

2020

Instructors' Perspectives on Misalignment of Secondary and College Business Curriculum

RonDerrick Johnson
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College of Education

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RonDerrick Johnson

has been found to be complete and satisfactory in all respects,
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Walden University
2020

Abstract

Instructors' Perspectives on Misalignment of Secondary and College Business
Curriculum

By

RonDerrick Johnson

M.Ed., Dallas Baptist University, 2015

MBA, Letourneau University, 2004

BBA, East Texas Baptist University, 2001

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

Walden University

May 2020

Abstract

Curricula developers have not been aligning high school career and technical education (CTE) business curricula to prepare high school students for college business courses. The purpose of this research was to explore and seek to understand misalignment issues regarding CTE business curricula at a public school district and three surrounding colleges in the southern United States. The conceptual framework was curricula integration theory, which posits that education leaders and curricula developers improve existing knowledge by designing curricula systems that address real-world problems, issues, and concerns. The research questions for this qualitative case study were about the perceptions of college business professors and high school CTE business teachers regarding student preparedness and the alignment issues between college business and high school CTE business curricula. Purposive sampling was used to select business teachers and professors. Data were collected from 6 business teachers and 6 professors via face-to-face semistructured interviews. Data were analyzed using thematic analysis for emergent themes. The themes that emerged were unified efforts to positively change CTE business perspectives with all education stakeholders, business curricula alignment that can be enhanced through state-regulated assessments, CTE planning between high school teachers and college professors, development of CTE online programs, allocation of time for CTE planning for business high school teachers and college professors, and administrative CTE support. Positive social change implications include implementations leading to the alignment of CTE curricula for high schools and colleges to better prepare high school graduates for college and to join the business work environment.

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Dedication

I dedicate the accomplishment of this doctorate to my God and Savior Jesus Christ. Many have heard of the relentless love of the Father but, I am a living witness of his omnipotent power. Although the evil one took his best shot; he was not able to finish me off. With the strength of God's righteous right hand, I kept coming. No weapon formed against me will ever be able to prosper and every lying tongue that rises against me, bearing false witness and judgment, will be refuted. As a servant of the Lord, I seek no revenge because my vindication comes from him.

Isaiah 54:17

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First, I want to thank my Mother Patti Jane for her supreme confidence and belief in my abilities. She has been the epitome of perseverance and my largest motivation to never give up. Without the sacrifices that she and Eddie has made for my brothers and me, her immense wisdom, and magnificent love, I would have by no means accomplished this goal.

I thank my Father Lonzell Sr. who instilled me with faith in God. He has been an integral part of my life and has helped to shape the man of God that I am today. Also, my three brothers Lonzell Jr., Christon, and Corey are the strongest and most intelligent young men I have ever met. They have proven time and again that when faith is met with courage, you can accomplish anything. I would like to thank my daughter, Tyshe, for inspiring me through her endless pursuit of greatness.

To my extended family, I pray this accomplishment helps to increase your continued belief in yourselves and make a positive impact on generations to come.

I would like to remember and thank my grandparents. Ms. Ella Mae Powell and Ms. Tennie Hazel Wilkins lived during an era in which they were not given the chance to strive for educational excellence. However, they instilled my family with the dreams and hope of a better tomorrow. This faith was that one day their grandchildren would be given the opportunity they were not.

Finally, I would like to thank Dr. Alexson for guiding me by contributing your methodological expertise. And a special thanks to Dr. Kiriakidis for going beyond the call of duty and pushing me to realize my full potential.

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Chapter 1: Introduction to the Study

The development of career and technical education (CTE) courses has been a significant focus for educational leaders since the induction of the Carl D. Perkins Career and Technical Education Act of 2006 (Imperatore & Hyslop, 2017). One of the significant components of the act was to ensure that students are career and college ready. The integration of common core subjects, such as mathematics, science, reading, social studies, and writing, may help CTE students develop the essential skills to prepare them for the workforce (Burch, Burch, Heller, & Batchelor, 2015). Burch et al. (2015) conducted semistructured interviews to probe into the business curricula between a school district and local colleges. Information from the study was used to make an informed analysis of the business alignment practices between the learning institutions. The Texas Education Agency (TEA) for the 2020–2021 statewide CTE programs, division of the college, career, and military preparations met with stakeholders that represent CTE programs. The purpose of the meeting was to collect feedback from approximately 1,000 stakeholders, including the sampled school district for this research.

Several areas are considered to evaluate the effectiveness of curricula implementation. The curricula assessment measures used by the curricula integration theory include student self-concerns, social world issues, explanatory ideas for describing and interpreting, and techniques for analyzing and expressing concepts (Beane, 1997). Curricula integration theory is the foundation of this study used to answer the pertinent research questions. The problem is a misalignment between the CTE business curricula at

a school district in the southern region of the United States and the business programs of three of the local colleges near an urban school district located in the same region. In Chapter 1, I discuss the background literature related to CTE business curricula alignment issues. Next, I identify the research problem and purpose statements of this study. I explain the curricula integration theory regarding CTE business curricula misalignment.

Background

Education policymakers have required multiple improvements to be implemented within CTE programs. The National Association of State Directors of Career Technical Education Consortium mandated that CTE programs have an approved program of study as authorized by the Carl D. Perkins Career and Technical Education Act of 2006 (Imperatore & Hyslop, 2017). Significant components of the law required that education programs ensured accountability, coordinated efforts with the local community, and integrated technology as well as academic connections at both the secondary and collegiate levels (Imperatore & Hyslop).

Of the states that adhered to the accountability requirements assigned by the U.S. Department of Education, Office of Planning, Evaluation, and Policy Development Service, 40 states complied at the high school level. However, only 24 states participated at the postsecondary levels (Imperatore & Hyslop, 2017). Fletcher and Gordon (2017) asserted that millions of high school graduates in the United States were underprepared for college success and that CTE teachers faced the challenge of redesigning their

curricula to incorporate current societal and contemporary demands. A lack of funding has created curricula alignment issues that impact educators' abilities to embrace stronger online and hybrid learning platforms that could increase how students learn (Fletcher & Gordon, 2017).

Digital platforms and new business computer software are developing at a high rate of speed. Online education is rapidly advancing (Feng, Lu, & Yao, 2015). Online learning management systems (LMSs) are used to enhance performance measures and content delivery to engage students (Allen & Seawell, 2013). To effectively facilitate LMSs, there must be a commitment between curricula developers, policymakers, administrators, and staff; however, lacking content development and minimal professional development for educators have detracted from effective web-based implementation for students (Allen & Seawell, 2013). The overall perception of mistrust and a reluctance to adopt online learning have limited teachers' acceptance of LMSs (Lai & Savage, 2013). Saeger (2017) identified the need to integrate CTE business curricula within a broader scope of education reform to embrace current technological advancements.

Improvements in the alignment of CTE curricula have been a debated topic in education. To align pertinent degrees with occupations, Saeger (2017) discussed the need to strengthen CTE business curricula alignment between secondary and college institutions. Saeger emphasized a need to develop CTE curricula between high schools and college institutions further. Saeger also reported statistical evidence that identified a

need for stronger alignment between high schools and college CTE curricula in the areas of academics, employability, technical, and job-specific skills. Alcoba (2014) theorized that there must be a strong relationship between the objectives, assessments, and instructional processes of education to increase curricula alignment. Along these lines, the Association to Advance Collegiate Schools of Business (AACSB) postulated that every school of business should outline four to 10 learning objectives in CTE areas that students must achieve (Alcoba, 2014). Conversely, little research has signified links between the goals of business schools and the achievement of student learning outcomes. Burch et al. (2015) delved into the issue of understanding how the future of CTE business courses between high schools and colleges could line up their curricula to reflect the growing trends of the business world. Burch et al. investigated how CTE business curricula must envelop innovative learning approaches to align with desired outcomes between high schools and colleges. Soto (2015) discussed how the traditional concepts of teaching do not train students for the present job market in areas defined within the CTE business curricula. Soto asserted that when discussing curricula development and alignment, education leaders must consider relevant standards and objectives used to develop the business abilities of students.

Student success in a subject is predicated on effective planning. Education leaders have often conferred about how education leadership must be strategic in creating students able to compete in the global economy (Sowcik & Allen, 2013a). Sowcik and Allen reported that 60% of the top 50 business schools in the United States are offering

coursework in leadership. Approximately 90% of the top business schools were integrating leadership as part of their core curricula (Sowcik & Allen, 2013a). The culminating output of this research could be vital for supporting educational leaders in anticipating and preparing students for college-level CTE courses through stronger curricula alignment with a focus on leadership.

There are collateral effects associated with how well students score on their college entrance exams. Researchers have estimated an 80% difference in the Graduate Management Admissions Test (GMAT) scores that negatively impact students concerning their wealth, educational spending, gender, and language literacy (Aggarwal & Goodell, 2014). These areas were pertinent to corporate leadership and one that organizations looked to for their corporate culture (Aggarwal & Goodell, 2014). One may point to GMAT to uncover some of the poor alignment issues related to students not being prepared for CTE business courses after high school. Painter-Morland (2016) found an apparent push to integrate ethics into college business programs; however, minimal evidence suggested that ethical concerns were implemented sufficiently within the business curricula of today's educational entities. There was a need for research into CTE related topics such as ethics, prior student learning experiences, cultural demographics, and course expectations to find ways to reach learners (Painter-Morland, 2016). Another aim of curricula alignment was an evaluation of business characteristics, such as responsible management education, which is another component of the CTE business curricula.

A student's view of their world and how it relates to them may affect their college and career aspirations. Scholars have debated the differences in organization-centered worldviews (OWVs) and human-centered worldviews (HWVs; Painter-Morland, 2016). OWVs center around materialism and profit interest, while HWVs are more focused on the ethics of business management (Painter-Moreland, 2016). These two types of worldview strengthen the need for CTE business curricula alignment to enhance student education to the degree that reflected the growing philosophical assumptions that defined responsible business management (Painter-Morland, 2016).

Student learning in CTE business programs covers a more extensive range of information than core high school courses, which affects the success of students with learning disabilities. Students with disabilities face considerably more challenges when transitioning from high school to careers or colleges (Schmalzried & Harvey, 2013). Approximately 21.6% of disabled individuals were in the workforce, as opposed to 70% of employed people who did not have a disability (Schmalzried & Harvey, 2013). Both the Carl D. Perkins Act of 2006 and the Association of Career and Technical Education (ACTE) sought to assist in closing this gap in education and ensure all students' success after graduation (Schmalzried & Harvey).

CTE leaders recognize the need to enhance support for students focused on CTE courses. Over the last 10 years, both private and public investors have coordinated efforts to strengthen CTE business curricula to align more closely with college expectations for success. Little research has been conducted about student achievement in CTE business

programs, labor market predictions for postsecondary endeavors, and the enrollment of CTE students in colleges.

The challenges that CTE students face are not unique to only 4-year colleges or universities. Dietrich, Lichtenberger, and Kamalludeen (2016) reported that little research has been conducted over the associations between community colleges and CTE students at the secondary levels. Dietrich et al. used a longitudinal study to examine a variety of effects on student outcomes concerning community colleges and high school CTE student participants. Zinth (2015) reviewed the efforts that policymakers from 13 states initiated to improve curricula alignment between high schools and colleges. Zinth reported the employment community should use economic data to work with and inform secondary and college institutions about what instructional pathways business students must take to meet the demands of high skills business jobs.

Problem Statement

The research problem is misalignment practices between CTE business curricula at a school district in the southern region of the United States and the business programs of three local colleges near that school district. Senior administrators sought to understand why many high school graduates enrolled in undergraduate CTE business programs and did not possess essential skills related to baccalaureate academic success or career readiness (senior school district administrator, personal communication, Sept. 7, 2019). At this school district in the southern region of the United States, many of the students seeking to enroll in prebaccalaureate business programs were performing poorly

on the placement exams (senior school district administrator, personal communication, Sept. 7, 2019). High school CTE business courses were not adequately preparing students for college (college administrator, personal communication, July 22, 2019). Adding to the problem was that curricula developers were not effectively aligning the high school CTE business courses with college business courses (senior school district administrator, personal communication, July 22, 2019). Minimal research has been done focused on the perceptions of business educators' regarding how to prepare high school CTE students for college business courses (senior college administrator, personal communication, July 22, 2019).

The absence of state-regulated assessments has contributed to the misalignment of business curricula meant to ensure students were college and career ready throughout the United States (Fletcher, Gordon, Asunda, & Zirkle, 2015; Park, Pearson, & Richardson, 2017). At the high school level, the National Governors Associations and the Council of Chief State School Officers developed Common Core State Standards (CCSS) to evaluate the progression of learning at the end of the instructional school year (Fletcher et al., 2017). National standards are created between secondary education and colleges to reflect what students have learned to ensure that they were career-ready (Fletcher et al., 2015). The absence of CCSS assessments for CTE business courses leads to poor alignment between what educators teach, the materials used, decisions about student graduation, and teacher training (Fletcher & Gordon, 2017). There is an apparent need for students to understand and take ownership of their potential role in meeting the needs of business

organizations (Mohapatra, 2015). Business practices are continuously evolving along with globalization and computer technology. Instruction should be integrated with technology to allow students to access related programs regardless of their location (Mohapatra, 2015).

Purpose of the Study

The purpose of this research was to explore and understand alignment issues regarding CTE business curricula at a public-school district and three surrounding colleges in the southern United States.

Research Questions

The research questions that guided this study were:

RQ1: What are the perceptions of college business professors and high school CTE business teachers regarding the preparedness of high school students for college business courses?

RQ2: What alignment issues exist within the college business and high school CTE business curricula?

Conceptual Framework

The conceptual framework was the curricula integration theory (CIT), which posits that education leaders, such as high school principals, business curricula developers, college deans, and instructional coaches, must improve existing knowledge by designing curricula systems that address real-world problems. Beane (1997) explained that CIT for education leaders and curricula developers encourages learners to improve

on existing knowledge by designing curricula systems that address related concerns faced by society (Painter-Morland, 2016). CIT was the foundation of this study because high school and college professors who teach business courses incorporate elements of the CIT theory, which includes multiple academic subjects with an emphasis on projects. CIT relates to the research questions regarding the perceptions of college business professors and high school CTE business teachers regarding the preparedness of high school students for college business courses and alignment issues with CTE business curricula. The concept of CIT allows educational leaders to compare and explore student-focused ways of creating effective business curricula. These include student self-concerns, social world issues, explanatory ideas for describing and interpreting, and techniques for analyzing and expressing content (Beane, 1997). Beane (1997) developed a curriculum concept map that addressed real-world problems, issues, and concerns using CIT (Painter-Morland, 2016). Business curricula developers use CIT to incorporate into the curricula interpersonal and social ideas (Beane, 1997). For example, business students using CIT can identify various concepts related to their understanding of a subject and take the initiative to explore additional content about the topic (Humphreys, Post, & Ellis, 1981). Using CIT, business teachers and professors can promote a shared view of commonly held ideas while allowing students to create new structures, processes, and models (Dressel, 2005).

I used CIT to answer the research questions by interviewing the participants to understand how they applied this theory to the business curricula to identify

misalignment issues. During the interviews, each participant reflected on how students' prior learning experiences helped them to create constructs to solve business-related problems in the classroom. Thus, CIT relates to this research because it assists business teachers and professors in helping students develop skills, such as independent thinking, problem-solving, globalization, economics, and communication, by strengthening the alignment between high school and college business courses.

Nature of the Study

A qualitative case study design was appropriate for this study to collect qualitative data regarding the misalignment of CTE business and college curricula. Business teachers' perceptions were paramount regarding the misalignment of the CTE curricula to better understand how to prepare high school students for college business courses. The phenomenon for this case study was the CTE business program offered at a public school district in the southern region of the United States. The participants were identified using selection criteria (see Ravitch & Carl, 2016). Each of the participants had business teaching certification and had taught the business subject for at least 2 years. I interviewed CTE business high school teachers and college professors.

Definitions

Career and technical education (CTE): A program of study that involves a multiyear sequence of courses that integrate core academic knowledge with technical and professional expertise to provide students with a pathway to postsecondary education and careers (California Department of Education, 2014).

CTE participant: An educator employed at one of the business schools sampled in this research who volunteered to contribute their responses (SCDOE, 2014a).

Curricula alignment: Matching learning activities with desired outcomes, as connected to a school's objectives (Wiles & Bondi, 2014).

Assumptions

An assumption was that the participants were transparent in the semistructured face-to-face interviews. Although I made valiant attempts to protect each participant's identity, the effects of the protection measures were successful in assuring the participants to the measure that they would respond truthfully and transparently. Another assumption was that a lack of federal funding caused a reduction in the necessary resources and training needed to equip educators to be successful in CTE business programs. Budget deficits and educational reform have impacted CTE programs nationally and caused an apparent decline in available funds for needed resources (Asunda, 2011; Litowitz, 2013). In consideration of these circumstances, I assumed a lack of perceived value for CTE business education.

Scope and Delimitations

Participants contributed their perspectives during semistructured face-to-face interviews on alignment concerns in business curricula. Education leaders and instructors need support in preparing students for college business programs. The scope of this study was a public high school in an urban school district where former high school CTE business graduates enrolled in one of three colleges in the area. Because the research was

limited to the geographic boundaries within the school district and local colleges, a bounded case study was appropriate.

Limitations

This research was limited because the responses were from a small sample of six CTE business high school teachers and six business college professors from three public colleges. The participants provided information regarding curricula misalignment of high school business courses. Therefore, the participants responded based on the high school students they taught within 1 academic year. An expanded research scope including other school districts may have yielded different results. Another limitation is that the school district and college administrators, who oversee the business curricula design, were not interviewed. Another limitation was that data from students were not collected.

Significance

Policymakers are instrumental in improving CTE. The Every Student Succeeds Act (ESSA) and the Carl D. Perkins Career and Technical Education Improvement Act of 2006 established an ethical obligation for school districts to advance standards in CTE programs (Coppes, 2016). The combined legislative acts, in conjunction with the U.S. Department of Education for Secondary Education, required that public high schools offer CTE curricula to support students in becoming career and college ready (Kitchel, 2014). The findings of this research may help CTE business high school teachers and professors develop strategies to align CTE business curricula. Positive social change implications may include strategies to align the CTE business curricula for high schools

and colleges to better prepare graduates for college or to join the business work environment. The presumption is that students who experience success in college and employment will positively impact the wellbeing of their families and their communities.

Poor performance on the business entry-level and benchmark placement exams signified a lack of readiness by students entering college business programs. I conducted this study to understand the business curricula of a school district in the southern region of the United States and to gain the perspective of their business educators. The apparent gap in preparation for college business courses may have been due to poor alignment between secondary and postsecondary business curricula. The significance of this study was to provide education leaders with an analysis of their business programs.

Summary

At an urban school district in the southern region of the United States, high school CTE business courses were not adequately preparing students for college. The purpose of this research was to explore and understand alignment issues regarding CTE business curricula at a public school district and three surrounding colleges in the southern region of the United States. Purposive sampling was used to identify high school business teachers and college business professors for semistructured face-to-face interviews. The literature review will be presented in Chapter 2.

Chapter 2: Literature Review

Students are prepared when the instructional curricula are sufficiently aligned. A misalignment exists between the CTE business curricula at secondary education institutions and postsecondary institutions. The purpose of this research was to explore and seek to understand alignment issues regarding CTE business curricula at a public-school district and three surrounding colleges in the southern region of the United States. As a result of this study, recommendations for closer curricula alignment will be made to the educational institutions to support them in providing more effective instruction for preparing their students for college business programs.

A literature review is provided regarding misalignment concerns in CTE business curricula. In Chapter 2, I highlight the strategies employed to identify relevant literature about the study. Also included is a description of key terms that assisted in the search process of identifying relevant scholarship. An explanation of the conceptual framework will describe the chosen methodology for the scope of this study, and there is a description of how the current research benefits from concepts and phenomena found in previous studies related to the research. I close this chapter with an exhaustive review of relevant CTE journals, peer-reviewed articles, books, and online resources to identify alignment discrepancies in business curricula.

Literature Search Strategy

Research engines EBSCOhost, Google Scholar, and Walden University's library resources assisted me in identifying relevant literature. The databases for the research

included Business Source Complete, CINAHL Plus with Full Text, Cochrane Central Register of Controlled Trials, Cochrane Database of Systematic Reviews, Cochrane Methodology Register, Communication & Mass Media Complete, Computers & Applied Sciences Complete, eBook Collection (EBSCOhost), Education Source, ERIC, Library, Information Science & Technology Abstracts, Open Dissertations, Primary Search, Public Administration Abstracts, Regional Business News, Research Starters – Education, and Teacher Reference Center. I used the following terms to identify the pertinent literature resources used in this study: *alignment, career, education, academic core, technical, vocational, qualitative, semistructured face-to-face interviews, coding, career technical online education, alignment, vocational online, CTE, career technical education, secondary CTE, secondary career technical education, online secondary education, curricula, curriculum, business analytics, gaps, and common core.*

Conceptual Framework

The theoretical framework that grounded this study is CIT. Beane (1997) explained that education leaders and curricula developers are encouraged to motivate learners to improve on existing knowledge by designing curricular systems that address real-world problems, issues, and concerns (Painter-Morland, 2016). I incorporated elements of CIT that included multiple subjects, an emphasis on projects, and relationships among concepts beyond textbooks (Wilder & Ozgur, 2015). CIT was the foundation for this research because of the propensity CTE business courses have toward incorporating personal and social ideas (Beane, 1997).

One of the main goals of CTE business programs is to create independent learners. With integrated CIT, students identify various concepts related to their understanding of a subject and take the initiative to explore additional content about the topic (Humphreys et al., 1981). In this process, curricula integration prescribes that students identify sources of CTE curricula that deal with concerns posed by real-world circumstances. Dressel (2005) explained that this learning process promotes a shared view of commonly held ideas while allowing students to create new structures, processes, and models. When students are engaged in solving real questions that are apparent in society, they begin to develop a sense of community.

School districts must remain abreast of the various changes in the business world. Continuous technological advancements and the complexity of globalization impede students' preparedness to compete in the current business world due to a misalignment of expectations between secondary and college business curricula (Annavarjula, Folami, Ramirez, & Zdravkovic, 2014). Approximately 65% of all jobs require that students obtain some level of education beyond a high school diploma (Carnevale, Jayasundera, & Hanson, 2012). CIT may allow education leaders to compare and explore various kinds of student-focused themes for creating effective curricula that have the potential to envelop components of globalization. Beane (1997) postulated that society and nature implore themes of integration that were prevalent in most employment skills.

Alternative academic subjects can be used in CTE business to enhance student learning. The research suggests there is a strong correlation between core content classes

and CTE business programs (Conrad & Watkins, 2011). However, when confronted with real-world dilemmas, students do not typically ask themselves how they can resolve it with science, math, or social studies. Conversely, people usually reflect on prior experiences, which is at the center of CIT, and creates the constructs for students to solve issues through real-world exposure (Erickson, 1995).

It is vital for the success of any learning institution to consider the overarching effects that a program of study has on the learning community. CIT relates to this research study and its critical research questions because of the influence it has among the global society that promotes curricula advancements for learning institutions (Partnership for 21st Century Skills, 2011). Corporate organizations argue that CTE curricula must impart students with skills, such as independent thinking, problem-solving, economics, and communication. These 21st-century skills are paramount to strengthening the alignment between high school and college business courses. Beane's (1997) CIT theory was used to identify areas of CTE curricula, based on responses from the participants, that do not align with the business industry.

Multiple learning advantages have been associated with CIT. Proponents of CIT have asserted that an added benefit of this theory is the creation of curricula that focus on student engagement (Eisenman, Hill, Bailey, & Dickison, 2003). Few studies offer empirical evidence of the impact CIT academics have on student learning. However, Vars (1991) reported over 80 comparative studies that affirmed that students who participate in integrated curricula perform better on standardized testing than their counterparts. There

have been many contributors to the advancement of curricula integration models for CTE programs. Lynch's (2000) themes included (a) K-14 student preparation for postsecondary education, (b) career planning and education, (c) contemporary development of CTE programs based on industry needs, and (d) integration of CTE within general education programs.

Experiential Learning

The theory of experiential learning expounds on a hands-on approach for students. Experiential learning involves a move away from cognitive learning to the practical act of student performance (Gasper, Langevin, & Boyer, 2007). In this approach, students should be responsible and involved in the learning process by identifying their specific needs and wants. Through experiential learning, students can implement CTE business programs by creating a marketing plan, conducting product analysis, performing financial analysis over service, or determining the life cycle of a new product. There are multiple advantages of experiential learning for students. The application of this learning approach provides a practical lesson for students as they apply real-world knowledge into their everyday lives (Rogers & Freiberg, 1994).

Self-Determination Theory

Self-determination theory focuses on identifying an individual's motivation and personality. The theory explains the origin of motivation from an intrinsic and extrinsic rationale. Self-determination theory includes elements of a person's social and cognitive development. Assessments embedded in the theory prescribe a person's sense of

discretion, well-being, initiative, and the overall status of their performance (Miniotaite & Buciuniene, 2013).

Student-Directed Learning

Along with elements of experiential and self-determination learning theories, concepts of student-directed learning are student-focused. Student-directed learning is a pedagogical theory that encourages students to move beyond the information learned in the classroom and apply that knowledge into formulating their cognitive ideas to make decisions (Bruner, 1996). Implementation of this learning is facilitated by giving students a variety of instructional information that allows them to develop their unique learning preferences (Bruner, 1996). Many educators have realized the advantages of this learning style and understand its relevance in the current age of technology. The student-directed learning theory reinforces quality education by engaging students throughout their educational careers (Baviskar, Hartle, & Whitney, 2009).

Constructivism Education Theory

Constructivism education theory centers itself around objectives identified through aligning CTE business curricula with current business needs. Based on this theory, educators and school personnel have the autonomy to modify their curricula toward learner participation. Along these lines, much of its focus is around students' cognitive domain and their need for social collaboration and interaction (Ornstein & Hunkins, 2009). The process of learning is vital for students as they gain insight into the

content through group discussions, participation, experimentations, and project-based learning.

Literature Review Related to Key Concepts and Variable

History of Career and Technical Education

Education leaders disagree about the most effective ways to instruct students. Discussions continue among education stakeholders who seek to answer the questions of whether education should be academic, career-centered, or a combination of each (Wallenborn & Heyneman, 2009). The findings of this research revealed a significant merger of the two education spectrums. CTE was initially referred to as vocational education and dates back to 1914. At its onset, vocational education was comprised mostly of at-risk and disabled students. Vocational education was associated with reduced value and was taught to students with limited learning capabilities (Foley & Pang, 2006). Most of the students enrolled in these courses were those who struggled in traditional classes (Treschan & Mehrotra, 2014). This antiquated view of vocational education was at the nexus of what caused the disjointed alignment of CTE business curricula. Many proponents of CTE education understood the implications of strengthening business programs with college and workforce education but did not understand the process of initiating the improvements. In 1914, the Commission on National Aid to Vocational Education advocated for the inclusion of vocational education in secondary education curricula. The petition was accepted in 1917 as part of the Smith-Hughes Act, which created a public education fund for vocational education that was

worth approximately \$1.7 million (Brewer, 2011). These funds were vital for the development of alternative learning approaches for teachers.

Some scholars suggest that core academic skills such as reading, math, and science are the foundation on which students build their education careers. However, Friedel (2011) defined CTE as an education centered around practical employment skills. Dare (2006) and Ryken (2006) agreed with Friedel (2011) as they considered CTE programs unique in that they pair student education to their career aspirations. Friedel (2011) focused on the curricula aspects of learning. Initially, CTE business programs provided students with the occupational skills needed for entry-level employment (Plank, DeLuca, & Estacion, 2008; Scott & Sarkees-Wircenski, 2004; Tillman & Tillman, 2008). These were jobs that may include cashiers, retail, inventory management, and customer service positions.

Employment and workforce demands are constantly evolving. The industrial revolution age spurred the need for these entry-level positions (Hersperger, Slate, & Edmonson, 2013). This increase in demand for industrial jobs created employment opportunities that captured the attention of students seeking to become gainfully employed upon graduation. Some socioeconomically disadvantaged students took advantage of these classes as they were compelled to enter the workforce to support their families.

CTE business programs that train students for on-the-job learning and practical experience provide a dual benefit for students. Not every student has the aptitude to

succeed in a learning environment dominated by academic performance (Herrnstein & Murray, 2010). With this understanding in mind, some students could benefit from CTE business programs that provide them with professional knowledge that could help them be competitive in the job market after graduating from high school. Through CTE business curricula, students learned many of the entry-level skills necessary for employment. Hersperger et al. (2013) and Lynch (2000) wrote about how most of the vocational entry-level employment positions were home economics, trade, industry, and agriculture. A combined effort to engage students, meet industry needs, and provide higher-order thinking skills led school districts to expose students to postsecondary CTE business options before graduation (Bozick & Dalton, 2013a; Folds & Tanner, 2014). The upper-level business classes assisted in preparing students for college programs.

Association for Career and Technical Education (2016) found that 645,000 skilled trade jobs, such as transportation and utilities, and 253,000 jobs in manufacturing were unfilled because of a lack of qualified workers. The lack of qualified workers is consistent with Romano and Dellow's (2009) projections that over 10 million technical and manufacturing jobs would remain vacant. Unifying science, technology, engineering, and mathematics (STEM) in CTE business curricula would help close these skills gaps (Asunda, 2012; Hagedorn & Purnamasari, 2012; Lichtenberger & George-Jackson, 2013; Schenck, Anctil, Smith, & Dahir, 2012). STEM courses are designed to educate students based on the job market projections of what is essential for employment success. Exams are administered to students during enrollment to determine their business aptitude and

the most appropriate course placement. The perceptions of high school business teachers regarding the CTE business programs will be discussed in the proceeding section.

Perceptions of High School CTE Business Teachers

Teachers are not always proficient in curriculum implementation. The perceptions of the CTE business teachers are that they feel incompetent with incorporating business curricula into core academic plans to prepare students for the workforce of the 21st century (Folds & Tanner, 2014; Hodge & Lear, 2011). Aliaga, Kotamraju, and Stone (2014) added that the emphasis on student engagement was not only dependent upon functional knowledge of employment practices but a student's aspirations and interest as well. Weingarten (2015) acknowledged that this divide of sorts might have contributed to the misalignment of curriculum-based instruction between school districts and college business programs. Weingarten classified CTE business programs that provided internships as being advantageous for students. Weingarten explained that they partnered with the business community and worked collaboratively with content areas such as science, math, reading, and social studies. How summative and formative assessments affect CTE business education is discussed next.

Lack of Summative and Formative Assessments

Teachers must possess a clear understanding of college business programs. Scholars have long uncovered that a significant number of high school students were underprepared to meet the challenges of college education (Hynes, Greene, & Constance, 2012). In response to this phenomenon, initiatives were developed in 2009 to standardize

education curricula across the United States through CCSS (Pense, Freeburg, & Clemons, 2015). The National Governors Association Center for Best Practices and the Council of Chief State School Officers developed the CCSS standards (Pense et al., 2015). Each state was required to adapt their curricula to the CCSS as well as implement assessments based on standards designed for core content subjects (Pense et al., 2015). CTE business programs were not included in state requirements.

Core content subjects include mathematics, science, reading, social studies, and writing. These learning areas require students to take formative as well as summative assessments such as the State of Texas Assessment of Academic Readiness (STAAR) test before the end of each school term (Burch et al., 2015). Summative and formative assessments enable educators to collect student data, monitor learning, implement standards, and guide curricula instruction (Burch et al., 2015). The strength of standardized exams such as the STAAR was that it aligned with the Federal Department of Education's recommendation of skills students must possess to be college and career ready (Burch et al., 2015). Educators have stated that one of the causes of misaligned business curricula may have resulted from significant deficiencies in the assessment of student knowledge in technical skills (Burch et al., 2015). CTE business courses such as business management, administration, finance, human resource management, E-commerce, and marketing were not required to administer the STAAR test to students as a prerequisite for college readiness.

The absence of state-regulated assessments has contributed to the deficiency in curricula alignment between high schools and colleges in CTE business. Achieve Inc. and the Meeder Consulting Group surveyed eight states to find answers about merging concepts between CCSS and CTE business curricula (Meeder & Suddreth, 2012). The results from their study revealed a gap in the alignment of the CTE curriculum's professional development, lesson planning, and overall implementation (Meeder & Suddreth, 2012). Perceptions of the college professors regarding the business curriculum alignment will be discussed in the proceeding section.

College Business Professors Perceptions

A lack of standardized testing for CTE business programs has impacted instructional practices. Curricula developers and administrative leaders should create and align stronger teaching strategies amongst high schools and colleges (Burch et al., 2015). Burch et al. placed the responsibility upon the educators to strengthen the business curricula. Bartholomew and Strimel (2017) debated that because of a lack of accountability found in state-regulated assessments for core content areas, education policymakers must strengthen CTE business curricula. Bartholomew and Strimel wrote about the absence of state-regulated summative and formative assessments for high school CTE business programs. Bartholomew and Strimel reasoned that college professors and high school teachers must create open-ended assessments to gauge a student's knowledge regarding CTE business projects and assignments.

Educators must then design self-made rubrics as a part of assessing students' knowledge to evaluate curricula content believed to be essential for college business courses. Wilder and Ozgur (2015) identified areas such as business intelligence as areas that business schools must encompass for students to be successful in today's workforce. Bartholomew and Strimel (2017) stated that teacher-made rubrics used to grade assignments were predicated mainly on personal experiences and exemplars of student work. This method was not deemed to be effective for business alignment.

Consistency in the evaluation of students' performance can help to increase student success. The method of grading using teacher-made rubrics is known as the Law of Comparative Judgement and considered highly subjective (Bartholomew & Strimel, 2017). Differences in CTE business assessments designed by teachers shape the inferior methods used by instructors that contribute to various alignment issues. College professors and their curricula developers had to adjust their content to accommodate business demands to reflect employment and industry standards (Wilder & Ozgur, 2015). Policymakers recognize the need to intercede to forge a merger between the business occupations and business school curricula (Wilder & Ozgur, 2015). Due to the emergence of business technologies, college curricula should prepare students for success after high school (Wilder & Ozgur). Wilder and Ozgur revealed a need for business curricula developers to understand real-world business operations and incorporate them at the high school and college levels through stronger curricula designs. Business curricula and socioeconomics will be discussed in the next section.

CTE Business Curricula and Socioeconomics

Federal funding for CTE business courses has plummeted in recent years. Approximately 158 million dollars has been cut from the federal funding for such courses, according to the Office of Vocational and Adult Education (OVAE) (U.S. Department of Education, 2012). These monetary cuts affected over 1.6 million students across the United States and exacerbated the abilities of secondary education institutions to align their CTE business curricula with that of colleges (USDOE, 2012). The Carl D. Perkins Act contributed to the strengthening of the alignment between industry standards, course content, current research, and real-world occupational training (Threeton, 2017). To mitigate the damages caused by a lack of funding for CTE business courses, the Obama administration announced a plan to overhaul the Carl D. Perkins Career and Technical Education Act of 2006 to strengthen the efforts to increase the quality of 2-year colleges and CTE education programs (USDOE, 2012). Funding is one of the components used to enhance CTE business practices.

Socioeconomically disadvantaged students have limited access to resources such as college preparatory materials, higher-level course curricula, and school counseling information, which can lead to greater success after students graduate from high school. Rigorous CTE business programs produce better-prepared students that experienced more success in college in comparison to schools with diminished content. Students' socioeconomic status contributes to the misalignment of CTE business curricula. The quality of education for socioeconomically disadvantaged students has traditionally been

inferior to their more affluent counterparts. Other alignment issues with CTE business will be discussed in the proceeding section.

Alignment Issues for CTE Business Curricula

Effective teachers must possess the skill sets to not only understand CTE business curricula but the ability to implement the business curricula with fidelity. Teachers must place a stronger emphasis on rigor, real-world relevance, and student engagement to prepare students for post-secondary success (Gragoudas, 2014). Peck, Singer-Gabella, Sloan, and Susan (2014) discussed how teacher performance assessments were tools used to analyze actual practices in the classroom. Performance data is another way to gauge teacher competency.

Teachers' understanding of curricula implementation increases their education pedagogy. Student deficiencies were traced back to teacher instructional abilities toward student performance (Peck et al., 2014). Conversely, Gragoudas (2014) implied that learning insufficiency was due to a lack of student engagement through real-world content. The findings contribute to the disparity in CTE business curricula alignment. Such challenges are only a portion of the more significant issues created as a result of a misaligned curriculum. Students voice is discussed next section in relation to the design of business curricula.

Students' Voice to Strengthen Curricula Design

One aspect of this reality was the consideration of a student's point of view. Bron and Veugelers (2014) described the concept of students' voices as the incorporation of

learner perspectives regarding their education into the development of the curricula designs. Schools may provide students with the autonomy and platform to express themselves toward contributions within the development of curricula (Bron & Veugelers). Both studies acknowledged a void in the congruency between practice and research (Shakouri, Nazari, & Nazari, 2015). Curricula designers can close the procedural gap by recognizing student concerns.

Each learner must feel heard, and their ideas incorporated into the instructional development. Often the opinions of students, especially at the secondary levels, may not be respected due to their lack of expertise (Bron & Veugelers, 2014). Bron and Veugelers stated that the millennial age brought with it a vast array of technological advances that could overshadow the abilities of an instructor. Learners' ideas should be a consideration at each level of the curriculum. Feng et al. (2015) alluded to the understanding that this generation of students can offer a vast array of technologies that align within the CTE business curricula. The practical aspects of CTE business can prepare students to contribute their skills in the workforce. Fitzgerald (2018) echoed similar sentiments by citing that employers found it imperative that students gain real-world experiences as necessary for their successful employability. CTE business curricula developers must move away from antiquated designs of course content and reflect student as well as employer propositions for learning. Students have grown with the advancements of computer operating systems, cell phones, software, and applications, as well as digital hardware. Students' views, coupled with the instructional expertise of the teachers, can

serve to maximize student knowledge. Effective CTE business programs not only address the needs of high-growth industries but also simultaneously encourage students in their pursuit of higher education goals. By CTE business curricula designers sharing with students in its development, it would allow them to contribute their past and present life experiences that could serve to create more buy-in from the learners (Bron & Veugelers, 2014). Worked-based learning is a topic of discussion among education leaders regarding its essential nature for higher education success (Byrom & Aiken, 2014). As learners immerse themselves in job placement programs, the considerations of their work experiences could serve well for the improvement of CTE business curricula.

Today's technology advancements have equipped students with skills that were not prevalent 15 years before this study. Feng et al. (2015) described a five-phase process to collaborate student input into curricula development. First is the vocational analysis in which one determines the need of the marketplace and workforce as related to student interest (Feng et al., 2015). Second is an analysis that takes into consideration the learning profile of each targeted group. Third, is the assessment of each task of the student as well as an educator (Feng et al., 2015). The fourth phase of recruiting students to assist in CTE business curricula design is the planning aspect (Feng et al., 2015). The purpose of this phase is to clarify the basic course, professional, and design of the curricula structure (Feng et al., 2015). The fifth and final phase is implementation and evaluation, coupled with periodic knowledge updates (Feng et al., 2015). A combination of student input and complete comprehension of the curricula design process has the

potential to mitigate CTE business alignment challenges. Next will be a discussion about support for CTE business alignment.

Supporters of CTE Business Alignment

Misalignment in CTE business curricula has prompted education organizations to endorse learning policies. The National Education Association and the Association to Advance Collegiate School of Business led a movement towards supporting students in becoming education and career-ready (Barrett-Tatum, 2015). Barrett-Tatum (2015) found that those who supported curricula integration believed schools must look at education as a process for developing abilities conducive for the 21st century. CTE business curricula required high schools and colleges to line up their curricula to reflect the growing trends of the business world. Even core subjects such as math, science, and reading are assimilating their content with the occupational curricula (Bottoms & Sharpe, 1996; Dougherty & Ellibee, 1997). Kivunja (2015) discussed that this paradigm shift in education is imminent for both high school and college learners. This may be because there is no age requirement in the accessibility of digital technology.

Revisions in education guidelines are often realized with every new generation. The transition from the industrial age of the 20th century to the information age of the 21st century brought with it the need for a change in teaching, student learning, and assessments (Kivunja, 2015). Technological advancements are prevalent in almost every sector of the workforce (Kivunja, 2015). Future business employees are a viable asset for organizations as they make substantial contributions to e-commerce in the digital

economy (Kivunja, 2015). These employment candidates could advance business operations through their business knowledge. Next, will be a review of the discovered need for employment and educational research.

Need for Current Employment and Educational Research

Teaching innovations are one of the foundational tools used to promote student learning. Heard (2014) stated that the advancements of digital and technological integrations in education bring with it the need for curricula designers to be more purposeful about how they engage current students. Researchers created an abbreviated version of the Occupational Work Ethic Inventory and the Employability Skills Assessments as a tool for education leaders in 1995 (Folds & Tanner, 2014). There is a gap in technical business concepts that is prevalent in high school and college-level courses, thereby; diluting the congruency of the curricula with real-world expectations (Folds & Tanner, 2014). Curricula designers should forgo preexisting bodies of knowledge and explore new practices and paradigms that merge modern ideas relating to the curricula and instruction (Heard, 2014). The necessary shift in the alignment of business curricula is contingent upon an epistemological understanding of the inclusivity of all stakeholders that drive education forward (Heard, 2014). Next, will be a review of issues with curricula alignment.

Business Curricula Alignment Issues

In a recent study conducted by TEA for the 2020–2021 statewide CTE programs, the division of the college, career, and military preparations met with stakeholders that

represented CTE programs across Texas. The purpose of the meeting was to collect feedback from approximately 1,000 stakeholders, including the school district sampled in this research, regarding necessary revisions to strengthen the CTE program (Texas Education Agency, 2020). Khan and Law (2015) described the issue of curricula alignment and development as being universal within the education industry and that it was clear about the information needed for improvement at each level of study. Based on the findings from the TEA, necessary revisions within the course sequences were needed to strengthen the alignment of the final programs of study for the proceeding school year.

Because of the different approaches that learning institutions take toward the designing of curriculum, the theory of curricula development and alignment remains a hot topic of debate (Khan & Law, 2015). The controversy over curricula designs persists regarding alignment issues between what is published and taught by education institutions (Khan & Law, 2015). There seems to be a divide between those that reported on the challenges in education and what is transpiring in the classroom. CTE proponents such as Jocson (2018) argued that business curricula should not only prepare students to fill job vacancies but also to balance social, emotional, and economic development.

All aspects such as each participant's contribution and expertise should be considered in the development of the business curriculum. Khan and Law (2015) explained that fragmented curricula alignment occurs due to an absence of one or more of the essential components of planning, implementing, and evaluating. Korthagen and Vasalos (2005) suggested that teachers must be reflective about the needs, interests, prior

knowledge, and predispositions of every student. These concepts promote the idea that education leaders must make substantial adaptations to their curricula.

School districts focus many efforts on facilitating real-world business experiences for students. A primary strategy for ensuring that CTE business learners obtain necessary skills, training, and education is to create a seamless transition to the workforce (College and Career Readiness and Success Center, 2013). Addressing the issues surrounding increased rigor, relevant, and engaging learning opportunities for students who participate in CTE business courses can be a significant undertaking for an education system (College and Career Readiness and Success Center, 2013). Lumby, Crow, and Pashiardis (2008) noted one way to reach educators at all levels is to set individual goals that target student growth. Student progress should be measurable, specific, realistic, rewarding, and time-based.

High school CTE business curricula should eliminate low-level course training. As highlighted by the College and Career Readiness and Success Center (2013), CTE business curricula should include program studies that align with business college expectations. Developing students who are competitive in an ever-evolving job market involves multiple steps for implementation. Balfanz, Bridgeland, Bruce, and Hornig Fox (2013) purported that effective transitioning strategies to support student success include increasing the rigor of the CTE business curricula, provide real-world learning opportunities, and create more engaging and relevant lessons. Support for these educational endeavors came through Technical Education and Career Help (TEACH)

Act. The act was an amendment to the original Higher Education Act of 1965 (Library of Congress, 2019). Included in the act were allocations for grants to advance technical skills for students and teachers. Next will be a discussion over controversies in CTE curricula development.

Controversies in CTE Curricula Development

Issues regarding an apparent crisis in the development and alignment of business curricula. The way business schools are instructing business students is the antithesis of what the workforce is currently demanding. The reason for this occurrence is due to the institutional constraints placed upon business schools by a commercially driven education industry. Researchers have identified these reasons for why school districts are viewed similarly to corporate organizations and required to follow education stakeholder's recommendations for improving student learning (Kyriakides, Creemers, Antoniou, Demetriou, & Charalambous, 2015; Patel, 2015). Stakeholders are placed within school boards to vote on policy for curricula and program development. Policies designed to meet the needs of the school systems have the potential to directly improve student progress (Flessa, 2012; Kyriakides et al., 2015; Reynolds et al., 2014). Conversely, poor policy measures can have an adverse effect on student learning.

Several weaknesses contribute to poor student performance in business. Inadequate funding for training, professional development, and a lack of educational materials have been at the root of the reason that misalignment has occurred between high schools and colleges (Pense et al., 2015). A cause for cutbacks in CTE programs

may be due to a lack of accountability and professional development. These areas were what the United States Department of Education prescribed as necessary components for a school to receive federal funding (U.S. Department of Education, Office of Vocational and Adult Education, 2012). School districts that lack the resources to accurately implement CTE business curricula further reduce their ability to prepare students in becoming career and college ready (Pense et al., 2015). As a result, these schools must adhere to the demands of their economic contributors to thrive financially.

Viewing schools as business ventures cause CTE business curricula to become disjointed as programs desire to satisfy their investors' best interest and not that of the student. Contrary to the views of capital investors, business curricula must be innovative, and student-centered, which Kreamer and Zimmermann (2015) described as the competency-based pathway. The description of the competency-based pathway is one that considers relevant technical and employability skills as a focus that is intentional and clearly defined. Though funding is an ongoing debate in the field of education, a lack of support from the administrative, government, and district level policymakers contribute to the resistance realized for effective CTE business curricula implementation. Coupled with those challenges is the reality of motivating and training unwilling participants. Some of the strengths of organizations that supported their teachers through the availability of technology as well as administrative and technical support. Unlike many corporate and private sector occupations, money as a motivational tool is not always feasible in the education industry. A lack of relevance for staff development and support

from all stakeholders leads to continued barriers to CTE curricula improvement.

Opposing arguments for an academic-based curriculum, and those for cognitive-based curricula remains a topic of debate in education institutions around the world (Stone, 2014). For example, though the constructivism-based methods are great for student participation and engagement, it is argued that its practice is not as effective in aspects necessary for long-term memory (Kirschner, Sweller, & Clark, 2006). The proceeding section will be a discussion of CTE business alignment issues.

CTE Business Curricula Alignment Issues

Apparent barriers can impede the efficacy of curricula development and its implementation, which pointed to the misalignment of its learning objectives. The American Institute for Research (2016) explained the struggles that education leaders often experienced when adopting programs such as new curricula models. Business educators must increase their ability to demonstrate high levels of competency when connecting students to CTE curricula content. Training teachers on strategies for improving skills, enhancing their knowledge of CTE curricula, formulating new instructional strategies, and identifying innovative ways to engage students should be the pillars of education. Conversely, beliefs, attitudes, and the approach that educators may take when instituting curricular programs such as CTE could be overlooked (American Institute for Research, 2016). Unlike other professional industries, education is centered primarily on individual development and interaction.

Not every educator has an adequate understanding of curricula implementation and how to use it to target student deficiencies. To support staff members when adopting new curricula, American Institute for Research (2016) developed the Three Diagnostic Dimensions of the concern-based adoption model (CBAM). The CBAM technique assists education leaders who struggle with innovative configurations and the identification of potential challenges when instituting the curricula (American Institute for Research, 2016). Proper teacher training through professional development is central to the active alignment of instructional practices. Teachers must possess the ability to implement CTE business curricula at the classroom level through an implementation process referred to as adoption and adaptation. Implementation of curricula may vary according to a teacher's competency and understanding of the curricula. This process includes the designer of the curricula and the educator working collaboratively to adjust the instruction for improvements.

Education leaders have employed several methods to measure curricula effectiveness. Advocates evaluated the efficacy of how well the CTE business curricula content aligned with the Malcolm Baldrige Quality assessment in a study by Crum-Allen and Palmer (2016). This assessment was created in 1987 and awarded to educational institutions across the United States that emphasized systems thinking and strategic planning (Crum-Allen & Palmer, 2016). In this research, 293 education leaders responded to the criteria outlined in the Malcolm Baldrige Quality assessment. Also included were CTE education institutions because of their business industry relationships

and the need for their students to reflect the current workforce (Crum-Allen & Palmer, 2016). Among all Baldrige Award winners in education, not one was from a CTE education center (Crum-Allen & Palmer, 2016). The planning process is perhaps one of the most vital aspects necessary for curricula efficient alignment. However, barriers exist that separate student learning from relevant business career planning enveloped throughout their K-12 experiences (Kreamer & Zimmermann, 2015). Findings from the study revealed that of all the categories assessed, the area of strategic planning was the lowest scoring item among CTE education institutions (Crum-Allen & Palmer, 2016). The discovery is consistent with the systemic issue of curricula misalignment and the need to support this area of concern.

Curricula developers must gain a full understanding of what is required for CTE business students to be successful in their education careers. Although many realize that enhancing CTE related business courses may be the solution to workforce needs, the evaluation of the significance of its contributions are not known (Stevens, Kurlaender, & Grosz, 2015). School districts should solicit input from every teacher, including the CTE business department. Included in such an analysis are the selection and production of materials, teaching processes, evaluation strategies, methods for evaluating the accuracy, the tiering of learners, course length, methodology, and sequencing for course content (Li, 2014). Moreover, one must possess an accurate understanding of the perspective of potential employers (Li, 2014). Li provided probable resolutions for meeting the needs of the workforce. Next, will be a review of what remains to be studied.

What Remains to be Studied

There is minimal research about high school students' perceptions of online CTE business courses. In consideration of the enormous surge in online education, it is critical that business courses are well defined and aligned with business curricula. Weimer (2013) wrote about the use of online management systems and their effectiveness within classrooms and real-world learning. Much of the existing research reflects student views that are career-oriented toward postsecondary education. However, a gap in the literature remains, specifically in online business programs. Weimer's perspective is one that combines an LMS with traditional classroom learning. Concepts discussed by Weimer coincided with Rodi, Kohun, and DeLorenzo's (2013) outlook that promotes online management systems as a tool for digital progress reports, curricula management, and the facilitation of online learning modules.

Research is needed to uncover both the positive and negative aspects of online student experiences to design effective business programs and curricula. The online sector for CTE business education is relatively new, and research is needed to pinpoint the best strategies for instructional success. Information from proceeding studies can be useful for solving one of the most significant deficiencies in secondary education, which Wesch (2008) described as a lack of real-world relevance for students. As pointed out by Wesch (2008), necessary strides in technical innovations must be realized as the workforce concedes to globalization.

Research is lacking in the area of global business technology. More information is needed to prepare students for the technical innovations of a globalized society that align CTE business programs with 21st-century skills (Dougherty, 2018; Gillis, Jones-Moore, Haynes, & Van Wig, 2016). CTE lies at the forefront of education for training students towards their career goals. These programs have the potential to equip students with the relevant skills that can align the CTE curricula with future employment opportunities (Park et al., 2017). Mann (2017) added to this debate by stating, “There must be stronger partnerships between employers that reflect the concepts of CTE business programs that align with the curricula as well as their online practices” (para 2). Debates on the overarching purpose of higher education ensue over whether they should prepare students for employment or society. This disconnect contributes to the gulf that separates CTE business from the efficient preparation of students for today’s job market (Lagemann & Lewis, 2012). There remains a need to correlate state-regulated assessments into CTE programs such as the CCSS for core content areas. These content areas include math, science, reading, social studies, and writing. Lagemann and Lewis (2012) expounded upon the absence of CCSS assessments for CTE courses, which can limit the accountability of the business curricula and their instructors. At its core, Burch et al. (2015) explained that one of the primary functions of state-regulated assessments such as CCSS is to evaluate student performance. Data can be used to track the effectiveness of policymakers’ recommendations for education success.

Additional research is essential for understanding the planning strategies needed to combine components from the CCSS and CTE curricula to maximize student readiness for college. Conrad and Watkins (2011) asserted that there was a strong correlation between CCSS and CTE and that the two curricula should be linked to maximize student learning. However, because of a lack of state-regulated standards for CTE programs, teachers had little knowledge of CCSS (Stair, Warner, Hock, Conrad, & Levy, 2016). Teachers' ability to implement the concepts was futile without intense training.

Another area in the field of CTE business education that requires more research is the impact of pre-baccalaureate programs that allow students to earn college credits while still in high school. The purpose of the interaction between high school and college business programs is to create a stronger alignment within the two instructional institutions. Phelps and Chan (2016) noted that additional research about how dual credit learning programs are influencing students in their college business courses was needed. Phelps and Chan explained that there is minimal research that focused on the success of students that enrolled in dual credit courses and whether the programs are effective in preparing them for post-secondary education. More research regarding dual credit programs can support business curricula developers to better design and implement findings to support business students.

Summary and Conclusions

In Chapter 2, I restated the problem and purpose of this research. Next, I discussed the strategy that I used to search for the literature to answer the research

questions. In the conceptual framework, I provided a comprehensive view of the writings of other theorists related to this research. The curricula integration theory was the framework that grounded this study. Also, I reviewed and considered concepts from experiential learning, self-determination, student-directed learning, and the constructivism education theory.

Knowledge, student autonomy, flexibility, and retention are staples of the learning theories mentioned above. What is known is the contributions to learning that each of these methods contributed are necessary elements for today's technologically advanced students. Not only do the learning pedagogies support core curricula practices, but they are inherently pertinent to the development of CTE business education. As the research moved into present-day concerns of school districts and colleges, I found literature specific to the problem and purpose of the study as well as those that would help to answer the research questions. Topics that dealt with high school and college educator perspectives about business curricula, inadequate curricula alignment, student concerns, and related controversies remain to be studied. The present study filled a gap in the research by identifying possible solutions for incohesive alignment in CTE business curricula.

A need for additional research remains in areas that deal with poor CTE curricula alignment between secondary and college business programs. What is unknown are student perspectives regarding online business courses, the effects of globalization on business studies, best practices for merging business curricula with that of the workforce,

and the success of pre-baccalaureate programs on students entering college business programs. There is a significant amount of information needed to enhance the understanding of CTE business curricula. Additional research may result in recommendations about alignment issues and best practices for effective curricula alignment practices.

In Chapter 3, I discuss the methods employed to generate feedback from the participants used for this research. I discuss the chosen research design and its rationale. I also discuss the participants' identification process, instrumentation, recruitment, procedures for data collection, and the data analysis technique. Next, I discuss the trustworthiness and how it relates to credibility, transferability, dependability, confirmability, and reflexivity.

Chapter 3: Research Method

In this chapter, I discuss the relevant components of the research methodology and rationale that anchored the study. In the methodology section, I explain the identification process for participants and how the data were collected and analyzed. I discuss the credibility, dependability, and confirmability used to establish trustworthiness. Next is a review of the ethical procedures to protect the confidentiality of the participants. I also describe the data collection and analysis. Finally, there will be a summary of the main points discussed in the chapter. The research design is presented next.

Research Design and Rationale

A case study design was appropriate to examine the experiences of the participants regarding the business programs at the sampled school district and three surrounding colleges. Semistructured face-to-face interviews are ideal for exploratory studies when used to predict, describe, understand, and investigate the reasons for a specific occurrence. The phenomenon for this qualitative study was the CTE business program offered at a school district in the southern region of the United States, which was not adequately preparing students for college business courses.

Many high school graduates enrolled in undergraduate CTE business programs do not possess essential skills relating to baccalaureate academic success or career readiness, but the reason for this remains unknown. One methodology I considered but did not select was grounded theory. I excluded grounded theory because the purpose of this study

was not to develop but apply theory (Trochim, 2006). Other research designs that were given consideration but not used were ethnography and phenomenology. Ethnography was not suitable for this study because it examines a phenomenon over an extended time (Imel, Kerka, & Wonacott, 2002; LeCompte & Schensul, 1999). Phenomenology was not appropriate because it did not support the purpose of understanding the perceptions of CTE business high school teachers and professors regarding the lack of preparedness of high school students for college business programs. The research questions that guided this study were:

RQ1: What are the perceptions of college business professors and high school CTE business teachers regarding the preparedness of high school students for college business courses?

RQ2: What alignment issues exist within the college business and high school CTE business curricula?

Role of the Researcher

The recruitment process was strategic and involved careful planning and communication. I communicated with each participant for approximately 1 hour and 30 minutes. As part of the planning process, considerations were made regarding previous and current work as an administrator at another school district in the southern region of the United States. Because CTE business teachers often transfer to other school districts, I was vigilant in ensuring that I did not solicit any former colleagues as part of this study. Before the data collection process, I was responsible for delivering each consent letter to

the participants and communicating with the necessary administrators and business deans to gain consent. The doctoral committee members at Walden University and I were the only ones who analyzed any of the data. However, I was the only person to collect and code the data from the participants. After I conducted the semistructured face-to-face interviews, I transcribed the data.

Methodology

Participant Selection and Recruitment Strategy

Random sampling is not ideal for conducting research that seeks rich data. Researchers should use smaller sample sizes for adequate data collection (Kaplan & Maxwell, 1994; Patton, 1990). Miles and Huberman (1994) postulated that data saturation comes through comprehensive studies with fewer than 15 participants and that 15 or more participants would be overwhelming. I used purposive sampling to select six high school business teachers from a school district in the southern United States and six college business professors from three surrounding colleges to participate in this research. Although there were approximately 21 business teachers and professors asked to participate, only 12 responded with interest. Because I had no prior knowledge of any of the participants, the job descriptions of the business teachers helped in the identification and selection process. Before the recruitment process, the superintendents, principals, and deans of the business departments at the colleges received a consent form in a request for permission to conduct the research. Selection criteria for high school teachers were: (a) state-certified, (b) teach business courses, and (c) taught at the research site for at least 2

years. The selection criteria for college professors were: (a) full-time college professors, (b) teach business courses, and (c) has taught at the research site for at least 2 years. The proceeding is a discussion of data collection.

Data Collection

The sources of data were interviews with two groups of participants. The first group comprised six high school CTE business teachers. The other group comprised six business college professors who taught at local colleges. Data were collected from six business teachers and six professors via semistructured face-to-face interviews. Before data collection, I was granted permission from Walden University's Institutional Review Board (IRB) for the protection of human participants and school leaders from the school district and colleges to conduct this study. Approval from IRB (12-26-2019-0130319) confirmed that I complied with the proper ethical standards for recruitment, interviewing, and the data collection process.

Access to the participants. I created a potential business teacher list from the websites of the schools and colleges. After the development of the preliminary list and consent by the school district's administrator and business deans at the colleges, I hand-delivered an invitation letter to the campuses of the business teachers and college professors. The invitation letters asked business teachers and college professors who were interested in participating in this study to communicate their names and preferred time to be reached. Upon receipt of the participants' interest in participating, I contacted the business teachers and college professors, answered clarifying questions, and obtained

their desired interview times. Appointments corresponded with participants' requested times that did not conflict with their workday schedules. The interviews were conducted in private conference rooms the participants identified at their campuses.

Interviews with the participants. I scheduled each of the 12 interviews throughout a 3-week timespan. I conducted three interviews the first week, four the second week, and five the third week. I conducted one interview every other day of the week including weekends. No participants had to reschedule because they were able to keep their appointment times. I recorded each interview using an audio recording application on an iPhone. After the initial transcription, I then played the interviews a second time so I could identify and correct any errors made by the computer. An example of errors would be a different word that the computer may have transcribed that was like another. Next, I went through and read each of the transcriptions to check for clarity and that I could clearly understand what was reported by the participants. After the third check for accuracy, I printed each of the transcripts, put them in a folder, and gave them back to each of the participants for their review.

Instrumentation

I used two interview protocols, the first for the high school CTE business teachers (Appendix A) and the second for the college business professors (Appendix B). The interview questions were designed to accurately identify the participants' perceptions regarding the adequacy of the business curricula alignment and its ability to prepare students for college business programs. I conducted the interviews and recorded them

using an audio recording application on an iPhone. Additionally, I used a backup digital recorder for an accidental deletion on the iPhone. Each interview was conducted in a private room and took approximately 45 to 60 minutes to complete. I transcribed the semistructured interviews. To protect the anonymity of the participants during the interviews and throughout the study, the letter T was given to each teacher, coupled with an associated number. For example, T1 represented the first teacher. The letter P identified the professors coupled with an associated number. For example, *P1* represented the first professor used in the study.

Procedures for Participant Recruitment

A letter of cooperation was given to the administrator responsible for research at the school district and to the deans of the participating business colleges requesting permission to conduct the study. The cooperation letter notified the superintendent and deans of the business departments about the nature of the study and procedures to avoid unauthorized disclosure of personally identifiable information from educators or student records. To ensure the anonymization of all student data, I excluded individual records, such as race, age, sex, or any individual level of student assessments based on grade level or any other personal information. This measure provided a safeguard so that no information could be linked back to a student's or participant's information.

Upon approval from the administrators responsible for research at the research sites, I hand-delivered an invitation letter to each potential participants' campuses regarding the research. I requested that participants provide a contact number and the best

time to reach them. After briefly speaking with the participants, I scheduled a time that I could meet with them to further discuss the research and present them with a consent form. In the consent forms, I provided the reason they were selected, their level of participation, what the research was about, their voluntary option, confidentiality and privacy agreements, the potential risk associated with the research, and the data collection procedures. A participation prerequisite for the business educators was that they must have at least 2 years of teaching experience, familiar with the business curriculum, and state-certified. I explained the reason they were selected and their level of participation in the study. I informed the participants they were not obligated to answer any interview questions and they could stop their participation during the interview. High school business teachers and college business professors who agreed to participate offered their best times to communicate. I then contacted the participants to set up a time to conduct face-to-face interviews that were not anticipated to last more than 1 hour each. I requested that the participants set their appointments during a time that would ensure that the interviews would not be interrupted. The appointment times each corresponded with daily intervals over 3 weeks. All physical data used during the semistructured interviews were locked in a filing cabinet in the office. I will keep the data for 5 years.

Data Analysis

After the interviews, I scheduled a follow-up meeting with the participants to review and confirm the accuracy of the interview transcripts. Once the participants acknowledged that the interview transcripts were accurate, I used coding to identify

common words and phrases. I charted similar terms and phrases and used axial coding to identify subcategories that emerged from similar responses that were contributed (see Strauss & Corbin, 1990). The subcategories were constructed according to a constant comparative model. I aggregated the responses from the high school CTE business teachers and college business professors using axial coding designed to identify business curricula misalignment practices (see Strauss & Corbin, 1990). The constant comparative method was used to summarize the structure, purpose, content, and primary use of the CTE business curriculum. A continual process of analyzing information assisted in bringing the data to the point of saturation (see Sutton & Austin, 2015). I examined participants' responses in conjunction with the literature review and conceptual framework to identify repetitive phrases and words from the semistructured face-to-face interviews.

I aggregated responses from the high school CTE business teachers and college business professors using axial coding. During the axial coding process, I extrapolated thematic words, phrases, responses, and sentences from the semistructured face-to-face interviews. I identified common words and phrases during the coding process. I examined the participants' responses in conjunction with the research questions, literature review, and CIT. Repetitive phrases and words recognized from the semistructured face-to-face interviews were categorized according to best practices or not supportive of the CTE business curricula alignment. As previously discussed, I used NVivo to help manage participants' responses from the semistructured face-to-face interviews. The use of audio

recording assisted in transcribing the data from the semistructured face-to-face interviews. Also, there was an additional digital recorder used as a backup. Participant data were uploaded onto a password-protected computer and later transcribed.

Issues of Trustworthiness

The trustworthiness of qualitative research is identified as being contingent upon the integrity of the researcher. A review of the interview protocol from business teachers, administrators, business professors, as well as an associated superintendent was vital for the reinforcement of trustworthiness. I used semistructured face-to-face interviews to ensure trustworthiness. I scheduled each interview within a 3 weeks' timeframe. I also scheduled follow-up meetings (i.e., member checks) within the same 3 weeks' timeframe for each participant to examine their responses for accuracy. While reviewing the interview transcripts, I was committed to focusing on trustworthiness and adherence to ethical procedures (see Yazan, 2015). There was an elaborate description of the findings and a precise data collection process to assure that every response was an authentic representation of the participants' perceptions (see Yazan).

Credibility

The credibility of this study was reinforced by ensuring that participants did not feel coerced into sharing their perspectives. Credibility is an important component of qualitative research (Yazan, 2015). Also, member checking is used to minimize the researcher's biases (Stake, 2010). The participants reviewed their responses for accuracy after the interviews were transcribed. To further establish credibility, I made every effort

to accurately represent the responses of the participants (see Cope, 2014; Elo et al., 2014). I triangulated the perspectives from the CTE business teachers and the college business professors by comparing and combining their responses. I began to categorize phrases based on the participants' responses. I identified patterns and similarities in the participants' responses. Reflexivity means attempting to examine one's thinking and feeling during the different phases of a research study (Patton, 2015). During the data collection and analysis, I did not have emotions or reactions to the participants' responses and I was able to avoid personal biases and reactivity.

Transferability

I transcribed the interviews and conducted member checks to ensure the accuracy of the interview transcripts. Logical reasoning can be made because of extenuating circumstances that influenced the research (Yin, 2018). The findings can be generalized or transferred to other similar public high schools and colleges based on reasonable explanations of the findings (see Yin, 2018). Transferability in this research was enhanced by interviewing multiple participants. The findings are transferable to other colleges and high schools that offer similar CTE business curriculum.

Dependability

I strengthened concepts of dependability to support the study. This was done by strategically and consistently including the contributions of each participant as well as a thorough inspection of the standards of qualitative research (see Yazan, 2015).

Qualitative research can achieve dependability by ensuring consistency within the subject

regardless of existing variables, conditions of the interview location, or timeframes (see Cope, 2014; Elo et al., 2014). Even though the interviews occurred in different locations, I was able to maintain consistency in the way I asked, recorded, and transcribed each section of data.

Confirmability

It is important for other researchers to confirm a study. Confirmability describes the notion that other researchers would be able to confirm the findings of the study (see Yazan, 2015). Accordingly, data were collected from CTE business and college business professors. I diligently analyzed the data to ensure that the results of the study precisely reflected a synopsis of the participant perspectives (see Yazan, 2015). I ensured that views and opinions were an accurate representation of the participants by listening to the recordings of the interviews (see Houghton et al., 2013).

Reflexivity

I have multiple years of education experience, various academic degrees, and certifications in business education. Reflexivity encourages a researcher to self-reflect about their motives before conducting a study (see Yazan, 2015). Biases, preconceptions, and preferences were considered and recorded before the study to curtail any predispositions (see Yazan). Throughout this research, I was constantly reflecting on the education experience to ensure personal biases did not influence the findings.

Ethical Procedures

Measure for Protection of Participants

I followed the ethical parameters established by IRB for the protection of human participants. Approval from the IRB (12-26-2019-0130319) confirmed that I complied with the proper ethical standards for recruitment, interviewing, and the data collection process. Business teachers' names and positions were obtained from the Websites of the schools and colleges to create a list of potential participants. Of this preliminary list, I was careful to ensure that I neither supervised nor worked with any of the potential participants to minimize any chance of biased selection. From the preliminary list and permission from the administrative staff, I hand-delivered each participant an invitation and consent letter regarding the study. Before the recruitment process, a letter of cooperation was presented and signed by the administration of the school district and a legal executive that represented each of the colleges within the region in a request for permission to conduct the research.

I will keep all recorded and transcribed data in a filing cabinet for a period of 5 years. I am the only one who has a key to the filing cabinet. No demographic details, such as age or ethnicity were shared in the findings. I did not include other details that could reveal any of the participant's information.

Although the participants' responses were classified, if any aspect of the study leads to an adverse persuasion detrimental to safety, or any disclosure of abuse or harm to a student, the participants were notified that their response ceased to be confidential and

that I had a duty to report such findings. Consent forms notified participants that there was no compensation for their contributions. I informed the participants that they would not be penalized nor retaliated against if anyone chose not to participate.

Biases are apparent in most qualitative research, according to Wadams and Park (2018). To this end, I may have developed some preconceived notions while conceptualizing the participant responses, which could have led to the development of biases. These viewpoints included anticipated outcomes, questioning, sampling, and conceptual biases (Wadams & Park, 2018). I recognize the following biases throughout the study and the steps that were taken to mitigate them. The physical appearance of the classroom could have also created biases while conducting the interviews. In this case, the lack of appropriate resources and visual aids could have affected the way that I viewed the participant. The educational background of the participants was another area that could have persuaded any opinions about the knowledge base of the participant. The rationale being, the more education, the more expertise the participant may have. The years of experience that the participant possessed was another area that I was cognizant to not view in a biased manner. I was careful not to ask any leading questions or make any suggestive expression during the interviews. If the responses were vague, I was diligent about asking any clarifying questions.

Data Management

Participants received notices that all digital data, such as recorded interviews, were password-protected, saved on the personal iPhone, and transferred to a computer to

reassure participants of their privacy. Also, I notified the participants that no data, whether digital or physical, would be shared at any time during or after the research. I notified the participants to make copies of the invitation and consent forms for their records. Additionally, the consent forms were printed and stored in a file cabinet and accessed only with a key that I possess. Participants were notified not to share their responses or details of the research with anyone at their school or college to protect the confidentiality of the research.

I considered the following as potential adverse responses that could be derived from the research as well as the precautions that were taken to protect the confidentiality of the data. The first was the potential of negative information discussed publicly regarding the study and perceived biases related to a demographic or economic subpopulation. I provided an email address that was accessible for anyone who wished to inquire about the research. Another instance may have been a possible breach in recorded, written, or documented data. Accordingly, I stored digital data on a password-protected computer, and all written documentation was accessible only with a key to a filing cabinet.

Summary

In Chapter 3, I restated the primary purpose of this study. This description was followed by the research design and rationale section that identified the central concept while addressing the phenomenon of the study. Next, I described the role of the researcher. I described the criteria for the participants, as well as how they were contacted

and recruited. I included the data analysis plan, procedures for coding, connections to the research questions, and the data management system. Also, I described credibility, transferability, dependability, confirmability, and reliability. In Chapter 4, I present the findings.

Chapter 4: Reflections and Conclusions

The purpose of this study was to learn more about the misalignment of practices between CTE business curricula at a school district and the business programs of three local colleges in the southern United States. Specifically, I investigated the perceptions of CTE business teachers and those of business professors. A case study was sufficient for the examination of the school district and colleges as the investigations took place on the campuses of the business teachers. All interviews were conducted over 3 weeks. The findings may assist business curricula developers and education leaders in identifying ways to prepare business students for postsecondary success. In Chapter 4, I discuss the setting and demographics of the data collection, the data analysis, evidence of trustworthiness, and the results of the study, and I conclude with a summary.

Setting of Research Site

The research site was a school district in the southern region of the United States and surrounding colleges. The southern school district is in a mostly rural area. Enrollment at this school district consists of approximately 16,000 students, 800 teachers, and 45 administrators. The student-to-teacher ratio was around 20:1 for Grades K–12. Demographics for the school district were: Caucasian 33%, African American 30%, Hispanic 25%, Asian 7%, two or more races 4%, and the remaining percentages were inclusive of all other ethnicities.

I collected data from CTE business teachers and business professors through semistructured face-to-face interviews. I conducted the interviews over 3 weeks during

the 2019–2020 school year along and scheduled follow-up meetings before we concluded. I approached 21 business teachers and professors to participate, and 12 responded with interest to volunteer in the research. Selection criteria for high school teachers included: (a) state-certified, (b) teach business courses, and (c) has taught at the research site for at least 2 years. The selection criteria for college professors included: (a) full-time professors, (b) teach business courses, and (c) has taught at the research site for at least 2 years. All the participants who met the selection criteria had taught the subject for between 5 and 30 years, with an average of 14.3 years. The CTE business teachers have taught for 5–15 years, with an average of 12.4 years in the subject area. The business professors taught between 10 and 30 years, with 17.7 being the average time teaching the subject. Four of the six CTE teachers have master's degrees, while the other two have a bachelor's degree. All six business college professors have a doctorate. Five of the participants were women, and seven were, and the college students ranged from first-year students to senior-level students. men. The southern United States school district sampled for this research enrolled students from ninth through 12th grade

Data Collection

Number of Participants

I received IRB approval from Walden University (IRB # 12-26-19-0130319). After approval from the school district's IRB and the IRB of the business colleges, I delivered consent letters to each respective school and placed them in the educators' mailboxes to invite them to participate in the research. I used predetermined criteria to

identify potential participants. The invitation letter specified the selection criteria for participants. If the CTE business teachers and business professors agreed to participate in the study, they were informed to text the provided number. Once I received the texted notices of interest, I contacted the participants to schedule a time to conduct the semistructured face-to-face interviews. Of the 21 potential business teachers and professors, 12 individuals participated in the semistructured face-to-face interviews for this qualitative case study: six high school CTE business teachers from the school district and six college business professors from colleges in the area.

Location and Data Collection

I conducted this study at a school district in the southern region of the United States and three colleges in the local area. The locations of the semistructured face-to-face interviews were private conference rooms at their campuses. Five of the college business professors wanted to meet after school hours; one chose to meet before school. Before the interviews were conducted, I reviewed the information presented in the consent letter with the participants to ensure they had a clear understanding of the study.

Sources of Data

Before each interview, I set up a digital recorder as well as an iPhone with the recording function enabled. Two interview protocols were used to ask each participant open-ended interview questions; the first protocol was for business teachers (Appendix A) and the second protocol for college professors (Appendix B). Interview responses from two groups of participants were the sources of data.

Participant Demographics and Characteristics

Table 1 includes the ID assigned to each participant as well as their years of teaching a business course and grade levels taught. Each of the business professors taught many of the CTE business students who enrolled in their colleges through the prebaccalaureate programs that partnered with the school district. Graduating senior students who enrolled in the colleges from the school district were identified as freshmen.

Data Recording Process

The participants were able to select their preferred locations for their interview. I strongly encouraged them to identify a location that would be free from any interruptions during their interviews. During the interviews, I asked open-ended interview questions to high school CTE business teachers and college business professors. The interviews were recorded digitally and uploaded to a password-protected computer. The uploaded recordings were transcribed automatically on the computer using the dictate function located on the Microsoft Word toolbar. I transcribed the interviews. I met with the participants for a second time to conduct member checks. The participants reviewed the interview transcripts for accuracy. The participants agreed with the accuracy of the interview transcripts and no changes were made.

Table 1

Participants' Demographics

ID	Years teaching	Subject	Grade level taught
P1	12	Business law	College first-year
P2	5	Marketing	College first-year student
P3	7	Economics	College first-year student
P4	5	Business administration	College first-year student
P5	10	Human resource management	College first-year student
P6	30	Business administration	College first-year student
T1	20	Business information management	High school senior
T2	15	Business information management II	High school senior
T3	8	Introduction to economics	High school senior
T4	12	Business law	High school senior
T5	30	Practicum business management	High school senior
T6	10	Business communication	High school senior

Data Analysis**Categorization and Theme Analysis**

I used the NVivo to organize the interview transcripts. I conducted an initial coding process. Coding was used to identify common words and phrases. I organized similar terms and phrases in the initial coding. I used axial coding to identify subcategories that emerged from similar responses that were contributed. The

subcategories were constructed according to a constant comparative model and based on common themes. I used the constant comparative method to identify similarities between the subcategories. In the next section, I present the themes.

Findings of the Study

The following themes emerged. In this section, I present the themes and excerpts from the interview transcripts. Each theme includes excerpts from the teachers and the professors.

Theme 1: Misalignment of CTE Business with College Business Courses

Teachers were instructed by school administrators to incorporate differentiated instruction into their lessons. Because of the time required to implement differentiated instruction, business teachers did not have enough time to teach college business curricula concepts. T1 explained:

Differentiated instruction includes a process of tiering students according to ability level and reteaching lessons to students that did not understand the instruction. Tier one students were those who understood the lessons when they were initially taught and scored between 80 to 100 on assessments. Tier two students were those that scored between 60 to 80 percent on their assessments and below this margin was the tier three students. To complete this process for 25 students can take days, if not, weeks to complete.

The teachers expressed their concerns that time was an issue to align business curricula. T3 stated, “CTE business teachers do not have the time to remediate lessons.”

From this statement, I concluded that a portion of the college instruction was not taught due to a lack of time which caused a misalignment in the business curricula. T2 explained, “Remediation of instruction was rare due to the time it takes to reteach the lessons and incorporate college business content.” The reteaching of instruction through remediation practices is another important component of business curriculum alignment.

Another reason that CTE business curricula were misaligned with business curricula was because of a lack of resources. T1 stated, “Traditionally, teachers do not like to deliver their lessons according to state regulations because essential business skills are omitted if they were not included in the tested content.” The high school business teachers reported that state-regulated assessments would help to align the business curricula to help students develop 21st-century skills that employers look for in a candidate. T1 said, “I believe our testing would be stronger if we had exams that were researched based and data-driven so that we do not only rely on the teachers to create their test.” T6 added to this idea by stating, “A lack of state-regulated testing puts CTE business instruction at a disadvantage by excluding relevant information identified from a larger learning community.” T1, T3, T5, and T6 each talked about business curricula content. CTE participants reported that due to the heightened sense of importance placed on state assessments, students were focused on maximum effort to do well. T6 stated, “If the CTE business department had the same support from the school board and their executive administrators as core content areas, students would be encouraged to invest

more in their preparation for business testing.” Thus, CTE business curricula are misaligned.

The professors reported a lack of support between the school district and the policymakers. P5 expressed, “Teachers are required to create end-of-course exams for CTE business courses which do not always align with college business courses.” P5’s response indicated that there is a misalignment in the business curriculum. P6 said, “CTE business teachers are responsible for identifying learned skills and creating exams designed to assess students based on content not taught at the college level. Similar to P5’s response, P6 stated that teachers create their exams without taking into consideration the college curriculum. These two examples provide evidence that there is a misalignment in the business curriculum. P3 explained that the problem was, “No two tests were alike at the high school levels which weaken the alignment of the business curricula for students that were entering college business courses.” High school teachers prepare their exams without sharing exam questions to align the business curriculum to the college business curriculum. P1 stated, “By incorporating state assessments in the CTE business programs, business professors would be able to review those assessment scores and identify the areas that students were struggling and tier them accordingly.” This statement provides evidence for the need to align the college curriculum to the high school business curriculum. P2 discussed, “By tiering students according to collegiate expectations, business professors would be able to remediate their instruction according to student scores and place them in business courses to strengthen their fundamental

knowledge. As P2 reported, teaching high school students the concepts of the college curriculum to prepare them for college business courses may help educators to remediate instruction according to students' scores. P3 said, "Data from our assessments could greatly benefit us if we could couple those results with data obtain from state-regulated assessments from the school district." P3 agreed that college business assessments could benefit college professors by admitting more competent high school students to enter college. Data obtained from the formative assessments could allow business teachers and business professors to identify content areas of improvement. Business curricula could then be better aligned according to improvement areas. P5 stated, "Testing promotes the alignment of college business concepts by requiring the implementation of learning expectations identified through state regulations." P4 added, "Formative state assessments would help to classify instructional goals that are identified through data analysis." P5 and P4 reported that proper testing at the high schools may help students who enter college by aligning the high school curriculum with the college business concepts. Data obtained from the formative assessments could allow business teachers and business professors to identify content areas of improvement. Thus, the professors reported that high school teachers who teach business courses use assessments that do not align with the college business curriculum. The aforementioned excerpts provide evidence that there is a misalignment in the business curriculum. The professors provided similar responses that teachers create their exams without taking into consideration the college curriculum providing evidence of the misalignment in the business curriculum.

High school teachers prepare their exams and do not align the college curriculum to the high school business curriculum. Teaching high school students the concepts of the college curriculum may better prepare them for admission to college in the business programs. Thus, college business assessments could benefit college professors by admitting more competent high school students to enter college via proper testing at the high schools to align the high school curriculum with the college business concepts.

In conclusion, each of the business teachers and professors stated that there is a misalignment between the school district and college curricula. Two of the CTE business teachers discussed a lack of time needed to remediate lessons appropriately for student understanding. More time is required for the school district to remediate lessons and align the curricula with college business curricula. Both the teachers and professors agreed that the inclusion of state-regulated testing could provide data that would strengthen instruction practices. However, without government support from education leaders such as curricula developers, superintendents, and school policymakers, business teachers and professors must rely on self-made and local assessments that fail to sufficiently align the curricula. Thus, there is a misalignment between the school district and college curricula.

Theme 2: Preparation Through Online and College Business Course Access

The participants from the school district and the local colleges provided their senior students with the opportunity to earn college credits through their pre-baccalaureate program, which incorporates elements of online business courses as well as on-campus classes that students may enroll in to gain college-level business credits.

However, the program was not effectively equipping students for college success. High school teachers T1, T3, T5, T6 each spoke about the slow speed and mediocre business content provided through the online business program. These teachers alluded to the fact that the online business courses were not effective in equipping students with college-level business content because much of the content was outdated.

Many of the teachers seemed frustrated with the online business platform. T3 spoke to the point that current business content was not aligned with their curricula and students were not able to access the website. T3 said:

Often, students are not able to log onto the online business courses that have the potential to incorporate practical business skills related to the workforce. The online business program could also serve to provide content material for the college placement exam. The primary goal of the pre-baccalaureate program is to equip students with real-world business content and knowledge. However, if students cannot access the online instruction then they are not receiving instruction from the college business professors.

T6 and T2 also pointed out the fact that often students were not able to log into the online business courses. T6 stated, "I can never contact anyone at the colleges to help with student login issues." High school students may earn college credits through the pre-baccalaureate program because this program incorporates elements of online business content. According to the high school teachers, the difficulty with the pre-baccalaureate program was the business content was provided through the online business program

providing evidence that the online business courses were not effective because the content was outdated. The high school teachers showed frustration with the current online business platform. The teachers stated that current business content was not aligned with the college business curriculum.

The college professors shared similar responses to the high school teachers' responses that high school students did not have adequate access to online college business courses. The professors emphasized that high school students did not have adequate access to online college business courses because of software updates for the online learning platform. For example, P2 stated, "Software upgrades for online business programs would not be completed until the 2020-2021 school year." P3 explained how vital it was for students to gain access to online business content for their success in college. The college professors' response focus on the importance of helping high school students with online college business courses by resolving software issues with the online learning platform. P3 stated, "Many of the business professors rely on the online platform to reinforce basic business knowledge for students before they enroll into the college programs." The response from P3 clearly demonstrates that business professors rely on the online platform. The business content found in the online learning platform may help high school students for successful college entrance. P5 discussed, "Exposure to business content was the primary way for students to prepare for college-level expectations." P5 provided an explanation of the importance of preparing high school students for college entrance. P4 stated:

I have had several students state that while in high school, they were not able to log into the accounts developed for the pre-baccalaureate business programs. Many students mentioned they were not able to complete their assignments without access to the online courses. The assignments that students were responsible for directly correlated with the online business site and students were required to answer questions based on that content.

The professors emphasized that the online learning platform needs to be updated. The college professors strive to help students with online college business courses; however, professors rely on the online platform because the business content found in the online learning platform may help high school students for successful college entrance. Other statements from business professors indicated that the inferior management of the online business courses was impeding student progress. P1 and P3 stressed that they have made several calls to the technology department of the colleges and were provided with temporary fixes. P1 said, "Often the problem would be fixed for a week or two and it would reoccur." These types of responses from the participants substantiated the notion that the online business programs were not able to meet the needs of the students. P5 stated, "It is important for the school district to have access to an effective online learning system that reflects relevant business content so that students will be prepared when they get to college." The college professors emphasized that to prepare high school students for the business curriculum, students need to have adequate access to online college business courses.

In conclusion, both the CTE business teachers and business professors felt like the online business program was insufficient for student learning. Many of the participants conceded to the fact that the potential to support business instruction was possible through the online platform. However, outdated software and a lack of technical as well as administrative support are needed in the online business program.

Theme 3: Create and Support Meaningful Planning Times

Teachers acknowledged there is a lack of planning time. Teachers need time to attend professional development to streamline the business curriculum with that of the colleges. T3 explained, “Meaningful planning time is professional planning and training which is specifically targeted toward teacher needs.” Texas Education Code, Sec. 21.404 entitles every teacher plan and preparation time for their classes (Texas Classroom Teachers Association, 2020). The school district allocates one 45-minute planning time during their workday. A unanimous concern of the high school CTE business teachers was that they did not have enough time built into their schedules to plan with various departments. T2 stated, “There must be time built within our schedules at least twice a semester for teachers to attend meetings and professional development to streamline our business curricula with that of the colleges.” Teachers also reported how training was vital for the success of the students enrolled in the pre-baccalaureate business program. Students could gain credits for the business programs at each of the three colleges there were used in this study. T1 stated,

Without planning, students might gain college credits; however, the student is not learning the specific content needed for them to be successful once they enrolled in the colleges. What students did not learn in high school would be reflected in the results of their college placement exams.

Teachers reported that planning is required to prepare students for college business courses. T6 was adamant about including college business instructors within their training. T6 stated, “More planning with the business professors would allow us to incorporate their curricula into our instruction to give us insight for aligning our end-of-year exams with college placement exams.” Planning was also vital for teachers to incorporate what is known as the response to intervention (RTI) process that the school district promotes. T6 explained, “RTI requires teachers to tier their students according to collected data such as classwork, homework, and assessments.” Consequently, RTI may include more time to prepare for and implement intervention instructional practices. T3 stated, “The increase of additional planning times would allow teachers to strengthen their RTI practices as well as incorporate what they found to be most effective in reaching struggling students.” Thus, teachers need planning to prepare students for college business courses. Planning with business professors is needed. High school teachers and college professors can plan together on the business curriculum.

A difference between the high school teachers’ responses and the business professors was that teachers need planning to prepare students for college business courses while business professors reported that teachers need to introduce college

business concepts to students. P6 said, “If students are going to possess the skills necessary to keep up in college business courses, they must be exposed to the curricula as soon as possible.” P5 stated, “Failure to introduce students to the freshman level business courses diminishes the value of the pre-baccalaureate program.” Responses from the professors made it clear that it was vital for the high school teachers to plan not only what topics but also when they would introduce particular business concepts to students.

The professors stated that they are ready to plan with the high school teachers on the college business curriculum. P4 asserted, “We have made several attempts to plan with the teachers from the school district with minimal success.” P1, P5, and P6 discussed that alignment with colleges must be strengthened in the areas of planning and curricula integration. Many of the responses were directed towards a need to include the necessary skills and workforce expectations within the alignment practices. P2 explained, “Alignment with colleges must be strengthened in the areas of planning and curricula integration.” The responses from the teachers and the professors about planning are similar. Teachers need to plan with college business professors. Professors have reached out to the school district to organize such planning. Thus, the school district administrators should accommodate planning between teachers and professors.

In conclusion, the CTE business teachers and business professors stated that additional time was needed to plan and prepare for aligned curricula. Each of the business teachers did not feel as though the 45 minutes they were given to plan was adequate. Teachers talked about the importance of extra time needed for professional development

and intervention practices. Many of the professors explained that planning with the CTE business teachers would be an effective way to integrate college business content. However, additional planning would have to be coupled with more time allocations for both teachers and professors.

Theme 4: Improvements in CTE Business Perspectives

Both business high school teachers and college professors emphasized the need to improve the CTE business curriculum. The emphasis from both groups of the participants was on the need to change the perspective of the CTE business curriculum programs at the high school levels. Teachers need professional development while business professors need communication with school district administrators and teachers. Each of the six CTE business teachers alluded to the notion that there must be a concerted effort to reshape the way that students, as well as educators, viewed the career and technical education program. T6 stated, "Training may help teachers to better help students to improve their proficiency in business. T1 commented, "Teachers can be unaware of the comments they make and how it affects the way students perceive their CTE business program." During their interviews, each CTE business teacher expressed that there was a perception within the education community that the CTE and the business programs were of less importance and that the curricula were not as rigorous as the core content curriculum. According to T2, "Core content teachers were reluctant to incorporate the CTE business curricula within their classes because they did not see the relevance." T3, T4, and T5 stated that teachers may be downplaying the importance of the CTE business

classes and that those disparaging comments shed a negative light on the CTE business programs. Each of the CTE business teachers defended their business programs by commenting on the importance of the CTE program and specifically the business department. T3 stated, “CTE business courses, unlike subjects such as math, reading, and science, provide practical knowledge for students entering the workforce.” Thus, teachers need professional development to improve the CTE business curriculum.

Many of the CTE business teachers complained about the practice and made several requests for the school principal to enforce the requests from teachers to not pull students out of their business classes. T1 explained, “Each of the high school CTE business teachers was adamant about students not being pulled out during their CTE business times. T6 stated, “The practice of pulling students out of class devalues the CTE department in the eyes of the students and teachers.” P5 stated:

During the end-of-year testing, many of the students from the CTE business department were called from out of their CTE business classes to make up other class assignments and prepare for course content exams. This practice of taking students out of their business classes to complete assignments in other classes reinforce the attitude that core content classes hold more value.

Teachers have dealt with this issue for some time and were unsuccessful in their efforts to stop the action. T5 and T6 discussed their dissatisfaction with the way that school leadership would place greater emphasis on assessments for the core content areas and overlooked the importance of CTE business students to prepare for their assessments.

Some of the business professors added comments that supported the idea that the perspectives of the CTE business department must be improved. P1 stated, “Some students talked about negative comments they would receive from some of the CTE business teachers.” These comments add support to Theme 4 regarding the need to create a positive image for the CTE business programs. P3 explained, “There must be a concerted effort to identify a positive message within the CTE business program and uniformly communicate that message to the learning community.” Teachers emphasized the importance of CTE business students being prepared for college assessments.

Business professors stated that the focus of high school teachers should be on the need to change the perspective of the business programs at the high school levels. Business professors also stated the need to communicate to students the value received from practical business learning. Many professors revealed that students did not express an attitude of value in their CTE business knowledge. P6 asserted, “Students would discuss how their core content teachers would make statements like CTE classes are only to ensure that you can have enough credits to graduate.” P1 stated:

Not every CTE business teacher would communicate the relevance of the CTE business programs to their students. I would have to explain to some of the students from the school district the practical application of CTE business programs. I would inform them of the potential they would have to apply many of the learned concepts into their everyday lives.

One of the benefits of the CTE programs is the practical instruction of knowledge that students may apply within their current job or employment search. P3 explained:

The primary focus of the CTE business department should be to prepare students for real-world occupations in business, and there must be an alliance of efforts from all education stakeholders to support students in realizing the relevance of the business programs.

P4 and P5 talked about their personal experiences in business courses when they were in high school. P4 said, "I remember how the business teacher in high school motivated students to work in the business industry. P5 stated, "Business class in high school was the only course that I was interested in." P5 continued by adding, "This is the type of concept that the school district and business college should work to invoke in the minds of their students. P6 expressed, "The way that teachers personally feel about the content will come out in the instruction, therefore, we must recruit teachers that have a passion for business education." Thus, professors need to focus on the value of practical business learning.

In closing, business teachers and professors placed much of the responsibility of reconstituting the way people viewed the CTE business department upon all stakeholders. Responses were primarily centered around the need to change the perspective of the business programs at the high school levels. The business teachers and professors each offered their insight into some of the negative connotations that are perceived by many of the stakeholders such as business professors and teachers. Some of the teachers though

sensitivity training in professional development would be effective in changing negative views. Many of the business professors discussed the need to communicate to students the value received from practical business learning.

Theme 5: Support and Additional Training for Business Curricula Design

Both teachers and professors need support and additional training because both groups believed that training is critical for enhancing their instructional practices. Both groups emphasized that professional development should include input from both the teachers and professors. Many of the CTE business teachers discussed how the design of business curricula should include input from CTE business teachers and business professors. T2 stated, “Feedback from multiple business teachers and students may produce effective results if they are effectively incorporated within the business curriculum. T3 stated, “The school district must design professional development programs aimed at designing proficient business curricula through the acquisition of multiple sources of data.” T1 and T2 postulated that business curricula design was different from some of the core content subjects because of its practical application in the workforce. The assertions given by these two teachers revealed that training for CTE business curricula should be more creative and innovative because of the instructional content. T4 stated, “It is important for curricula developers and administrators to have a deep understanding of what areas of training teachers need to maximize training efforts.” Teachers should identify their training needs.

Training for CTE business teachers should be more purposeful in its ability to target-present business needs. T3 discussed how there was a lack of training in place for beginning teachers to learn the business curricula to prepare students for college business courses. T5 stated, “First-year teachers, and those new to the school district, may not fully understand how to implement the curricula expectations because of lack of training.” One of the areas that new teachers must be trained in is the content in the college placement exams. These exams are those that first-year students who enrolled in the colleges must take to assess their business aptitude. T3 explained, “The expectations placed on high school business teachers to prepare teachers for college assessments are unrealistic primarily due to a lack of curricula training.” Adding to the assertion that there may be a lack of enough training, T1 stated, “I do not know whom to contact at the district level to request additional curricula training.” T2 added, “I have requested to plan with the business curricula developer, but that person does not work on campus, so that makes it difficult for training purposes.” T5 reported, “The college-level business curricula training is focused on the general overview of the business content provided for the high school.” T1, T2, and T5 stated the need for the school district and the colleges to strengthen their professional business training to include how to correlate both curricula for effective classroom instruction. Thus, training for CTE business teachers should include business needs.

The design of the business curricula is most effective when it includes perspectives from multiple stakeholders as well as pass and present data analysis. T4

stated, “Training opportunities should be centered around reviewing student assessment scores and how to use the data to increase student learning.” T2 added, “When given the opportunity to attend training programs, the teacher has the potential to bring back to their campus the information they learned to train other teachers at their campuses.” T2 also added:

I believe that by allowing the business teachers to select from a catalog of training opportunities would add autonomy to teacher training and increase their level of accountability. This can be accomplished by presenting the business teachers with the opportunity to self-evaluate and identify areas of training that they believe would directly increase their competency in that area.

All professors agreed that when teachers apply the training to their instructional practices, they can provide greater opportunities for students to learn. P3 disclosed that professors did not feel as though high school business curricula developers were adequately trained to work with college business educators. P4 stated that the high school business curriculum does not align with college business curricula because of a lack of training. P5 stated, “The high school business curricula developers use standards that they receive from the Texas Education Agency’s (TEA) curricula guides.” P5 reported, “TEA’s curricula standards are well developed; however, to be most effective, the standards must be aligned with insight from business professors regarding what they teach in college programs.” As stated by P5, CTE business teachers can strengthen and align their instructional practices with additional training with business professors. P1

stated, “Training from the curricula designers could help promote teacher success.” P1 was adamant about conducting training classes between the college and high school business curricula developers at least once a year to coordinate how the instruction would be implemented within the instruction. P6 placed an emphasis on the interaction and planning process by stating, “Training must be conducted at the beginning of the year to set the pace for the entire school term.” P3 and P4 both discussed a need for administrative support at the district level to adapt and improve the training process for business teachers. Thus, professors and teachers need to apply the training to their instructional practices.

In closing, teachers and professors spoke about the same phenomenon, which is that additional training is needed for both groups and administrative support regarding training opportunities. Teachers and professors identified that more support and training with business curricula developers could enhance student success in college. According to the teacher participants, curricula training for business teachers and professors is critical for enhancing high school teachers or college professors’ instructional practices. Similarly, most of the respondents believed that professional development would benefit more when input is provided from both the teachers and professors. From the responses, I was able to identify that a lack of training with the curricula developers could be one of the primary reasons for curricula misalignment in the business departments. Many of the responses from the teachers alluded to the idea that it was difficult for them to contact the relevant personnel at the colleges to coordinate training efforts. Responses from the

business professors seemed to point to the notion that the business teachers were not adequately identifying what college business content should be taught.

Theme 6: Critical Need for Business Resources

Each of the six CTE business high school teachers and six business professors expressed similar thoughts that there was a need for more business resources in the business programs. T3 stated, “Without access to necessary business resources, students lacked sufficient business curricula support.” T4 added, “Business resources are needed to remain at par with other school districts.” T5 stated, “Many business teachers conduct fundraisers throughout the school year to provide students with additional educational business resources.” Business resources are especially important in business classes because of the practical and hands-on nature of many of the projects. T1 stated, “Without business resources like current business textbooks, we are forced to research current information and implement the findings within the business curricula.” T6 stated, “It is difficult for teachers to engage and keep students’ attention without incorporating digital technology as a business resource.” Classroom resources serve multiple purposes that include not only instructional but, student engagement practices as well. T2 stated, “Limited business resources create a gap in student learning because we are not able to afford certification and digital software, online business tutoring programs, and computerized assessments.” Thus, teachers need more business resources. T3 talked about how teachers must modify their lessons because of limited business resources and stated:

It is difficult for teachers to engage students in practical learning activities and conduct more theoretical activities without necessary business resources such as learning materials. Teachers are more likely to go to more affluent school districts if they felt constrained in their teaching capacity because of limited business resources. Inadequate business resources are an ongoing concern for not only school districts but also colleges as well and one that the business professors viewed as an impediment to student learning.

Professors talked about conversations that they had with students in which they discovered that there was a lack of learning resources at the school district. P1 stated, “There are several practical learning programs that utilize simulations that students in other school districts were proficient in the use of those applications.” I realized that the lack of adequate business resources placed students from the sampled school district at a disadvantage from the school district that provides those types of resources for their students. The broad perspective of the professors was that students were more successful in college when exposed to up-to-date business resources. More specifically, P5 stated,

Many of the students who enrolled in business classes college from the school district were unaware of how to use digital software and that we would have to remediate the instruction of how to use the pertinent software before moving on to the next lesson.

Digital software as a business resource can be expensive for economically disadvantaged school districts that do not have the budget to allow for this type of spending. P2 stated:

By providing students the opportunity to use business resources early in their education, students may master the business curricula a lot quicker. Students are at a disadvantage in comparison to their more affluent counterparts who have the necessary business resources.

In conclusion, business resources are needed to help high school students master business curricula to be successful in college. Both the teachers and professors expressed a need for appropriate classroom resources to support student learning. The teachers and professors reported that students in other school districts were more advanced in their business knowledge because they were equipped with resources such as current textbooks, updated computer software, and tutoring programs that support teacher instruction.

Theme 7: College Business Curricula Alignment

Both high school teachers and college professors stated that they need to work together to align the business curricula. Teachers reported that collaboration between the school district and colleges is necessary. Professors reported their input should be considered when planning the high school business curriculum.

The alignment of curricula is one of the fundamental aspects of education. All teachers discussed the need for better alignment practices that include input from the

professors of the business colleges. Each of the teachers reported that high school business curricula alignment is essential for high school students to succeed in college business programs. T5 stated:

Each stakeholder of the business program should provide input regarding the business curricula alignment. Because of high teacher turnover at the school district, knowledge of the college placement exams is not always conveyed to the next teacher hired for the business position.

T6 said, “When teachers retire or go to other school districts, they do not always transfer their understanding of the college-level exams to the new instructor.” I realized that the importance of curricula alignment with the business colleges. Accordingly, college curricula are designed to instruct students with the essential knowledge of business expectations for college business courses. Without first-hand knowledge of the course and exam expectations at the college level, the teacher is not fully equipped to prepare students for college business expectations. T3 stated:

I met with the curricula developer from one of the colleges and emphasized the need for business curricula alignment. During the meeting, I was allowed to review the colleges’ business curricula and I discovered many gaps in the content that our students would be expected to know in their first-year business courses.

Some of the teachers reported a lack of vertical alignment between the high schools and the business colleges. Vertical alignment is when each teacher at the higher or lower grade levels plan together to prepare students for their next grade level. T6

reported, “There is a lack of vertical alignment in the curricula planning with the colleges that place our students at a disadvantage.” T6 continued to reveal how there was minimal support from the school district to align the business curricula with that of the colleges. T5 expressed, “I believe that students will begin to show improvements once we align the business curricula with that of the college.” Thus, support for training and planning seemed to be the consensus for a plan to promote better student learning.

The direct input from business professors about what was taught in business courses at the high school level should benefit curricula planning. Communication between the school district and business colleges is needed to determine the content and time during the students’ education that the curricula should be taught. Each of the six business professors acknowledged that the business curricula between high schools and colleges should be aligned. P1 said, “Stakeholders should align college business curricula and plan with the various high schools throughout the district.” P2 stated, “Our efforts to align the business curricula with the CTE departments have seldom been met with much cooperation.” P3 explained, “Business teachers were using content from the TEA Website as a curricula resource that was not relevant for freshman and sophomore level students.” P3 stated that content from TEA did not include college-level business content. P5 revealed, “Because of the fast-paced environment of the business world, student lessons should evolve at the pace of technology.” P3 stated, “I would be happy to provide the CTE business department with the lessons that I have developed around the technological advancements of business.” P4 stated, “I realize that what is being taught at

the high school level is quite different from college. However, we must try to lay the foundation to introduce pertinent business content to students.” With adequate business resources, the teachers would be able to more effectively apply business concepts for students.

The teachers and professors agreed that they must work together to align the business curricula. The teachers felt that the collaboration between the school district and colleges may maximize students’ success. The professors stated that direct input from business professors about what was taught in business courses at the high school level was one of the primary benefits of curricula planning. Communication should increase between the school district and business colleges to determine the content and time during the students’ education that the curricula should be taught.

Evidence of Trustworthiness

Credibility

I scheduled a follow-up meeting for each participant to review their interview transcripts. Creswell (2009) elaborated on the topic of credibility as a process of validating the results of the research with the data source. I used a digital recorder and iPhone to record the interviews. To further reinforce credibility, I included details regarding data collection and analysis, recruitment, and privacy protection procedures.

Transferability

For this research, I used semistructured face-to-face interviews to collect the perspectives of six high school CTE business teachers and six business college

professors. I followed a very specific strategy for identifying, communicating, and collecting the data from the participants. The procedures that I employed to collect data and interact with the participants were in line with Walden's IRB process. Therefore, the transferability of this research was created in the regard that a researcher that conducts a similar study would essentially have to comply with much of the same IRB protocol.

If research boundaries such as location, type of participants, time allocation, data collection techniques, and the number of participants in other studies were like this research, those studies may yield comparable results. I was able to add to the quality and authenticity of the responses by keeping a narrative record which helped to ensure that the responses were solely based on the participants' perspectives.

Dependability

Throughout the study, I strived to maintain a level of consistency within the data collection and analysis process. I created the open-ended interview questions for the participants to disclose their perspectives regarding the curricula alignment of their business programs and that of the colleges. I audio recorded each interview. I also transcribed the interviews verbatim. I obtained information from interview questions related solely to this study. I strengthened the dependability of the findings by checking in with participants during all aspects of the interview process and allowing all participants to review the interview transcripts for accuracy (see Yin, 2018). This process reinforced dependability by evaluating the quality of the data collection process, analysis, and interpretation of the findings.

Confirmability

I categorized phrases based on the participants' responses and identified patterns and similarities in the participants' responses. I confirmed the accuracy of the participants' responses through a member checking process. Through member checking, the participants were able to review their responses to ensure accuracy. I triangulated the perspectives from the CTE business high school teachers and the college business professors by comparing and combining their responses. Another practice that I used was to use my professionalism to avoid any personal biases, perceptions, and opinions about this study. I did not have emotions or reactions to the participants' responses and I was able to avoid personal biases and reactivity.

Summary

In this chapter, I discussed the setting of the study as well as participant demographics and characteristics. Data collection procedures were used to describe the number of participants, location, and duration for the data collection process. Also, for the analysis portion of the chapter, I described the specific coding processes and themes that I was able to identify. Finally, I discussed credibility, transferability, dependability, and confirmability. In Chapter 5, I discuss the conclusions and make recommendations.

Chapter 5: Discussion, Conclusions, and Recommendations

The research problem at the focus of this study was a misalignment in business curricula between secondary and postsecondary schools. The purpose of this research was to understand alignment issues regarding CTE business curricula at a public school district and three surrounding colleges in the southern region of the United States. The methodology used for this research was a case study. Six CTE business teachers and six business professors contributed their responses in individual semistructured face-to-face interviews. Through their responses, I discovered business curricula misalignment issues between the school district and the colleges. Findings from the semistructured face-to-face interviews yielded seven themes that may lead to an improvement in the alignment of the business curricula between the school district and colleges as well as create a positive perspective of the CTE business program:

- Theme 1: Misalignment of CTE business with college business courses,
- Theme 2: Preparation through online and college business course access,
- Theme 3: Create and support meaningful planning times,
- Theme 4: Improvements in CTE business perspectives,
- Theme 5: Support and additional training for business curricula design,
- Theme 6: Critical need for business resources, and
- Theme 7: College business curricula alignment.

The theoretical framework that grounded this study was CIT. Beane (1997) explained that CIT may support business teachers, education leaders, and business

curricula developers by helping them improve on existing knowledge by designing curricula systems that address real-world problems, issues, and concerns. Beane (1997) defined curricula integration as the process of using familiar information to engage students within the instruction. According to Beane's CIT, teachers can increase student engagement by (a) combining multiple subjects, (b) placing more emphasis on projects, (c) incorporating resources that go beyond the textbooks, (d) identifying relationships beyond the concepts, (e) utilizing thematic units as organizing principles, (f) creating flexible schedules for teachers, and (g) creating flexible student groups. Beane's (1997) CIT study relates to the themes identified in this study.

In Theme 1, the respondents discussed a misalignment of CTE business curricula with college business courses curricula. CIT can be used to enhance students' learning (Beane, 1997). As discussed in Theme 1, tiering students according to their ability levels to reinforce college business concepts is rarely practiced due to time factors. By creating flexible student groups, as discussed in CIT, CTE business teachers could identify and group students according to their areas of need (Beane, 1997). Once the students are grouped, teachers could then be assigned to work with the various groups according to their level of expertise (Khan & Law, 2015).

In Theme 2, respondents addressed the preparation of students through online and college business course access. The idea of the prebaccalaureate program partnership with the school district and colleges was to provide students with the business curricula content they would need to prepare them for college. With the incorporation of current

technology into student learning, online business programs could be instrumental for content remediation (Frost & Dreher, 2017). As discussed by Beane (1997), teachers should place more emphasis on projects. Participant responses alluded to the need to develop a stronger online business program that was offered as a part of the prebaccalaureate program. By strengthening the business platform and upgrading its software, teachers would be able to emphasize business-related curricula offered at the college level.

In Theme 3, the respondents spoke about the creation and support of meaningful planning time. Many of the business teachers and business professors stated that to enhance the business curricula alignment, planning must include input from the colleges. Planning should be collaborative in nature and include an accountability system that measures the effectiveness of the implementations (Legacy et al., 2015). This relates to CIT in its need for identification of relationships beyond the concepts. High school business curricula are designed to teach students what they need to know according to the standards identified for their grade level.

Theme 4 relates to CIT because of its recommendation to combine multiple business subjects. Students could benefit from collaborating with various learning communities while gaining practical work experience through business partnerships (Holzer, 2017). This is the education model that many teachers promote through CTE business programs.

Administrative support and additional training for business curricula design were the focus of Theme 5. Participants reported a need for more support around the proficient implementation of business curricula. Research has shown that training programs realize the best results when they are coupled with support from a learning community, such as other teachers, administrators, curricula designers, and instruction specialists (Kennedy, 2016). The reasons identified for this deficiency in training was a lack of teacher input and autonomy in the selection of training programs. CIT relates to Theme 5 by prescribing flexible schedules for teachers to improve student learning. By creating flexible schedules, teachers can select training times they would not otherwise be able to attend if conducted during their class instruction times.

According to Theme 6, respondents are focused on the need for business resources. A need for additional business resources was unanimous among both the CTE business teachers and business professors. Theme 6 directly relates to the CIT principle of incorporating resources beyond the textbooks as a way to strengthen curricula design (Beane, 1997). Resources are essential not only for student learning but also for greater support to teachers by allowing them to proficiently implement learning strategies into their lessons (Nagro, Hooks, Fraser, & Cornelius, 2016).

Theme 7 related to the misalignment of the college business curricula. Some of the respondents stated that there must be a stronger inclusion of business professors to provide input regarding the curricula. Improvements in curricula training were found to

be necessary. Thematic units are the categorizing and organization of business curricula around selected themes (Beane, 1997).

Research Questions

The following two questions helped to guide this research.

RQ 1: What are the perceptions of college business professors and high school CTE business teachers regarding the preparedness of high school students for college business courses?

RQ 2: What alignment issues exist within the college business and high school CTE business curricula?

The proceeding is a synopsis of the various themes. In Theme 1, the respondents spoke about the misalignment of CTE business curricula with that of the business colleges that helped answer Research Question 2. Theme 2 was about student preparation through online and college business course access that helped to answer Research Question 1. The focus of Theme 3 was on the creation and support of meaningful planning times and helped to answer Research Question 2. The emphasis of Theme 4 was the necessary improvements in the way stakeholders perceived the CTE business programs and helped answer Research Question 1. Support and additional training for business curricula design were Theme 5, which helped answer Research Question 2. Theme 6 referred to the critical need for business resources and assisted in answering Research Question 2. Finally, Theme 7 dealt with responses that discussed improvements for college business curricula alignment that helped answer Research Question 2.

Research Question 1

In Theme 2, the participants discussed views regarding student preparation through online and college business courses which helped answer Research Question 1. Most of the responses regarding the online business platform that students used in the pre-baccalaureate program revealed its potential to increase student learning. Many of the participants revealed multiple areas of improvement that would be required for the online learning program to work proficiently. Online learning can be useful for intervention practices or a way to reinforce instruction (Aiken, Heinze, Meuter, & Chapman, 2017). Beane (1997) explained that business students should be provided with learning sources beyond textbooks (BT). One of the business professors discussed how business skillsets can be greatly improved through digital platforms such as online learning to access business sources that enhance the curricula.

In Theme 4, the participants discussed the necessary improvements in the way stakeholders perceived the CTE business programs that could help to improve student preparedness for college. Research has described that a positive perspective of education courses like the CTE business program helps to increase teacher job satisfaction which could lead to increased student learning (Gagnon, Hall, & Marion, 2016). In support of this outlook, a recent survey of 200 teachers revealed that a positive school perception was essential for improving school culture, stakeholder involvement, leadership interactions, and student achievement (Agi, 2017). CTE programs have historically been viewed in the world of academia as those classes that are taught toward students who

were low achievers. One teacher explained similar descriptions of the CTE programs as Ali, Firissa, and Legesse (2017) that in the past, CTE education was associated with reduced value and was taught to students with limited learning capabilities or language barriers. Some of the teachers felt like this type of perception could be one of the reasons that students were struggling in the CTE business department. Researchers have disputed those assumptions and have argued that CTE programs such as business benefits all students (Gentry, Hu, Peters, & Rizza, 2008; Gentry, Peters, & Mann, 2007).

Teachers need to work together to develop business curricula. Beane (1997) discussed how his CIT definition uses a combination of subjects (CS) to impact student learning and prepare them for college. Participants were adamant about the benefit to the CTE business classes preparing students to apply skills in their potential work environments. Research has described one of the advantages of CTE business programs as their ability to prepare the student to enter the workforce after graduation. This is the type of outlook that promotes the benefits of the CTE business program and one that can gain the interest of the student that is seeking employment to support their college tuition or families (Rojewski & Hill, 2017). De La Garza and Kuri (2016) wrote about the shared relationships among business programs through community service, co-operative learning, and apprenticeships. To increase the perspectives of the CTE business department, community support is vital (Mitchell, 2015). A response from one of the business teachers dealt with involving all stakeholders to communicate a positive message about the CTE business program.

Teachers could incorporate technology into the CTE business curriculum.

Virtanen and Rasi (2016) wrote about another way to improve stakeholders' perspectives. Virtanen and Rasi (2016) discussed how teachers who incorporate more creative and innovative technologically, such as language interpretation software for English language learners, realize a substantial increase in CTE perspectives. The idea is to make connections with other language learners through the appreciation of their language differences as well as cultures. Literature that explains the growth plan for the CTE business program is another way to improve the perspective of the department (Plotner, Mazzotti, Rose, & Teasley, 2018). Connections through programs and literature should be made available in various languages to students, parents, and the community.

Based on the findings, I concluded that the school district and colleges must increase their communication efforts to strengthen their partnership in the prebaccalaureate program. The program was designed to instruct students with college business content through online business programs. However, the business teachers and business professors expressed the need to improve on the online program's technical efficiency. According to some of the business professors and each of the business teachers, the perceptions of the CTE department must be improved to support student learning. One of the ways to improve the CTE business perspectives is to include multiple content areas such as math, reading, and science to implement some of the business information within their instruction.

Research Question 2

Planning is one of the main components to ensure that the business curricula align workforce demands with CTE business and college expectations. Responses indicated that improvements in planning (Theme 2) were necessary if the school district were to reach the level of competence that would ensure 21st-century skills for their high school students (Association for Career and Technical Education, 2014). The opportunity for students to convert their knowledge into employment opportunities has often been discussed as a primary benefit of the CTE programs. School leaders such as executive and associate principals make state assessments a priority. Inadequate business curricula alignment practices place more pressure on school districts and colleges to meet state regulations (Stowell et al., 2016). Accountability measures must be put in place for curricula alignment practices between the school district and business colleges (Jenkins, 2015; Kerrigan, 2015; Leveille, 2013; Stowell, Falahee, & Woolf, 2016). However, there is an apparent gap in research that addresses business curricula management at the local levels. Quality management of business curricula should be the focus of colleges, as a tool, to correct misalignment curricula issues (Albashiry, Voogt, & Pieters, 2015). Curricula alignment between the school district and business colleges should be an ongoing process to cultivate skills identified in the workforce (Stowell et al., 2016).

The process of training requires great flexibility and the ability to work closely with all school personnel. Quaresma and Valenzuela (2017) wrote about how to support must be given to the creation of meaningful teacher planning times. Meaningful planning

is when training is facilitated through the inclusion of input from various teachers, administrators, curricula developers, and students. Scholars support the idea that teachers are motivated to integrate skills learned from training when they were initiated by school leadership (Desimone & Garet, 2015). However, without specific knowledge of the needs and goals of the learners, the CTE business program would continue to suffer from a disconnect in expectations between students, parents, universities, counselors, and college staff (Mohamed, Bakar, Sulaiman, Salleh, & Sern, 2015). To understand the needs of the students, school leaders must support creative planning that addresses the input from various stakeholders through action research, learning communities, and continuing education programs (Brown & Militello, 2016).

The design of the business curricula should identify and align student learning and career aspirations. In a similar study, 62% of students surveyed revealed that they enrolled in high school CTE business courses with the assumption that the courses would prepare them for their career goals (DeFeo, 2015). As discussed by P6, students who enroll in their business courses do not possess the prerequisite knowledge they need to be successful in the college business programs. Apparent misalignment between the CTE business curricula at the sampled school district and its surrounding business colleges has underprepared students for college, which can lead to the inability of students to achieve their career aspirations (Castellano et al., 2017). Teachers could contribute to how the business curricula are designed by better understanding their student needs.

Teachers need training regarding the design of the business curricula. One way to incorporate the needs of students is through flexible student (FG) grouping (Beane, 1997), which would require more training for teachers to categorize students according to their abilities and related fields of study. One of the important roles of school leaders is to equip their teachers with the pertinent knowledge that can students' achievement (Romano & Eddy, 2017). Teachers have reported that they benefit most from the training that is practical and that they can immediately incorporate within their lessons (Matherson & Windle, 2017). The technological advancements of the 21st century have reshaped the way that students learn. These students have access to information and communication platforms that help them to discover their career aspirations (Kirk et al., 2017; Pehmer, Gröschner, & Seidel, 2015). Through the alignment and incorporation of student input into the business curricula design could support students in making real-world connections (Vocke, 2007). When students can recognize how business content applies to their potential work environment, they may be motivated to seek new opportunities to learn (Vocke, 2007). Curricula planning must be meaningful in the regard that business curricula developers are seeking and taking into consideration the feedback of all stakeholders including students. Learning principals that rely on the input of the entire learning community create an atmosphere of collaboration throughout the school. When teachers share and reflect upon their experiences, it could promote a deeper understanding of the challenges faced in the business program and develop ways to close the gaps in student learning (Jewitt et al., 2018).

The discussion of meaningful planning time also suggests that high school teachers and college professors plan throughout the school year to enhance the alignment of the curricula. As discussed by some of the CTE business teachers, they are not given enough time to plan with the business professors and their curricula developers. The time needed for planning must be assessed with input from the high schools and business colleges. Beane identified flexible schedules as being imperative for effective curricula integration. To improve business curricula alignment, there must be support from the school leaders like the school principals, executive directors, and deans of the colleges (Smith, 2016).

Administrators that offer support for more planning times should have a way to measure the effectiveness of instructional implementations. Professional development and training outcomes could be strengthened through monitoring of improved outcomes. To make efforts more meaningful, business teachers and professors should be held accountable for assessing the effectiveness of the recommendations made for business curricula alignment (Legacy et al., 2015). The ability to gauge the success and challenges of professional development practices is an aspect of leadership that can support the school district in the achievement of higher academic success (Kouzes & Posner, 2017).

Responses of some of the participants indicated that school leaders were not fully aware of the needs of their teachers. Smith (2016) discussed how principals of a school must invest time within the classrooms to understand the needs of their teachers. After observing instruction, adjustments can be made to strengthen the alignment of the

business curricula. School leaders should focus on the development of business curricula alignment on soliciting feedback from teachers, practice through demonstrations, and the development of new skills (Burbaugh, Seibel, & Archibald, 2017). Aiken et al. (2017) discussed how collaboration has shown to be an effective way to improve professional development, training, and the alignment of the business curricula.

Often teachers and professors may change subjects or relocate to other learning institutions. Therefore, successful learning institutions offer ongoing training in all aspects of education including curricula design. With training throughout the school year, business teachers could better align the business curricula (Darling-Hammond et al., 2017). The loss of veteran teachers can create a gap in the transference of information over curricula design and its instructions. Teachers and professors must contribute their expertise and share their knowledge to create proficient network systems that capture best instructional practices (Peterson, Chester, Attiwill, & Bateman, 2015). Coupled with this collaborative effort, should be an active response between school districts and colleges to increase evaluation measures to ensure proficiency of the business content (Jenkins, 2015; Kerrigan, 2015). Using this evaluation process, training is conducted to support teachers in areas they identify in which they are not competent. When teachers share and reflect upon their improvement areas, it could promote a deeper understanding of the challenges faced in the business program and develop ways to close the gaps in student learning (Jewitt et al., 2018).

Teachers should consider the support factors that are implicated at each level of learning. Khan and Law (2015) postulated that curricula management is imperative for the implementation of quality instruction for every scholar at the college level. Once evidence for improvements is gathered, academic teams such as business teachers and professors, school principals, college deans, and curricula designers must be assembled to identify the personnel that would be most proficient in the delivery of training (Galea, Fried, Walker, Rudenstine, Glover, & Begg, 2015). Darling-Hammond et al. (2017) stated that teachers greatly benefit when professional developments identify skills that are targeted toward specific teacher improvements.

Curricula developers have designed CTE business programs to provide students with the practical occupation skills needed for entry-level employment. It is the role of school administrators, superintendents, and school board members to provide teachers with the learning resources needed to effectively implement the business curricula (Algozzine et al., 2017). A lack of business resources used to engage students with the use of modern business software, digital technology, and online learning platforms can cause the curricula to become disjointed. Beane's (1997) CIT description discussed an emphasis on projects (EP) to promote student learning. Classroom and instructional resources are a necessary component for teachers to implement projects such as real-world business simulations.

Students with special needs present a unique set of instructional skills. Scholars stated that students with learning challenges require specific learning resources to be

included in classroom activities (Morningstar, Shogren, Lee, & Born, 2015). Teacher assistants, reading aides, and additional training programs are some of the learning resources that benefit the high school CTE business programs. These types of resources should be considered as necessary to move the CTE business programs in a progressive direction (Mazzucato, 2017). Researchers showed that when students are provided with innovative instructional resources, they are more equipped to succeed in college and the workforce (Carayannis, Meissner, & Edelkina, 2017). Conversely, a lack of necessary classroom and instructional resources like computer-based business programs, digital printers for marketing, and current learning materials, students are held at a disadvantage.

The participants' responses revealed the perception that insufficient training contributed to inadequate business curricula alignment between the school district and colleges. When the alignment of the curricula is disjointed, students do not have a basic understanding of the prerequisite business content before enrolling in college business courses. Beane's (1997) research of CIT discussed a relationship among concepts (RC) as those that should be integrated within the CTE business curricula. Curricula alignment is one of the fundamental practices that can support the success of student learning (Castellano, Sundell, & Richardson, 2017).

Unlike core content courses, CTE programs are not required to administer state-regulated assessments at the end of the school year. The lack of state-regulated assessments could be another reason that business curricula are misaligned. Researchers have reported that formative assessment is not required for CTE courses (Chappuis,

2015). Some formative assessments are regulated by government policymakers and evaluated according to very specific guidelines. The use of formative assessments provide educators with feedback about what students should have learned according to researched-based evidence (Wang, Gurr, & Drysdale, 2015). One of the main benefits of formative assessment is that it provides teachers with consistent data that can be used to align instruction with the college curricula to help students reach intended learning goals (Strunk, Marsh, Bush-Mecenas, & Duque, 2016).

When teachers align their business curricula with the state-regulated recommendations, students may become more prepared for college business courses. Participants discussed how state-regulated testing could help to identify student insufficiencies in learning if the assessments include business content required for college-level instruction. By assessing students according to state-regulated criteria like core content classes, CTE business teachers may adopt a similar methodology that promotes learning through data-driven analysis (Dorozhkin, Tarasyuk, Lyzhin, Krotova, & Sherstneva, 2016). Beane's (1997) research discussed the CIT concept of using thematic units as organizing principles (OP). This relates to Theme 7 of this research because state-regulated testing would assist business teachers in compartmentalizing what policymakers identified as essential for college readiness. Many of the CTE business teachers expressed that quality feedback provided through state assessments could help with remediation practices to better equip students for college

There is a strong relationship between formative assessment and student achievement. Curricula developers, college professors, school leaders, and education policymakers have identified such assessments as vital for students' learning process (Baird, Hopfenbeck, Newton, Stobart, & Steen-Utheim, 2014). When the school districts and colleges work together with various stakeholders such as teachers, professors, curricula developers, and administrators, they better understand how to align the business curricula. Each stakeholder could offer their understanding of students' strengths and weaknesses and create instructional support through a more aligned curriculum (Clark, 2015). Many of the teachers who were interviewed expressed their desire to use formative assessments to align the CTE business program by using its concise data.

In conclusion, based on the participant responses, planning between the school district and business colleges appeared to be a major issue. The strengthening of the business curricula alignment is inefficient when the business teachers and professors are not able to effectively plan together. When teachers are allowed to plan, the input must be provided from school personnel such as teachers, professors, administrators, curricula designers, and students. The respondents discussed that a lack of time seemed to be the main impediment for the affective planning practices between the school district and colleges. More business resources were another area that the participants discussed to help them align the business curricula. Some instruction was not able to be effectively taught to the students because the teachers did not have the resources needed for the lessons. Also, the CTE business teachers and business professors both discussed how

formative assessments could be a primary tool for aligning the business curricula. The data produced from the assessments would provide the educators with the feedback they would need to adjust their business content and instruction.

Limitations of the Study

I approached 21 potential business teachers and professors to participate in this research. A total of 12 CTE business teachers and business professors responded with interest to volunteer in the research. Therefore, a limitation of this study is that a larger sampled population could have yielded additional and more robust data.

Education agencies define a Title I school as one that enrolls mostly socioeconomically disadvantaged students. The public-school district selected for this research was a Title I school where many students do not enter colleges offering business programs because of the misalignment of business curricula that do not meet course prerequisites. By extending the semistructured interviews to incorporate school district and college administrators, I may have been able to gain a better understanding of the reason for the business curricula misalignment. Semistructured face-to-face interviews involved open-ended interview questions meant to probe and encourage thoughtful responses. However, there may have been some reluctance on the part of the participants to provide honest responses. Other school districts that enroll students from alternative economic and social backgrounds may have yielded different results.

Another limitation was that some of the participants may not have possessed a proficient knowledge of the CTE business curriculum. Therefore, the results may not

have precisely reflected the full scope of stakeholders' perceptions of the alignment issues. The semistructured face-to-face interviews presented open-ended questions meant to probe and encourage thoughtful responses. However, negative implications that may have been perceived by the participants could have created reluctance for some to fully disclose their thoughts on a topic. A final limitation was that I did not review the specific business curricula from the school district nor the colleges which could have provided further insight into the phenomenon.

Other limitations were from the perspective of the time constraints of this study. If this research was to be conducted over a more extended time, then this research could have yielded additional qualitative interview data. The findings may not precisely reflect the full scope of participants' perceptions of the misalignment curricula issues. Only business curricula from the participating high schools and colleges, as well as perceptions from high school teachers and college professors who were currently teaching the business courses during the time of the interviews, were included in the study.

The interpretations of the semistructured face-to-face interviews posed other limitations to the study. The socioeconomic status of the participants may have played a role in their business exposure, which may have either positively or negatively influenced their business knowledge. Therefore, without a full scope of the participants' diverse circumstances, I was not able to gain a complete perception of their viewpoints (see Hesse et al., 2008).

Personality and physical characteristics such as gender, race, age, and ethnicity could have overtly affected the responses of the participants (Miyazaki & Taylor, 2008). These attributes may have invoked stereotypical profiling and discriminatory reactions from the participants that could have contributed to limitations in the research (Miyazaki & Taylor). Background characteristics such as education, competency, beliefs, values, social status, and cultural differences may have altered the responses of the participants. Limitations related to this case study design include the fact that I relied solely on interviews with high school teachers and college professors. This study lacked triangulation with other data related to the research purpose such as reviews of the high school teachers and college business curricula, placement scores, and course exam scores.

Recommendations

School District

Recommendations for the high school leaders such as principals and superintendents are to create a school environment that promotes a positive image for the CTE business department. Another recommendation is for the allocation of additional resources to promote student learning. Many of the teachers revealed that due to a lack of resources much of the business curriculum could not be implemented effectively. Also, more planning time is required for the teachers to plan between the grade levels at the school district and business colleges.

Some of the CTE business teachers reported that the time needed to plan was not available and weakens curricula alignment efforts. A final recommendation for the school

district is for them to identify the person responsible for the upkeep of the online business platform. Although the online business courses have the potential to increase student business knowledge and incorporate college content, it is inefficient due to technical difficulties.

Business colleges

Recommendations for business colleges are for them to strengthen their communication efforts with the school district. Some of the professors reported that they had difficulties contacting members from the school district that was responsible for facilitating training. Also, business colleges should identify the technical resources needed by the school district to strengthen the online business platform. The prebaccalaureate partnership between the school district and the business has the potential to promote student learning. However, business professors should work closely with the school district to identify the college level content that should be implemented within class instruction. A primary concern of the teachers was the fact that they were not able to get assistance when students were not able to gain access to online business courses.

School District and Business Colleges

The CTE business programs and colleges should place more emphasis on planning efforts. More research is needed on the topic of alignment of the business curricula that could strengthen the relationship between secondary and post-secondary business stakeholders. An area recommended for further study is that of technology

integration between the business curricula and real-world expectations. Students who do not have the resources to learn such as with the assistance of actual digital programs may not be as prepared for colleges as they should be. There is a need for more competent graduates of business programs. More research is needed to identify ways to align the business content between the school district and colleges to increase students' use of technology that meets industry standards. Finally, further research is needed to determine the impact that pre-baccalaureate courses contribute to college success. Although the opportunity was provided for students to gain college-level credits, there was minimal information within the literature review that reflect how the program enhances their learning.

Implications

Positive Social Change

The findings may support student learning by assisting education leaders in analyzing their business curricula alignment practices. Improvements in online presence, vertical planning, acquisition of appropriate resources, and practical work scheduling can help to support student learning. The findings promote positive social change through enhanced instructional practices that support student learning, which contributes to college success. Additional online business courses, more professional development opportunities, stronger planning between the colleges and school districts, and the addition of necessary classroom resources may be the catalyst for students to gain from business curricula. To this end, as students begin to appropriate a more positive

perception can be restored regarding the way that the CTE business program. Therefore, the identification of alignment practices may start the dialogue necessary to encourage curricula developers to incorporate stronger alignment practices between the school district and the colleges discussed in this study.

Recommendations for Practice

The ability of the school leaders to better prepare students for college business programs relies heavily upon planning and time allocations. As discussed by many of the business teachers, vertical planning times must be integrated with college business professors. Administrators should schedule times within their professional development for teachers to meet with the partnering business colleges. Planning should be conducted intermediately throughout the school year. Stakeholders such as the principals and superintendents of the school district should take the load of the scheduling responsibility. Providing time for CTE business teachers to streamline their curricula designs with that of the colleges could enhance instruction for high school students.

School leaders should invest in creating a stronger online business program for students to access relevant content. Educators need to understand the importance for students to enhance their business skills through applied knowledge gained through stronger online business programs. Participants discussed that if given the opportunity, students could advance their business knowledge through online learning. Although the enhancement of online learning would primarily support CTE business students, this must be a shared responsibility between both the school district and their partnering

business colleges. Although the enhancement of online learning would primarily support CTE business students, this must be a shared responsibility between both the school district and their partnering business colleges. Below are seven recommendations that were developed as a result of the semistructured face-to-face interviews and topics based on Beane's CIT research.

1. CS - A combination of subjects: Programs can be positively impacted by cross-subject and campus collaborations between colleges and school districts (Albashiry et al., 2015). Through the promotion of alternative program implementations, business curricula can strengthen the relevance of CTE business as it is realized in multiple facets of learning.
2. EP - An emphasis on projects: Practical learning is a way to give students the real-world application associated with the knowledge presented in the classrooms. Technology engages students with business concepts that are applicable in the workforce. The use of technology within the classroom is a great way to support and promote innovative thinking with employment expectations (ISTE, 2016).
3. BT - Sources that go beyond textbooks: Students should be allowed to learn in a variety of ways. Not only should textbooks be incorporated within instructional practices but, other resources such as online courses, field experiences, and professional seminars. Teachers should gain exposure to other business resources that would assist them in their instructional practices and strengthen their skillsets

(Crowley, 2017). The growth of technology and its digital platforms has increased the need for teachers to differentiate their teaching practices.

4. RC - Relationships among concepts: Teachers should use multiple strategies to set business concepts. To improve relationships among concepts, business curricula must be reviewed and revised with effective planning and input from all education stakeholders (Galea et al., 2015).
5. OP - Thematic units as organizing principles: This topic encourages teachers to group students according to data-driven instruction derived from college placement exams. One of the benefits of standardized testing that was recognized by business teachers is that the curricula can be organized based on predefined criteria established by education stakeholders. The current alternative to state-regulated testing at the high school level is teacher-made exams. These exams are not designed to allow teachers to build upon learning activities that prepare students for their next level of education. Students benefit more when teachers teach aligned curricula (Song, Hur, & Kwon, 2018)
6. FS - Flexible schedules: Teachers must have autonomy within their schedules that would allow them to vertically plan with various stakeholders such as curricula developers, teachers of other grade levels, and college professors. Administrators must be more invested in the allocation of flexible schedules, compensation, and providing substitutes for teachers to alleviate barriers to training (Badri, Alnuaimi, Mohaidat, Yang, & Al Rashedi, 2016).

7. FG - Flexible student groupings: The tiering of students according to their assessment outcomes is one way to group students. Additionally, students can be grouped to optimize their emotional, social, and communication skills. As students are homogeneously grouped according to their ability levels, teachers can structure their remediation and reteaching efforts based on similarities in student performance (Garayta, 2017).

Conclusion

The teacher participants used CTE business curricula to instruct students. State legislatures have passed laws such as the Every Student Succeeds Act (ESSA), and the Carl D. Perkins Career and Technical Education Improvement Act of 2006 as a way to promote school districts to advance standards in CTE programs (Coppes, 2016; Kitchel, 2014). One of the goals of the research was for the findings to have implications for positive social change in the lives of business students and their community by contributing to a higher level of business education. Scholars have postulated that education is the best way to promote student success. As the world becomes increasingly globalized, business languages will ultimately merge, and more occasions to network with partner organizations will emerge.

The essence of this study was that CTE business teachers and professors must recognize and advance their instructional competency with today's business workforce. As prescribed in the curricula integration theory, the teacher must take into consideration what and how students learn as they integrate their unique ideas into their instructional

practices. Although using student input with the business curricula may be a relatively novel idea, this research has provided evidence for its potential benefits. Also, the emergence of technology and its digital platforms brought with it an alternative to traditional learning. This learning variance is one that if implemented effectively, could serve to advance the way that students learn and perform in the business world. Because of the alternative learning methods and resources, high school CTE business curricula must align with not only that of business colleges but also the workforce. The enhancement of the business curricula alignment can be done via state-regulated assessments, organized vertical planning, developed online programs, additional planning time allocated for teachers, more administrative support, and a unified effort to positively change CTE business perspectives with all stakeholders.

The strengthening of the alignment practices can be accomplished with the support of the school principals, deans, curricula designers, education policymakers, and teachers. The creation of a positive perspective in the CTE business programs can encourage and motivate students to learn. Business concepts can be reinforced within CTE business instruction when business teachers are supported by teachers. The school district must provide CTE business teachers with classroom resources such as current business textbooks, business software, digital technology, and online learning software to maximize student learning. According to the participants' responses, effective implementation of strongly aligned CTE business curricula would be most effective when

combined with meaningful and vertical planning between the high school CTE business department and their local business colleges.

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Appendix A: Interview Protocol for CTE Business Teachers

Semistructured Face-to-Face Interview Protocol for H.S. CTE Business Teachers

Title and responsibilities of the participant:

School Identifier: _____

1. Describe the instructional practices of the CTE business teachers at the high school level.
2. How do you integrate collegiate CTE business curricula within the daily instruction?
3. Describe how you prepare students for college success in CTE business courses?
What indications suggest that the CTE business curricula may not be aligned with college business program expectations?
How does the alignment of the business curricula impact your students' learning regarding their hands-on experience, listening, speaking, writing, and reading?
4. Identify the most critical areas of improvement needed between high school and college business programs?
5. What ways do you work with college professors to align CTE business curricula at your high school?
6. What are the course prerequisites for students who want to enroll in the CTE business programs?
7. What are the most significant areas of improvement needed in the CTE business curricula and its program?

8. In what ways would you recommend strengthening the alignment between the high school CTE business curricula with related college business programs?
9. In what ways do you work with college business curricula developers?

Appendix B: Interview Protocol for College Business Professors

Semistructured Face-to-Face Interview Protocol for College Business Professors

Title and responsibilities of the participant:

School Identifier: _____

1. Describe the instructional practices of college business professors.
2. What college prerequisites should the high school CTE business curricula include for high school students?
3. Describe how you prepare student for success in the business workforce?

What indications suggest that the business curricula may not be aligned with the high school CTE business program?

4. Identify the most critical areas of improvement needed between high school and college business programs?
5. What ways do you work with high school CTE business teachers to align the business curricula at your college?
6. What are the most significant areas of improvement needed in the college business curricula and its program?
7. In what ways do you work with CTE business curricula developers?