods they were utilizing. This could generate additional knowledge into the methods of

preparing business educators to integrate reading skills in business courses. This recommendation concurred with the recommendation of J. Stone, director of the National Center for CTE Research (personal communication, December 22, 2008).

2. It is recommended a qualitative study be undertaken because “asking people to respond to practices they presumably are following” is problematic because “they [participants] might not be able to tell you the truth.” Therefore, it is recommended that a qualitative study be undertaken to determine if the participants in this study are practicing what they preach. The lead researcher in integrated academic skills in CTE, W. N. Grubb, (personal communication, December 18, 2008) concurred with this recommendation.
3. It is recommended that research be undertaken that asks the participant to define and describe the integration of reading skills in business courses. This would determine if the participants understand what they are reporting on the instrument. It is further recommended that additional research be undertaken that connects the perceptions of the study participants and their actual practices in the classroom. This recommendation concurs with J. Stone and W. N. Grubb (Personal communication, December 22, 2008; Personal communication, December 18, 2008).
4. The study determined that participants at institutions focused on teaching were less likely to favor the integration of reading skills in business course. It is recommended that additional research into the practices of business teacher educators at institutions focused on teaching be conducted to determine why their

perceptions were significantly different than their peers at institutions focused on research or the combination of research and teaching.

5. The study participants indicated favorable perceptions towards the integration of reading skills in business courses, but did not believe that business educators should be held accountable by assessments, like those required by the *No Child Left behind Act*, for teaching reading in business courses. Therefore, it is recommended that additional research be conducted to determine if business teachers should be held responsible through other types of accountability measures.
6. The study participants indicated that reading skills should be explicitly integrated in business courses. Additional research is recommended that reports the models of reading instruction that should be explicitly integrated in business courses.
7. The study indicated the perceptions of business teacher educators in regards to the integration of reading skills in business courses. However, research had not indicated the impact of integrating reading skills in business courses on student reading and business skill achievement. Therefore, it is recommended that research be undertaken to determine the impact of reading skill integration on student reading and business skill achievement.

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## APPENDICES

APPENDIX A: PANEL OF EXPERTS

## Appendix A1: Panel of Experts

Panel of Expert Members


---

Dr. Ola Brown, Professor Emeritus  
Dept. of Reading Education  
College of Education  
Valdosta State University

Dr. Ronni Jo Draper, Associate  
Professor  
Dept. of Teacher Education  
College of Education  
Brigham Young University, Provo

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Dr. W. Norton Grubb, Professor and Chair  
Dept. of Policy, Org., Measurement., and Eval.  
School of Education  
University of California, Berkeley

Dr. Thomas Haynes, Professor  
Dept. of Curriculum and Instruction  
College of Education  
Illinois State University

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Dr. Nancy Groneman-Hite, Professor  
Dept. of Business Admin. and Education  
College of Business  
Emporia State University

Dr. James R. Stone III, Professor  
Director, National Research Center  
for CTE  
College of Education  
University of Louisville

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Dr. Matthew Thomas, Associate Professor  
Dept. of Curriculum and Instruction  
College of Education  
University of Central Missouri

Dr. Cheryl Wiedmaier  
Dept. of Middle and Secondary  
Education and Instruction  
Technologies  
College of Education  
University of Central Arkansas

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Dr. Jill White, Associate Professor  
Dept. of Engineering and Computer Tech.  
College of Professional Studies  
University of West Florida

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## Appendix A2: Email Message, Requesting Assistance, to Panel of Experts

Dear <<Title>> <<First>> <<Last>>> :

My name is Frederick Polkinghorne and I am an assistant professor of adult and career education at Valdosta State University (Georgia) and a doctoral candidate at Southern Illinois University Carbondale. I need your help. I am in the dissertation stage of my terminal education. I need you to take a look at the survey and research questions; I developed, to measure the perceptions of teacher educators on the integration of literacy skills in content area coursework.

I need your feedback to determine if the content of the survey will answer the research questions (content-validation). There is truly no one more qualified than yourself to assist in this process. In return for your scholarly assistance, I will recognize your contribution in the final project. I have attached the documents to this email and sent the documents (including a SASE) via USPS mail to:

<<Participant Address Block>>

Again, thank you so much for your consideration in assisting me in earning the Doctorate of Philosophy degree at Southern Illinois University Carbondale. Please provide your feedback by January 1, 2009.

If you are unable to meet the time goal, please let me know so that I may wait for your feedback. With all sincerity, I truly appreciate your time and will never forget that you assisted me in the completion of my terminal degree.

Sincerely,

Frederick W. Polkinghorne  
Assistant Professor

## Appendix A3: USPS Message to Panel of Experts Requesting Assistance

Dear <<Title>> <<First>> <<Last>>> :

My name is Frederick Polkinghorne and I am an assistant professor of adult and career education at Valdosta State University (Georgia) and a doctoral candidate at Southern Illinois University Carbondale. I need your help. I am in the dissertation stage of my terminal education. I need you to take a look at the survey and research questions; I developed, to measure the perceptions of teacher educators on the integration of literacy skills in content area coursework.

I need your feedback to determine if the content of the survey will answer the research questions (content-validation). There is truly no one more qualified than yourself to assist in this process. In return for your scholarly assistance, I will recognize your contribution in the final project. I have attached the documents and provided your with a SASE, when you have completed your review please return the materials via USPS mail.

Again, thank you so much for your consideration in assisting me in earning the Doctorate of Philosophy degree at Southern Illinois University Carbondale. Please provide your feedback by January 1, 2009.

If you are unable to meet the time goal, please let me know so that I may wait for your feedback. With all sincerity, I truly appreciate your time and will never forget that you assisted me in the completion of my terminal degree.

Sincerely,

Frederick W. Polkinghorne  
Assistant Professor

## Appendix A4: Panel of Experts' Validation Instrument

### Perceptions of Faculty at Business Teacher Education Institutions: Methods of Teaching Literacy in Business Courses

Please respond to the following items after you have complete the enclosed questionnaire.

1. Were there any instructions that were difficult to understand?  Yes  NO

If "yes," please cite the section(s) or question(s) and any suggestion for improvement.

Section # \_\_\_\_\_ or Question # \_\_\_\_\_

Suggestion(s):

Section # \_\_\_\_\_ or Question # \_\_\_\_\_

Suggestion(s):

2. Were they any questions that were difficult to understand?  Yes  No

If "yes," please cite the question(s) and any suggestions for improvement:

Question # \_\_\_\_\_ Suggestion(s) \_\_\_\_\_

Question # \_\_\_\_\_ Suggestion(s) \_\_\_\_\_

Question # \_\_\_\_\_ Suggestion(s) \_\_\_\_\_

Question # \_\_\_\_\_ Suggestion(s) \_\_\_\_\_

3. How long did it take to complete the questionnaire? Approximately \_\_\_\_\_ minutes.

Is the survey too long?  Yes  No

4. After reading the cover letter that came with the questionnaire, would you be persuaded to respond?  Yes  No

What suggestions do you have for improving the cover letter?

5. Please rate the overall difficulty in completing the questionnaire?

Extremely Difficult  Difficult  Moderate  Easy  Extremely Easy

6. Additional comments/suggestions

THANK YOU for your help!

## Appendix A5: Research Question as Sent to Panel of Experts

### CHAPTER 3

#### RESEARCH QUESTIONS AND JUSTIFICATION

An exhaustive review of relevant theoretical and research literature directly justified this study. The problem of this research is to determine (a) perceptions of business teacher educators regarding the nature of integrated literacy instruction in business education courses, (b) the professional development background of business teacher educators in integrated literacy instruction, and (c) the influence of selected variables on their perceptions. Specific research questions were derived from a thorough review of business teacher education research. The rationale for the inclusion of the particular research questions that support the problem of the study follows.

Answers to the following research questions are sought in the study:

*Research Question #1:* What are the perceptions of business teacher educators regarding the integration of literacy instruction in high school business education courses?

*Rationale and Support:* Little research has examined how business teacher educators perceive the importance of literacy instruction in high school business education classrooms. Several studies have examined the perception of business teachers in high schools. A myriad of those studies reported that business teachers felt it was important to teach these skills, but much like their colleagues in other content-areas, felt unprepared to teach literacy skills (Polkinghorne, 2007; Polkinghorne, Railsback, Hite, 2008). This question serves to report the perceptions of business teacher educators in regards to the integration of literacy skills in future certified business teacher coursework.

*Research Question #2:* What are the perceptions of business teacher educators regarding their preparation for instructing integrated strategies of literacy instruction in future certified business education methods courses?

*Rationale and Support:* If business teacher educators are to prepare future certified business teachers to integrate strategies of literacy instruction in high school business courses, the question that arises is how are business teacher educators prepared to instruct future certified business teachers in strategies of literacy instruction? Literacy education research contends that it is the responsibility of content-area teacher educators to prepare their students to integrate literacy in the teacher's specialty area; however, are business teacher educators prepared to instruct future certified teachers in strategies of integrating their curriculum (Draper, 2008)? The question serves to report the perception of the level of preparation business teacher educators have to prepare future certified business teachers to utilize integrated instructional strategies.

*Research Question #3:* What are the perceptions of business teacher educators regarding their role in preparing future certified business educators to integrate literacy instruction in high school business education courses?

*Rationale and Support:* Research indicated that literacy skill development in content-area courses requires that students be explicitly taught how to read and why they read (Jacobs, 2008). Given that future certified business teachers are increasingly being called on to improve the literacy skills of their students, who is responsible for preparing future certified business teachers to integrate literacy skill development strategies in their courses (Jacobs, 2008; Stone et al., 2006)? Literacy teacher educators have indicated the responsibility for providing strategies to improve the literacy skills of future certified learners is the responsibility of content-area teacher educators (Draper, 2008). The question that remains is, do business teacher educators perceive it

to be their responsibility to prepare future certified business teachers with strategies to improve high school student literacy skills?

*Research Question #4:* What are the perceptions of business teacher educators regarding the type (implicit v. explicit) of primary literacy integration on the frequency in which literacy skills should be integrated in high school business education courses?

*Rationale and Support:* Believing that integration should occur is only one potential solution to a literacy skill problem, providing a model to remedy poor literacy skills is required if business teacher educators believe literacy integration improves student basic skills achievement. Currently, little research exists that posits there is any impact on student achievement in courses where literacy skills and content skills are integrated (Stone, et al, 2006). If business teacher educators perceive that future certified business teachers should integrate literacy in the business education classroom, how should future certified business teachers integrate literacy? Research contends that literacy should be explicitly taught in the content-areas (Draper, 2008). However, how do business teacher educators perceive integration should occur? Understanding how business teacher educators perceive literacy skills should be integrated sheds light on how business teacher educators are preparing future certified business teachers to integrate literacy skills in the high school business education classroom

*Research Question #5:* What are the perceptions of business teacher educators regarding the national status of preparing future certified business educators to integrate literacy skills in business education courses?

*Rationale and Support:* This research question seeks to understand the perception of business educators in the preparation of future certified business teachers on a national level. Current assessment data reports student literacy skill development has stalled after 2005 (ECS,

2007). A national reflection could indicate if resources are needed to improve the training of future certified business teachers in the strategies of integrating literacy skills in high school business education curriculum.

*Research Question #6:* What is the influence of (a) highest degree earned, (b) highest degree emphasis, (c) length of teaching experience, (d) last year of teaching experience, (e) focus of the university (whether the mission of the university is to teach, conduct research, or a combination of the two), and (f) current position on the literacy integration perceptions of business teacher educators?

*Rationale and Support:* Understanding the demographic variables that influence business teacher educators perceptions of (a) the integration of literacy skills in high school business courses, (b) their preparation to instruction future certified business teachers in integrated literacy methods, (c) their role in preparing future certified business teachers to integrate literacy skills in business courses, and (d) the type of literacy skills (implicit v. explicit) that should be primarily integrated in business courses could help in providing professional development to those individuals with the most critical need (Tyner, 1996).

## APPENDIX B: PILOT STUDY



## Appendix B1: Letter of Introduction to Study Participants

January 16, 2009

Dear «First» «Last» :

As a Family and Consumer Science educator, you are one of a very limited group who has been selected to participate in a pilot study being conducted through Southern Illinois University Carbondale and Valdosta State University. I am a faculty member at Valdosta State University as well as a doctoral candidate at Southern Illinois University Carbondale, where I am conducting dissertation research regarding the perception of CTE educators.

Your position and experience has provided you with expertise that is crucial to this study. Input concerning your role in preparing grades 6-12 teachers is necessary to gain information regarding the questions the study investigates. The overall objective of the study is to assist in improvement of baccalaureate instruction in CTE.

Your input is essential before the descriptive survey research is conducted. A copy of my proposed questionnaire and cover letter are enclosed for your examination. Please read the cover letter and complete the questionnaire, then answer the questions on the blue form. Please place all materials in the prepaid envelope and back in the mail to me by Friday, January 30th.

If you have any questions, please contact me (229-333-5654), or my dissertation chairs, Drs. Marcia Anderson and Barbara Hagler (618-453-3321).

Thank you so very much for taking time out of your busy schedule to assist with this study.

Sincerely,

Frederick W. Polkinghorne, M.S.  
Assistant Professor

This project has been reviewed and approved by the SIUC Human Subjects Committee. Questions concerning your rights as a participant in this research may be addressed to the Committee Chairperson, Office of Research Development and Administration, SIUC, Carbondale, IL 62901-4709. Phone (618) 453-4533. E-mail: [siuhsc@siu.edu](mailto:siuhsc@siu.edu)

## Appendix B2: Follow-Up Letter of Introduction to Study Participants

February 03, 2009

Dear «First» «Last» :

«First», you should have received my request for you to participate in a pilot study. I have yet to receive your response, and I need your help. The pilot study is a part of a much larger study into the perceptions of Career and Technical Educators. You are one of a very limited group who has been selected to participate.

Your position and experience has provided you with expertise that is crucial to this study. Input concerning your role in preparing grades 6-12 teachers is necessary to gain information that may be used to improve baccalaureate instruction in CTE teacher education programs.

Your input is essential before the descriptive survey research is conducted. Without additional response from the pilot study group, I will be unable to complete this dissertation study. A copy of my proposed questionnaire and cover letter are enclosed for your examination.

Please read the cover letter and complete the questionnaire, then answer the questions on the blue form. Please place all materials in the prepaid envelope and back in the mail to me by Monday, February 16, 2009. If you have any questions, please contact me (229-333-5654), or my dissertation chairs, Drs. Marcia Anderson and Barbara Hagler (618-453-3321).

Thank you so very much for taking time out of your busy schedule to assist with this study.

Sincerely,

Frederick W. Polkinghorne, M.S.  
Assistant Professor

This project has been reviewed and approved by the SIUC Human Subjects Committee. Questions concerning your rights as a participant in this research may be addressed to: Committee Chairperson, Office of Research Development and Administration, SIUC, Carbondale, IL 62901-4709. Phone (618) 453-4533. E-mail: [siuhsc@siu.edu](mailto:siuhsc@siu.edu)

## Appendix B3: Pilot Study Validation Instrument

### Perceptions of Faculty at FCS Teacher Education Institutions: Methods of Teaching Literacy in FCS Courses

Please respond to the following items after you have completed the enclosed questionnaire.

1. Were there any instructions that were difficult to understand?  Yes  No

If "yes," please cite the section(s) or question(s) and any suggestion for improvement.

Section # \_\_\_\_\_ or Question # \_\_\_\_\_

Suggestion(s):

Section # \_\_\_\_\_ or Question # \_\_\_\_\_

Suggestion(s):

2. Were there any questions that were difficult to understand?  Yes  No

If "yes," please cite the question(s) and any suggestions for improvement:

Question # \_\_\_\_\_ Suggestion(s) \_\_\_\_\_

Question # \_\_\_\_\_ Suggestion(s) \_\_\_\_\_

Question # \_\_\_\_\_ Suggestion(s) \_\_\_\_\_

Question # \_\_\_\_\_ Suggestion(s) \_\_\_\_\_

3. How long did it take to complete the questionnaire? Approximately \_\_\_\_\_ minutes.

Is the survey too long?  Yes  No

4. After reading the cover letter that came with the questionnaire, would you be persuaded to respond?  Yes  No

What suggestions do you have for improving the cover letter?

5. Please rate the overall difficulty in completing the questionnaire?

Extremely Difficult  Difficult  Moderate  Easy  Extremely Easy

6. Additional comments/suggestions

THANK YOU for your help!

## Appendix B4: Pilot Study Survey Instrument

**PERCEPTIONS OF FACULTY AT FCS TEACHER EDUCATION INSTITUTIONS:  
STRATEGIES OF TEACHING READING IN FCS COURSES**

Reading in this survey refers to the ability to phonemically read and comprehend written or symbolic material. By gaining information on FCS teacher educators' perceptions regarding importance and strategies of integrating reading into grades 6-12 FCS education courses, FCS education teacher curricula and professional development opportunities for FCS teacher educators might be improved. As a FCS teacher educator who instructs FCS education methodology courses, your expertise and perceptions are essential to the study. Thank you for your time and assistance. (Please use a dark pen or pencil. If you would like to obtain the overall results of this study, please see the directions that conclude this survey.)

My institution NO LONGER OFFERS a FCS teacher education program.

**\*\*If you selected the above response, please stop here and return this questionnaire in the attached envelope.\*\***

Are you currently working in a position that does, has, or may require you to instruct FCS teacher candidates in strategies of teaching FCS courses?

Yes If yes, please answer the following questions.

No If no, please stop here and return this questionnaire in the attached envelope

**SECTION 1: GENERAL INFORMATION ABOUT YOU, THE PROFESSIONAL:**

1. Your current position:

Graduate Assistant  Adjunct  Assistant Prof.  Associate Prof.  Professor  Other \_\_\_\_\_

2. Your highest degree earned:

Bachelor's  Master's  Education Specialist  Ed.D.  Ph.D.  Other \_\_\_\_\_

3. How would you describe the college or school in which you earned your highest degree:

Business  Education  Information Technology  Other \_\_\_\_\_

4. I am employed by a college/university focused on:

Research  Teaching  Research/Teaching

5. When did you teach (i.e. 1980 – 1982) FCS and/or FCS teacher education at a:

\_\_\_\_\_ Four-year university/college

\_\_\_\_\_ Two-year college

\_\_\_\_\_ Secondary school

\_\_\_\_\_ Middle school

*(PLEASE CONTINUE ON NEXT PAGE)*

**SECTION 2: READING INTEGRATION IN HIGH SCHOOL FCS EDUCATION COURSES:** Reading integration in this survey refers to teaching reading skills in the context of high school FCS education courses, in a manner that goes beyond what might normally occur in the delivery of FCS content.

6. High school FCS educators should integrate reading instruction in FCS courses.  
 Strongly Agree    Agree    Disagree    Strongly Disagree
7. High school FCS educators should be held accountable by assessments, like those required by the *No Child Left Behind Act*, for teaching reading in FCS courses.  
 Strongly Agree    Agree    Disagree    Strongly Disagree
8. High school FCS educators should frequently integrate reading skills in FCS courses.  
 Strongly Agree    Agree    Disagree    Strongly Disagree
9. High school FCS educators should rarely integrate reading skills in FCS courses.  
 Strongly Agree    Agree    Disagree    Strongly Disagree

**TERMINOLOGY:** In this section the term implicit is defined as occurring without students knowing and the term explicit is defined as occurring with students knowing.

10. High school FCS educators should **PRIMARILY** integrate reading skills implicitly with FCS content.  
 Strongly Agree    Agree    Disagree    Strongly Disagree
11. High school FCS educators should **PRIMARILY** integrate reading skills explicitly with FCS content.  
 Strongly Agree    Agree    Disagree    Strongly Disagree
12. Preparing FCS education teacher candidates to integrate reading skills in high school FCS courses will help them to improve the literacy skills of their students.  
 Strongly Agree    Agree    Disagree    Strongly Disagree
13. Preparing FCS education teacher candidates to integrate reading skills in FCS courses will help them to improve the FCS knowledge and skills of their future students.  
 Strongly Agree    Agree    Disagree    Strongly Disagree
14. Indicate the order (1, first; 2, second, etc...) of **PRIMARY** responsibility to prepare FCS education teacher candidates to integrate reading in FCS courses.  
       \_\_\_\_\_ FCS teacher educators  
       \_\_\_\_\_ Reading teacher educators  
       \_\_\_\_\_ Teacher educators other than business or reading (Specify: \_\_\_\_\_)

(PLEASE CONTINUE ON NEXT PAGE)

**SECTION 3: PROFESSIONAL DEVELOPMENT: READING INTEGRATION IN FCS EDUCATION COURSES**

15. Indicate the order (1, most important; 2, second most important, etc...) of importance of where FCS education teacher candidates should receive training to integrate reading.
- \_\_\_\_\_ In-service graduate coursework
  - \_\_\_\_\_ In-service professional development conferences/workshops
  - \_\_\_\_\_ Pre-service FCS education methods coursework
  - \_\_\_\_\_ Pre-service coursework integrated in general instructional strategies coursework
  - \_\_\_\_\_ Other (Please indicate): \_\_\_\_\_
16. The training of FCS education teacher candidates to integrate reading in FCS education courses is adequate.
- Strongly Agree  Agree  Disagree  Strongly Disagree
17. I am prepared to instruct FCS education teacher candidates in strategies of teaching reading skills in FCS courses.
- Strongly Agree  Agree  Disagree  Strongly Disagree
18. I am not prepared to instruct FCS education teacher candidates in strategies of teaching reading skills in FCS courses,
- Strongly Agree  Agree  Disagree  Strongly Disagree
19. I need additional preparation to instruct FCS education teacher candidates in strategies of teaching reading skills in FCS courses.
- Strongly Agree  Agree  Disagree  Strongly Disagree
20. I do not need additional preparation to instruct FCS education teacher candidates in strategies of teaching reading skills in FCS courses.
- Strongly Agree  Agree  Disagree  Strongly Disagree
21. If you have received training to prepare FCS education teacher candidates in strategies to integrate reading skills in FCS courses, please rank the methods in the order of influence (1, most influential.....6, least influential)
- \_\_\_\_\_ Classroom practice
  - \_\_\_\_\_ Collaboration with a reading teacher educator
  - \_\_\_\_\_ Professional conferences
  - \_\_\_\_\_ Review of research
  - \_\_\_\_\_ University coursework
  - \_\_\_\_\_ Other (Please indicate): \_\_\_\_\_

**SECTION 4: PERCEPTIONS OF CURRICULUM INTEGRATION:** The term integration is multi-faceted. This section of the survey is to determine how FCS teacher educators perceive integration to occur.

22. I am skilled in curriculum integration.
- Strongly Agree  Agree  Disagree  Strongly Disagree

*(PLEASE CONTINUE ON NEXT PAGE)*

23. How do you define curriculum integration:

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24. Would you be willing to receive follow-up communication about this survey? \_\_\_\_\_

27. If yes, how should I contact you for follow-up communications about this survey? \_\_\_\_\_  
(i.e. phone, 555-555-5555 or email, FCSTeacherEd@university.edu)

**THANK YOU FOR YOUR PARTICIPATION!**

Please return your completed survey in the attached prepaid envelope or send to:

Frederick W. Polkinghorne, M.S.  
Valdosta State University  
Department of Adult and Career Education  
Education Center, Room 212  
Valdosta, GA 31698-0800

APPENDIX C: FINAL DATA COLLECTION INSTRUMENT



## Appendix C1: Initial Letter of Introduction to Study Participants

Dear «First» «Last»:

I am a graduate student seeking my Doctorate of Philosophy degree in the Department of Workforce Education and Development at Southern Illinois University Carbondale. I realize your spring break is quickly approaching; however, please complete the enclosed survey designed to gather information about the perceptions of business teacher educators regarding the integration of reading skills in grades 6-12 business courses.

All business teacher educators in the United States at post-secondary institutions who are responsible for providing pre-service business teachers with instructional methodology training will receive a copy of this survey. You were selected to participate in this study because you were reported by «Address1» as the most recent instructor of business education methods/strategies at your university.

If you are not affiliated with instructing business education methods/strategies at your institution, please forward this survey to the person responsible. In the event that your institution no longer offers a business education program please indicate that on the enclosed survey and return it in the postage paid envelope.

The survey will take 10 to 15 minutes to complete. All your responses will be kept confidential within reasonable limits. Only people directly involved with this project will have access to the surveys. Completion and return of this survey indicates voluntary consent to participate in this study. Please use the return envelope provided.

Questions about this study can be directed to me or to my supervising professors, Drs. Marcia Anderson and Barbara Hagler, Department of Workforce Education and Development, SIUC, Carbondale, IL 62901-4605, Phone (618) 453-3321.

Thank you for taking the time to assist me in this research.

Frederick W. Polkinghorne  
229-333-5654  
fwpolkinghorne@valdosta.edu

enclosures

This project has been reviewed and approved by the SIUC Human Subjects Committee. Questions concerning your rights as a participant in this research may be addressed to: Committee Chairperson, Office of Research Development and Administration, SIUC, Carbondale, IL 62901-4709. Phone (618) 453-4533. E-mail: siuhsc@siu.edu

## Appendix C2: Follow-up Letter of Introduction to Study Participants

Dear «First» «Last»:

I am a graduate student seeking my Doctorate of Philosophy degree in the Department of Workforce Education and Development at Southern Illinois University Carbondale and an assistant professor of Adult and Career Education at Valdosta State University. I recently sent you a request to complete the enclosed survey designed to gather information about the perceptions of business teacher educators regarding the integration of reading skills in grades 6-12 business courses.

You were selected to participate in this study because you were reported by «Address1» as the most recent instructor of business education methods/strategies at your university. I have not yet received your response, and I need your response by April 16, 2009 so that I may complete my dissertation study.

If you are not affiliated with instructing business education methods/strategies at your institution, please return the enclosed survey indicating that you were wrongly selected. In the event that your institution no longer offers a business education program please select that option on the enclosed survey and return it in the postage paid envelope.

The survey will take 10 to 15 minutes to complete. All your responses will be kept confidential within reasonable limits. Only people directly involved with this project will have access to the surveys. Completion and return of this survey indicates voluntary consent to participate in this study. Please use the return envelope provided.

Questions about this study can be directed to me or to my supervising professors, Drs. Marcia Anderson and Barbara Hagler, Department of Workforce Education and Development, SIUC, Carbondale, IL 62901-4605, Phone (618) 453-3321.

Thank you for taking the time to assist me in this research.

Frederick W. Polkinghorne  
229-333-5654  
fwpolkinghorne@valdosta.edu

enclosures

This project has been reviewed and approved by the SIUC Human Subjects Committee. Questions concerning your rights as a participant in this research may be addressed to: Committee Chairperson, Office of Research Development and Administration, SIUC, Carbondale, IL 62901-4709. Phone (618) 453-4533. E-mail: siuhsc@siu.edu

## Appendix C3: Final Data Collection Instrument

**PERCEPTIONS OF FACULTY AT BUSINESS TEACHER EDUCATION  
INSTITUTIONS: STRATEGIES OF TEACHING READING IN BUSINESS COURSES**

In this survey, reading refers to the ability to phonemically read and comprehend written or symbolic material. By gaining information on business teacher educators' perceptions regarding the importance and strategies of integrating reading into grades 6-12 business education courses, business education teacher curricula and professional development opportunities for business teacher educators might be improved. As a business teacher educator who instructs business education methodology courses, your expertise and perceptions are essential to the study. Thank you for your time and assistance. (Please use a dark pen or pencil. If you would like to obtain the overall results of this study, please see the directions that conclude this survey.)

My institution NO LONGER OFFERS a business teacher education program.

\*\*If you selected the above response, please stop here and return this questionnaire in the attached envelope.\*\*

Are you currently working in a position that does, has, or may require you to instruct business education teacher candidates in strategies of teaching business courses?

Yes If yes, please answer the following questions.

No If no, please stop here and return this questionnaire in the attached envelope.

**SECTION 1: GENERAL INFORMATION ABOUT YOU, THE PROFESSIONAL:**

1. Your current position:

Graduate Assistant  Adjunct  Assistant Prof.  Associate Prof.  Professor  Other \_\_\_\_\_

2. Your highest degree earned:

Bachelor's  Master's  Education Specialist  Ed.D.  Ph.D.  Other \_\_\_\_\_

3. How would you describe the college or school in which you earned your highest degree:

Business  Education  Information Technology  Other \_\_\_\_\_

4. I am employed by a college/university focused on:

Research  Teaching  Research/Teaching

5. What years did you teach (i.e. 1980 – 1982) business and/or business teacher education at a:

\_\_\_\_\_ Four-year university/college

\_\_\_\_\_ Two-year college

\_\_\_\_\_ Secondary school

\_\_\_\_\_ Middle school

(PLEASE CONTINUE ON BACK OF PAGE)

**SECTION 2: READING INTEGRATION IN HIGH SCHOOL BUSINESS EDUCATION COURSES:** *In this survey, reading integration in this survey refers to teaching reading skills in the context of high school business education courses in a manner that goes beyond what might normally occur in the delivery of business content.*

6. High school business educators should integrate reading instruction in business courses.  
 Strongly Agree    Agree    Disagree    Strongly Disagree
7. High school business educators should be held accountable by assessments, like those required by the *No Child Left Behind Act*, for teaching reading in business courses.  
 Strongly Agree    Agree    Disagree    Strongly Disagree
8. High school business educators should frequently integrate reading skills in business courses.  
 Strongly Agree    Agree    Disagree    Strongly Disagree
9. High school business educators should rarely integrate reading skills in business courses.  
 Strongly Agree    Agree    Disagree    Strongly Disagree

**TERMINOLOGY:** In this section the term implicit is defined as occurring without students knowing and the term explicit is defined as occurring with students knowing.

10. High school business educators should PRIMARILY integrate reading skills implicitly with business content.  
 Strongly Agree    Agree    Disagree    Strongly Disagree
11. High school business educators should PRIMARILY integrate reading skills explicitly with business content.  
 Strongly Agree    Agree    Disagree    Strongly Disagree
12. Preparing business education teacher candidates to integrate reading skills in high school business courses will help them to improve the literacy skills of their students.  
 Strongly Agree    Agree    Disagree    Strongly Disagree
13. Preparing business education teacher candidates to integrate reading skills in business courses will help them to improve the business knowledge and skills of their future students.  
 Strongly Agree    Agree    Disagree    Strongly Disagree
14. Indicate the order (1, first; 2, second; etc...) of PRIMARY responsibility to prepare business education teacher candidates to integrate reading in business courses.  
     \_\_\_\_\_ Business teacher educators  
     \_\_\_\_\_ Reading teacher educators  
     \_\_\_\_\_ Teacher educators other than business or reading (Specify: \_\_\_\_\_)

(PLEASE CONTINUE ON NEXT PAGE)

**SECTION 3: PROFESSIONAL DEVELOPMENT: READING INTEGRATION IN BUSINESS EDUCATION COURSES**

15. Indicate the order (1, most important; 2, second most important; etc...) of importance of where business education teacher candidates should receive training to integrate reading.
- In-service graduate coursework  
 In-service professional development conferences/workshops  
 Pre-service business education methods coursework  
 Pre-service coursework integrated in general instructional strategies coursework  
 Other (Please indicate): \_\_\_\_\_
16. The training of business education teacher candidates to integrate reading in business education courses is adequate.
- Strongly Agree    Agree    Disagree    Strongly Disagree
17. I am prepared to instruct business education teacher candidates in strategies of teaching reading skills in business courses.
- Strongly Agree    Agree    Disagree    Strongly Disagree
18. I am not prepared to instruct business education teacher candidates in strategies of teaching reading skills in business courses.
- Strongly Agree    Agree    Disagree    Strongly Disagree
19. I need additional preparation to instruct business education teacher candidates in strategies of teaching reading skills in business courses.
- Strongly Agree    Agree    Disagree    Strongly Disagree
20. I do not need additional preparation to instruct business education teacher candidates in strategies of teaching reading skills in business courses.
- Strongly Agree    Agree    Disagree    Strongly Disagree
21. Please rank the types of training you have received to prepare business education teacher candidates in strategies to integrate reading skills in business courses according to the order of influence (1, most influential, etc.)
- Classroom practice  
 Collaboration with a reading teacher educator  
 Professional conferences  
 Review of research  
 University coursework  
 Other (Please indicate): \_\_\_\_\_
22. Please indicate the PRIMARY type of training you received to prepare business education teacher candidates in strategies to integrate reading skills in business courses (*Choose only one*).
- Classroom practice  
 Collaboration with a reading teacher educator  
 Professional conferences  
 Review of research  
 University coursework  
 Other (Please indicate): \_\_\_\_\_

(PLEASE CONTINUE ON BACK OF PAGE)

**SECTION 4: PERCEPTIONS OF CURRICULUM INTEGRATION:**

23. I am skilled in curriculum integration.

- Strongly Agree    Agree    Disagree    Strongly Disagree

24. The term integration is multi-faceted. How do you define curriculum integration?

---

---

---

25. Would you be willing to receive follow-up communication about this survey? \_\_\_\_\_

26. If yes, how should I contact you for follow-up communications about this survey? \_\_\_\_\_  
(i.e. phone, 555-555-5555; or email, BusinessTeacherEd@university.edu)

27. If you would like to receive the results of this study, please **send an email request** to: [fwpolkinghorne@valdosta.edu](mailto:fwpolkinghorne@valdosta.edu)

**THANK YOU FOR YOUR PARTICIPATION!**

Please return your completed survey in the attached prepaid envelope or send to:

Frederick W. Polkinghorne, M.S.  
Valdosta State University  
Department of Adult and Career Education  
Education Center, Room 212  
Valdosta, GA 31698-0800

## APPENDIX D: DATA ANALYSIS

## Appendix D1: Summary of Responses Classified as “other” by Question and Subject

*Table D1**Responses Categorized as “OTHER” by Table Reference*

<u>Subject Number</u>	<u>Response</u>
<i>Table 2 – Participant Categories: Current Position</i>	
34	Clinical Lecturer
55	Academic Staff, Tenure Track
64	Teaching Specialist
70	Senior Lecturer
71	Instructor
76	Instructor
112	Other
130	Instructor
131	Other
135	Visiting Instructor
139	Instructor
141	Instructor
145	CTE Admin
148	Instructor
151	Other
<i>Emphasis of highest degree</i>	
7	Other
46	Other
116	College of Agriculture, School of Voc. Ed.
132	Bus. Ed.
134	University
135	Land Grant University
136	Human Ecology
140	Marriage & Family Therapy
143	Family Life
151	Research
154	College/School of Home Economics

*(Table D1 continued)*



*Responses Categorized as "OTHER" by Table Reference*

---

<u>Subject Number</u>	<u>Response</u>
40	English
50	Other
60	Educ. College
86	Secondary Methods
107	Education Psych. And Education Studies
111	Consultants in Literacy

---

*from Table 7 – Participant Training for Integrating Reading Skills in Business Courses:  
Most Effective Training Methods*

15	Preservice content literacy course taught by an expert (not Bus. Ed. Faculty)
28	Education core courses
48	Specific reading strategy course
54	Pre-Service reading course taught by Reading specialist
113	Integration of Reading in Content Area Course
125	New Research findings
134	Many school districts have this as a prof. dev. focus
142	Education coursework for reading in content

---

*Participant Training Method*

2	I have not received training
8	No Training
16	Never had training
48	Specific reading strategy course in undergraduate program
89	Professional Bus. Experience
105	Specific Workshops
139	Self-study
148	Teacher in-service training

## Appendix D2: SPSS Kruskal-Wallis Tables

Research Question #1: What are perceptions of business teacher educators regarding the integration of reading skills in high school business courses?

Survey Item #	Kruskal-Wallis Test Statistic
<i>Variable: Institutional Affiliation</i>	
6	.337
7	.416
8	.773
9	.692
10	.264
11	.583
12	.371
13	.310
<i>Position Title</i>	
6	.510
7	.147
8	.794
9	.863
10	.847
11	.457
12	.801
13	.740
<i>Degree</i>	
6	.224
7	.067
8	.708
9	.369
10	.991
11	.533
12	.405
13	.135

(Appendix D2 continues)

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*College/School Awarding Highest Degree*

6	.227
7	.965
8	.176
9	.128
10	.393
11	.161
12	.407
13	.537

---

*Institutional Focus*

6	.401
7	.901
8	.624
9	.046*
10	.734
11	.669
12	.036*
13	.369

---

Research Question #2: What are perceptions of business teacher educators regarding their preparation to instruct business education teacher candidates in strategies of integrating reading skills in high school business courses?

---

Survey Item #	Kruskal-Wallis Test Statistic
---------------	----------------------------------

---

*Variable: Institutional Affiliation*

17	.183
18	.146
19	.947
20	.841
21	.434
22	.117

---

*(Appendix D2 continues)*

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<i>Variable: Institutional Affiliation</i>	
23	.476

---

<i>Position Title</i>	
17	.615
18	.378
19	.724
20	.568
21	.778
22	.500
23	.206

---

<i>Degree</i>	
17	.460
18	.492
19	.187
20	.095
21	.209
22	.502
23	.704

---

<i>College/School Awarding Highest Degree</i>	
17	.551
18	.290
19	.364
20	.495
21	.409
22	.600
23	.742

---

*(Appendix D2 continues)*

---

*Institutional Focus*

17	.286
18	.381
19	.335
20	.237
21	.280
22	.291
23	.071

---

Research Question #3: What are perceptions of business teacher educators regarding their role in preparing business education teacher candidates to integrate reading skills in high school business courses?

---

*Variable: Institutional Affiliation*

14	.230
15	.930

---

*Position Title*

14	.478
15	.703

---

*Degree*

14	.894
15	.548

---

*College/School Awarding Highest Degree*

14	.198
15	.813

---

*(Appendix D2 continues)*

(Appendix D2 continued)

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<i>Institutional Focus</i>	
14	.208
15	.429

---

Research Question #4: Is there a relationship of business teacher educators' perceptions regarding implicit or explicit reading skill integration with their perceived frequency of reading skill integration in high school business courses?

(method 1=implicit; 2=explicit)  
(frequency 1= favors implicit; 2= favors explicit)

Question 10  
(No significance reported)

Crosstab

		Q10Method		Total
		1	2	1
Frequency	1.00	57	42	99
	2.00	7	4	11
Total		64	46	110

Question 11  
(No significance reported)

Crosstab

		Q11Method		Total
		1	2	1
Frequency	1.00	68	30	98
	2.00	5	6	11
Total		73	36	109

Research Question #5: What are perceptions of business teacher educators regarding the national status of preparing business education teacher candidates to integrate reading skills in high school business courses?

Survey Item #	Kruskal-Wallis Test Statistic
<i>Variable: Institutional affiliation</i>	
16	.602
<i>Position title</i>	
16	.793
<i>Degree</i>	
16	.455
<i>Emphasis of highest degree</i>	
16	.510
<i>Institutional focus</i>	
16	.664



## Appendix D3: SPSS Mann-Whitney U Test

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*Survey item #6: High school business educators should integrate reading instruction in business courses?*

---

*Interval of teaching experience in secondary schools***Ranks**

	STeachInt	N	Mean Rank	Sum of Ranks
Q6	1-5	27	14.31	386.50
	16-20	3	26.17	78.50
	Total	30		

**Test Statistics(b)**

	Q6
Mann-Whitney U	8.500
Wilcoxon W	386.500
Z	-2.474
Asymp. Sig. (2-tailed)	.013
Exact Sig. [2*(1-tailed Sig.)]	.020(a)

a Not corrected for ties.

b Grouping Variable: STeachInt

**Ranks**

	STeachInt	N	Mean Rank	Sum of Ranks
Q6	6-10	18	9.69	174.50
	16-20	3	18.83	56.50
	Total	21		

**Test Statistics(b)**

	Q6
Mann-Whitney U	3.500
Wilcoxon W	174.500
Z	-2.656
Asymp. Sig. (2-tailed)	.008
Exact Sig. [2*(1-tailed Sig.)]	.011(a)

a Not corrected for ties.

b Grouping Variable: STeachInt

**Ranks**

	STeachInt	N	Mean Rank	Sum of Ranks
Q6	11-15	9	5.33	48.00
	16-20	3	10.00	30.00
	Total	12		

**Test Statistics(b)**

	Q6
Mann-Whitney U	3.000
Wilcoxon W	48.000
Z	-2.056
Asymp. Sig. (2-tailed)	.040
Exact Sig. [2*(1-tailed Sig.)]	.064(a)

a Not corrected for ties.

b Grouping Variable: STeachInt

*Survey item #9: High school business educators should rarely integrate reading skills in business courses.*

*Institutional Focus***Ranks**

	Employ	N	Mean Rank	Sum of Ranks
Q9	Teaching	49	47.01	2303.50
	Research/Teaching	58	59.91	3474.50
	Total	107		

**Test Statistics(a)**

	Q9
Mann-Whitney U	1078.500
Wilcoxon W	2303.500
Z	-2.421
Asymp. Sig. (2-tailed)	.015

a Grouping Variable: Employ

---

*Interval of Teaching Experience in four-year colleges/universities*

**Ranks**

	FTeachInt	N	Mean Rank	Sum of Ranks
Q9	1-5	20	29.48	589.50
	6-10	27	19.94	538.50
	Total	47		

**Test Statistics(a)**

	Q9
Mann-Whitney U	160.500
Wilcoxon W	538.500
Z	-2.621
Asymp. Sig. (2-tailed)	.009

a Grouping Variable: FTeachInt

**Ranks**

	FTeachInt	N	Mean Rank	Sum of Ranks
Q9	6-10	27	16.61	448.50
	26-30	9	24.17	217.50
	Total	36		

**Test Statistics(b)**

	Q9
Mann-Whitney U	70.500
Wilcoxon W	448.500
Z	-2.063
Asymp. Sig. (2-tailed)	.039
Exact Sig. [2*(1-tailed Sig.)]	.062(a)

a Not corrected for ties.

b Grouping Variable: FTeachInt

**Ranks**

	FTeachInt	N	Mean Rank	Sum of Ranks
Q9	6-10	27	16.76	452.50
	21-25	10	25.05	250.50
	Total	37		

**Test Statistics(b)**

	Q9
Mann-Whitney U	74.500
Wilcoxon W	452.500
Z	-2.288
Asymp. Sig. (2-tailed)	.022
Exact Sig. [2*(1-tailed Sig.)]	.037(a)

a Not corrected for ties.

b Grouping Variable: FTeachInt

**Ranks**

	FTeachInt	N	Mean Rank	Sum of Ranks
Q9	6-10	27	17.98	485.50
	16-20	13	25.73	334.50
	Total	40		

**Test Statistics(b)**

	Q9
Mann-Whitney U	107.500
Wilcoxon W	485.500
Z	-2.154
Asymp. Sig. (2-tailed)	.031
Exact Sig. [2*(1-tailed Sig.)]	.049(a)

a Not corrected for ties.

b Grouping Variable: FTeachInt

**Ranks**

	FTeachInt	N	Mean Rank	Sum of Ranks
Q9	1-5	20	29.48	589.50
	6-10	27	19.94	538.50
	Total	47		

**Test Statistics(a)**

	Q9
Mann-Whitney U	160.500
Wilcoxon W	538.500
Z	-2.621
Asymp. Sig. (2-tailed)	.009

a Grouping Variable: FTeachInt

**Ranks**

	FTeachInt	N	Mean Rank	Sum of Ranks
Q9	6-10	27	16.61	448.50
	26-30	9	24.17	217.50
	Total	36		

**Test Statistics(b)**

	Q9
Mann-Whitney U	70.500
Wilcoxon W	448.500
Z	-2.063
Asymp. Sig. (2-tailed)	.039
Exact Sig. [2*(1-tailed Sig.)]	.062(a)

a Not corrected for ties.

b Grouping Variable: FTeachInt

**Ranks**

	FTeachInt	N	Mean Rank	Sum of Ranks
Q9	6-10	27	16.76	452.50
	21-25	10	25.05	250.50
	Total	37		

**Test Statistics(b)**

	Q9
Mann-Whitney U	74.500
Wilcoxon W	452.500
Z	-2.288
Asymp. Sig. (2-tailed)	.022
Exact Sig. [2*(1-tailed Sig.)]	.037(a)

a Not corrected for ties.

b Grouping Variable: FTeachInt

**Ranks**

	FTeachInt	N	Mean Rank	Sum of Ranks
Q9	6-10	27	17.98	485.50
	16-20	13	25.73	334.50
	Total	40		

**Test Statistics(b)**

	Q9
Mann-Whitney U	107.500
Wilcoxon W	485.500
Z	-2.154
Asymp. Sig. (2-tailed)	.031
Exact Sig. [2*(1-tailed Sig.)]	.049(a)

a Not corrected for ties.

b Grouping Variable: FTeachInt

*Survey Item #12: Preparing business education teacher candidates to integrate reading skills in high school business courses will help them to improve the literacy skills of their students*

*Institutional Focus***Ranks**

	Employ	N	Mean Rank	Sum of Ranks
Q12	Teaching	48	60.75	2916.00
	Research/Teaching	58	47.50	2755.00
	Total	106		

**Test Statistics(a)**

	Q12
Mann-Whitney U	1044.000
Wilcoxon W	2755.000
Z	-2.519
Asymp. Sig. (2-tailed)	.012

a Grouping Variable: Employ

## Appendix D4: Non-Response Data

	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13
Mann-Whitney U	426.000	373.500	448.000	442.500	428.000	441.500	465.000	451.500
Wilcoxon W	891.000	808.500	944.000	907.500	893.000	906.500	961.000	947.500
Z	-.613	-1.194	-.270	-.364	-.345	-.359	.000	-.220
Asymp. Sig. (2-tailed)	.540	.233	.787	.716	.730	.720	1.000	.826
Exact Sig. [2*(1-tailed Sig.)]								

a. Not corrected for ties.

b. Grouping Variable: Comparison

Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23
387.000	392.000	440.500	372.500	380.500	449.500	420.500	144.500	145.000	429.000
852.000	827.000	936.500	868.500	815.500	945.500	855.500	334.500	355.000	864.000
-.865	-.472	-.150	-1.233	-1.080	.000	.000	-1.076	-1.296	-.362
.387	.637	.881	.218	.280	1.000	1.000	.282	.195	.718
							.297 <sup>a</sup>	.214 <sup>a</sup>	

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