An Evaluation Of PK–12 and Two-Year Post-Secondary Marketing and Business Instructors' Perceptions of PK–12 and Two-Year Post-Secondary Marketing and Business Programs in Southern California

by

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Van Aacken, Sean P. ***An Evaluation Of PK–12 and Two-Year Post-Secondary Marketing and Business Instructors' Perceptions Of PK–12 and Two-Year Post-Secondary Marketing and Business Programs in Southern California***

Abstract

This mix-method research study aimed to explore the perceptions that PK–12 marketing and business instructors and two-year post-secondary marketing and business faculty have of the respective marketing and business program. This study further examined the alignment between PK–12 and post-secondary marketing and business programs and their collaboration. The study employed a survey instrument to PK–12 and post-secondary marketing and business instructors in Southern California. A quantitative analysis was conducted utilizing descriptive statistics, *t*-tests, and Cohen's *d*. A thematic analysis of short responses was conducted. Major findings of this study were that PK–12 marketing and business instructors perceived they were aligned to post-secondary programs, but post-secondary marketing and business instructors did not believe that PK–12 was aligned with post-secondary programs. The study's findings and implications are discussed in addition to further recommendations on collaboration and alignment between PK–12 and post-secondary marketing and business programs.

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Chapter I: Introduction

Career and technical education (CTE) has strong roots in the United States. In addition, CTE has undergone many changes due to legislation throughout the years (Association for Career and Technical Education [ACTE], 2002). The changes CTE has undergone include name changes, changes in purpose, and how CTE is perceived in the United States. One of the significant impacts to CTE includes legislation starting with the Morril Land Grant Act of 1862, by the development of land-grant universities in every state that integrated agriculture and mechanical arts in classical education (Scott & Sarkees-Wircenski, 2014). Another impactful piece of legislation was the Smith-Hughes Act of 1917, which was the first of significant federal investments in CTE (ACTE, 2019a). Although the Smith -Hughes Act of 1917 did not specifically fund marketing and business education, it set the stage for the later George-Deen Act of 1936, which provided funding for marketing education and business for the first time (Hosler, 2002). This was significant as the George-Deen Act of 1936 was written during the Great Depression when distribution was inefficient, and students were required to work 15 hours as a stipulation of the law (Hosler, 2002). Because of the stipulation, many vocational education programs required students to work 15 hours a week as part of their programs (Hosler, 2002).

CTE encourages PK–12, two-year post-secondary institutions, business and industry partners, academic instructors, and other stakeholders to collaborate consistently and develop ways to prepare future employees to fit the economy's needs. Many CTE legislative acts have supported PK–12 and post-secondary CTE, marketing, and business education. The Smith-Hughes Act of 1917 created a seven-person Federal Vocational Education Board, with a spot for business education that F.G. Nichols held (Hosler, 2002). The Vocational Act of 1963 initially expanded vocational education programs in agriculture, home economics, marketing education,

trade, and industrial education, but not business education. However, a committee met with Carl D. Perkins who was a legislator and advocate for CTE, and business education was included in the Vocational Act of 1963, which funded business education for the first time (Hosler, 2002).

The business and marketing curriculum over the years has changed. Business education focused on shorthand, typewriting, and bookkeeping in the 1960s with the addition of general business and business arithmetic in the 1970s and the advent of accounting and keyboarding in the 1980s (Hosler, 2002). Throughout the 1990s and 2000s, the business education curriculum changed from secretarial office systems to management systems, entrepreneurship, and information technology (Gordon & Schultz, 2020). Marketing education has grown from distributive education to wholesaling and industrial marketing to now electronic and Internet marketing (Gordon & Schultz, 2020).

Through legislation surrounding career and technical education, there is additional accountability, emphasis on innovation, efforts to serve special populations, and stakeholder involvement. Yet, there continue to be varied perceptions of the overall population and academic teachers (Gordon & Schultz, 2020). One of the many perceptions is that CTE is not academic and the curriculum is not rigorous enough for high academic achievers (Aliaga et al., 2012; Blank, 1999). Academic teachers have conveyed opposition to integrating core academics and CTE subject areas despite core academic teachers agreeing that there should be integration (Handy & Braley, 2012). The push from federal legislation indicates that academic core subjects and CTE should be more integrated (Strengthening career and technical education for the 21st century [Perkins V], 2018). Aliaga et al. (2012) asserted that core-academic teachers see the value in CTE, as CTE prepares students for the workforce and post-secondary opportunities. However, Blank (1999) contended that academic teachers believe CTE is for students who are

not academically inclined and need a less challenging curriculum through hands-on learning. Tucker (2019) and Tucker and Hughes (2020) advocated that teachers viewed students as a failure if students wanted to pursue a blue-collar position and then became uninterested in the potential of their students. There are many pathways to success, with CTE being one of them.

Historically, CTE was known to people who were poor and needed to go into the trades (Jacob, 2017). CTE is perceived as something non-educated individuals can pursue instead of college. In addition, CTE is not supported as a standard post-secondary option. Now, CTE is known for re-engaging disengaged students and provides non-college-bound students with a different option (Kelly & Price, 2009). Students who do not want to attend college have opportunities to pursue CTE pathways, including learning a trade, learning skills through hands-on applications, and integrating academics and practical learning (Kelly & Price, 2009).

Progress has been made in collaboration between PK–12 and post-secondary education. The United States has adopted career pathways in each of the 16 career clusters to prepare students to navigate their career journey starting in PK–12 and post-secondary education (Advance CTE, n.d.d.). Career clusters in marketing and business education include business administration, finance, sales, and information technology (ACTE, 2019b). Career pathways start as early as high school and create a path within a career cluster to the workforce after high school into high-wage and high-need jobs or a pathway into post-secondary education (An & Taylor, 2019; Fink et al., 2017; Rodriguez & Gao, 2021; Taylor, 2015; Zinth, 2015a). Pathways were developed in collaboration with business and industry and leaders from all levels of the system to have CTE programs meet the local and regional economic needs and be competitive in the global economy (Council of Chief State School Officers, 2014).

It has been found that many PK–12 schools emphasize four-year university options and that attending a two-year college is not as successful (Gauthier, 2020b). Kendall (2011) supports attending a four-year university as the only way to be career ready. This is further supported by school counselors viewing community colleges as lesser than and not a viable educational option after high school (Kandalec Holm, 2019). Regardless of the variety of opinions about the value of post-secondary education, not every student desires to attend a four-year university. For students who do not wish to attend a four-year university, attending a community college is a common pathway (Stevens et al., 2019). Across California, many community colleges have agreements with PK–12 schools regarding dual credit, concurrent credit, and articulated credit to provide students with marketing and business course options.

Marketing and business courses prepare students to be workforce ready and further their education. Post-secondary CTE has a stigma that community colleges graduate associate degree holders that are not as competent because of community colleges not having as much rigor in their curriculum. However, in 2020, there were 368,193 associate degrees and certificates awarded. That comprises 52.7% of all degrees and certificates awarded statewide in California (Advance CTE, 2021). In addition, business degrees and certificates are the highest awarded among all degrees and certificates awarded at the PK–12 level and two-year post-secondary level in the state of California (National Center for Educational Statistics [NCES], 2021). In California, PK–12 marketing business curriculum covers marketing, sales, entrepreneurship, business management, finance, and international business pathways (California Department of Education, n.d.b). Post-secondary two-year colleges have a background in delivering CTE programming, such as marketing and business education, based on their regional economic need for high-wage positions (Carver & Kosloski, 2015). CTE programs are equipped to prepare

students to enter the workforce with needed technical skills or prepare students to further their education.

There is a gap in the literature on how PK–12 and post-secondary CTE perceive one another despite the many ways PK–12 and post-secondary CTE collaborate. Literature supports PK–12 and post-secondary how CTE collaborate in many ways (e.g., dual credit, stakeholder advisory groups, national initiatives, and legislative purposes) (Advance CTE, 2021; Fink et al., 2017; Perkins V, 2018). There is little research on the perceptions PK–12 and post-secondary marketing and business instructors have of the respective program. Duncheon and Relles (2020) emphasize the gap where PK–12 CTE and post-secondary CTE do not understand each other as PK–12 teachers must teach students in a PK–12 environment but still maintain the requirements of the post-secondary institution. Plasman et al. (2017) asserted that there is a lack of understanding between PK–12 faculty and post-secondary faculty since each has their own set of learning objectives and program outcomes yet they have partnerships with each other to be successful.

Statement of the Problem

There are conflicting messages about the alignment of PK–12 and post-secondary marketing and business programs. Secondary CTE focuses on career exploration, whereas post-secondary CTE focuses on career preparation (Defeo, 2015; Stone, 2014; Tucker, 2018). In contrast, ACTE (2019a) claims CTE prepares youth and adults for high-wage, high-skill, and high-demand careers and jobs. Perkins V (2018) requires that PK–14 CTE programs align with business and industry to meet the local and regional economic needs, thus preparing students for high-wage, high-skill careers, and jobs right after high school. PK–12 and post-secondary marketing and business education must collaborate for the viability of programs at each level.

PK–12 partners with post-secondary marketing and business programs to prepare students to enter the workforce and prepare students to enter post-secondary marketing and business programs. Post-secondary marketing and business programs must work with PK–12 to align PK–12 marketing and business programs to post-secondary programs to ensure students are post-secondary education ready. According to the U.S. Department of Education (2019), exploration in high school is meant to connect and lead to post-secondary education or specialized training after high school, and CTE courses should be integrated or complement their academic studies. Regardless, research supports that CTE benefits students to be college and career-ready in PK–12 and post-secondary institutions (Bartholomew, 2014; Hirschy et al., 2011).

While the legislation speaks to the need for PK–12 and post-secondary CTE to collaborate with one another, there is a lack of research to support how PK–12 and post-secondary marketing and business instructors perceive each other. The available research depicts the gap between PK–12 and post-secondary education in relation to dual credit or dual enrollment coursework (Duncheon & Relles, 2020). More specifically, it is now unknown how marketing and business instructors in PK–12 and post-secondary institutions perceive the respective programs.

Purpose of the Study

Considering the gap in research on the perceptions that PK–12 and post-secondary marketing and business instructors have of the respective programs, this mixed methods research study will explore the perceptions that PK–12 and post-secondary marketing and business instructors have of the other program. Currently, there is very little research on the perceptions of PK–12 and two-year post-secondary marketing and business instructors of the respective

marketing and business programs. Perceptions were measured by survey questions aligned to the California 11 elements of high-quality CTE framework used for PK–14 CTE.

Research Questions

The following research questions were addressed in this research study:

1. What perceptions do PK–12 marketing and business CTE faculty have about marketing and business post-secondary programs?
    a. What is the purpose of PK–12 marketing and business programs?
    b. What role does post-secondary marketing and business education serve in collaborating with PK–12 marketing and business instructors in preparing students for post-secondary marketing and business?
    c. How does PK–12 align itself with post-secondary marketing and business programs?
2. What perceptions do post-secondary marketing and business CTE faculty have of PK–12 marketing and business programs?
    a. What is the purpose of PK–12 marketing and business programs?
    b. What role does PK–12 marketing and business education serve in preparing students for post-secondary marketing and business?
    c. How does PK–12 align itself with post-secondary marketing and business programs?

Significance of the Study

This study could be significant as PK–12 and post-secondary marketing and business programs are expected to collaborate side-by-side to create pathways from PK–12 to post-secondary education or the workforce. There is little research about PK–12 and post-secondary

CTE instructors' perceptions of the other respective program, especially in marketing and business programs at the PK–12 and post-secondary levels. Literature supports that marketing and business instructors work with one another at a local and regional level by creating pathways of study from high school to two-year and four-year institutions, apprenticeships, and the workforce (ACTE, 2020). There are various stigmas surrounding PK–12 CTE marketing and business programs and post-secondary CTE marketing and business programs. This study could be a tool for PK–12 and post-secondary marketing and business programs to align more cohesively.

Methodology

This study employed a mixed-methods approach utilizing a survey design. A researcher-designed survey instrument with close-ended and open-ended questions was developed to understand the perceptions that PK–12 and post-secondary marketing and business instructors have of the respective programs. The researcher identified marketing and business instructors that work at community colleges and PK–12 schools in Southern California. The survey was sent out electronically via Qualtrics (www.qualtrics.com) to PK–12 and post-secondary marketing and business instructors that were teaching as a marketing or business instructor full-time or part-time. The survey was sent to all Southern California's PK–12 and post-secondary marketing and business instructors. The quantitative data was analyzed utilizing *t-tests*, Cohen's *d*, and descriptive statistics. The qualitative data focused on a thematic reduction and coded for analysis using focused coding (Mezmir, 2020). Data transformation was exercised in this study. According to Creswell and Creswell (2018), data transformation is taking qualitative themes or codes, and counts or groups them to form quantitative measures. This allowed the researcher to

interpret qualitative data and explain via the quantifiable themes from the open-ended qualitative questions (Creswell & Creswell, 2018).

Assumptions of the Study

The assumptions of the study were:

1. PK–12 marketing and business instructors will understand the intent of the questions and answer them objectively.
2. Post-secondary marketing and business instructors will understand the intent of the questions and answer them objectively.
3. PK–12 and post-secondary marketing and business instructors will provide accurate answers about their perceptions of the other program.

Limitations of the Study

There are limitations in the design of this research. First, this study did not disaggregate marketing and business when questions are asked in the survey instrument. The researcher does recognize that many colleges, universities, and some PK–12 marketing and business teaching credentialing identifies marketing and business as two separate disciplines (ACTE, n.d.d.). Second, the sampling technique is limited to Southern California. The study was conducted by sampling public PK–12 schools and community colleges that employ marketing and business instructors. Southern California encompasses the following counties: Los Angeles, Imperial, Riverside, Orange, San Bernardino, Santa Barbara, San Diego, Ventura, San Luis Obispo, and Kern.

Definition of Terms

The following terms and definitions assist in the understanding of this study:

Career Clusters

Broad occupational groupings that serve as an organizing tool, categorizing common knowledge and skill sets for secondary and post-secondary education. Career clusters use 16 broad groups of occupations and 79 pathways (sub-groups) (Advance CTE, n.d.a).

Community College

"…are colleges with technical skills that focus on general education" (Midwest Technical Institute, 2021, p. 17).

Post-Secondary CTE

The practice of teaching specific career skills to students in… two-year post-secondary education (National Conferences of State Legislators, 2022, p. 1).

PK–12 CTE

"… a school with a single grade or any combination of grades from prekindergarten to grade 12" (Law Insider, n.d., p. 1).

Technical College

Two-year colleges that focus on career specific technical skills (Midwest Technical Institute, 2021, p. 17).

Dual Credit

"…a college course taken by a high school student for which both college and high school credit is given" (Lichtenberger et al., 2014, p. 1).

Perception

"The processes by which a person uses the behavior of others to form opinions or make inferences about those individuals, particularly regarding their motives, attitudes, or values" (Dictionary of the American Psychological Association, n.d., para. 1).

Chapter II: Literature Review

This study aims to explore perceptions that PK–12 and post-secondary marketing and business instructors have of the respective program and their collaboration. This study was focused on PK–12 and post-secondary marketing and business instructors in Southern California. There are challenges and struggles with collaboration among PK–12 and post-secondary educational institutions throughout Southern California. There is a continued push for collaboration between PK–12 and two-year post-secondary CTE from federal legislation, state legislation, and local schools and school districts. The literature review explores the theoretical framework for the study and then moves into the historical impact of PK–12 and post-secondary CTE with a focus on marketing and business within the greater field of CTE. Next, it captures the definition of CTE and the perceptions of CTE in PK–12 and post-secondary with an emphasis on marketing and business education. It then captures the effect of legislation on PK–12 and post-secondary partnerships in the context of CTE and business and marketing education. Lastly, this chapter explores the following topics: dual credit, marketing and business education, marketing and business in California, and CTE in California.

Perception is defined as, “the processes by which a person uses the behavior of others to form opinions or make inferences about those individuals, particularly regarding their motives, attitudes, or values” (Dictionary of the American Psychological Association, n.d., para. 1). People have perceptions of different actions, events, thoughts, and feelings that shape the world around us as we know it today. Over its history, PK–12 career and technical education (CTE) teachers and two-year post-secondary CTE instructors have their perceptions of one another as they work side-by-side in the realm of CTE. There has been legislation that has encouraged the collaboration of PK–12 and two-year post-secondary to create pathways from one to another,

including high school to two-year post-secondary, high school to four-year, high school to the world of work, and high school to military (Carl D. Perkins Career and Technical Education Improvement Act [Perkins IV], 2006; Strengthening career and technical education for the 21st century [Perkins V], 2018). Through partnerships, such as dual credit, pathways initiatives, and programs of study (POS), two-year post-secondary, and PK–12 instructors have perceptions of the respective PK–12 and two-year post-secondary CTE programs.

Theoretical Framework

This theoretical framework for this study utilized the theory of interpersonal perception and the 11 elements of the high-quality CTE framework of California. Interpersonal perception is defined as, “the processes by which a person uses the behavior of others to form opinions or make inferences about those individuals, particularly regarding their motives, attitudes, or values” (Dictionary of the American Psychological Association, n.d., para. 1). The definition identifies the theory of interpersonal perception, which a person uses the behavior of others to form an option or make inferences. The high-quality CTE framework of California is utilized as an assessment of PK-16 CTE programs PK–14 in California.

Interpersonal Perception

Research supports that interpersonal perception is based on personal behavior and personality as it relates to the perceptions of others (Marcus et al., 2007; Swann, 1984; Thielmann et al., 2020; Wood et al., 2010). Wood et al. (2010) found a high relationship between personality traits and perceptions of others. For example, those who perceived people positively tended to be agreeable with others (Wood et al., 2010). According to Hughes et al. (2021), interpersonal perception can happen when people elicit similar or complementary behavior from

others, which forms a realistic perception of others. Hughes et al. (2021) also affirmed that prior beliefs and interpersonal processes are a facet of how people see others similar to themselves.

Differences exist in the research about interpersonal perception, such as judgment and perceiving each other through a lens of social desirability (Funder, 1995; Wood et al., 2010). Funder (1995) declared that a judgment is accurate if it proves beneficial for the judge, a judgment is accurate if a community of judges agrees that it is and that a judgement is accurate if a personality through psychological and sociological perspectives also influences perception and judgment. However, Wood et al. (2010) identified that most individual differences linked to perceptions of others were self-reported and linked to perceptions of others through other lenses, (e.g., social desirability). Wood et al. (2010) and Funder (1995) may have different views on interpersonal perception. Both believe there is self-reflection and how self-reflection aligns with the perception of something else.

Research also supports that perception is based on how people perceive a person they interact with (Marcus, 2007; Swann, 1984; Thielmann et al., 2020). Perceivers are more concerned with global accuracy versus circumcised accuracy (Swann, 1984). For example, “how will this person interact with me?” is also known as circumcised accuracy, compared to “how will this person behave with all the people this person encounters?” or global accuracy (Swann, 1984, p. 472). Perceptions can be assumed similar to basic traits that are closely tied to personal values, such as honesty-humility and openness to experience, which suggests an assumption that others share essential parts of each other’s identity (Thielmann et al., 2020). Marcus et al. (2007) also reported that people commonly believe that moral behavior among people is linked to individuals’ self-reported honesty-humility levels. Research supports that there are different perceptions of global accuracy and varied views on how interpersonal perception is interpreted.

In this study, the theory of interpersonal perception is the lens through which this study is situated.

High-Quality CTE Framework of California

The state of California has a rubric for evaluating PK–14 CTE programs titled the high-quality evaluation and plan form. There are 11 elements that the rubric identifies as high-quality in a CTE program (see Appendix B):

1. Leadership at All Levels
2. High-Quality Curriculum and Instruction
3. Career Exploration and Guidance
4. Student Support and Student Leadership Development
5. Industry Partnerships
6. System Alignment and Coherence
7. Effective Organizational Design
8. System Responds to Economic Demands
9. Skilled Faculty and Professional Development
10. Evaluation, Accountability, and Continuous Improvement
11. CTE Promotion, Outreach, and Communicatio.

This framework is used for local CTE programs to self-evaluate and for California to evaluate local CTE programs to receive much of the CTE funding from the state of California. In this study, the high-quality CTE framework of California is the other lens through which the study is situated.

The 11 elements of California's high-quality CTE framework align with the ACTE framework of 12 elements of high-quality CTE programs. The elements according to Imperatore and Hyslop (2018) are:

1. Standards-aligned and Integrated Curriculum
2. Sequencing and Articulation
3. Student Assessment
4. Prepared and Effective Program Staff
5. Engaging Instruction
6. Access and Equity
7. Facilities, Equipment, Technology, and Materials
8. Business and Community Partnerships
9. Student Career Development
10. Career and Technical Student Organizations (CTSOs)
11. Work-based Learning
12. Data and Program Improvement.

While many of the elements of the California framework are named differently, there is a lot of overlap and alignment between the two frameworks. The similar elements of the two frameworks are curriculum and instruction, alignment and sequencing, business and community partnerships, work-based learning, data and program improvement, and leadership within CTE.

The 11 elements of the high-quality framework of California combined student assessment and data and program improvement of the 12 elements. The 11 elements framework calls out external communication as a high priority. The 12 elements framework has this priority embedded in the access and equity element. Each framework is very closely aligned in its

content and the standards of CTE. However, each framework has its own priorities and how parts are split between the two frameworks.

Career and Technical Education Defined

The name and definition of CTE have evolved over the years. CTE held many different names before current name, including industrial education, manual education, career education, and vocational education (Grubb & Lazerson, 1975; Scott & Sarkees-Wircenski, 2014). In the early 2000s the name in the United States was rebranded to CTE, as we know it today (Scott & Sarkees-Wircenski, 2014). Most people have commonly known the field as vocational education, as it was funded as part of the PK–12 and two-year post-secondary education system as part of the Smith-Hughes Act of 1917 (Fletcher et al., 2013). The Smith-Hughes Act and many legislative acts paved the way for marketing and business education. The 1990 Perkins Act defined vocational education as "Organized educational programs offering a sequence of courses which are directly related to the preparation of individuals in paid or unpaid employment in current or emerging occupations requiring other than a baccalaureate or advanced degree" (NCES, n.d.a, para. 1). Marketing and business education certainly met that criterion by preparing students to go into entry-level positions in marketing and business occupations.

The National Center of Educational Statistics (NCES) defines CTE, by federal law—Elementary and Secondary Education Act of 1965 (Public Law 115-224), as “Courses and programs (high school and two-year post-secondary sub-baccalaureate level) that focus on the skills and knowledge required for specific jobs or fields of work” (n.d.a., para. 1). According to NCES (n.d.b.) the occupational fields that are included within this definition are:

- Agriculture and natural resources
- Business support, management, and finance

- Communications
- Computer and information sciences
- Construction
- Consumer services
- Education
- Engineering and architecture
- Health sciences
- Manufacturing
- Marketing
- Public, social, and protective services
- Repair
- Transportation

Finally, the National Education Reform defines CTE as “a term applied to schools, institutions, and educational programs that specialize in the skilled trades, applied sciences, modern technologies, and career preparation. It was formerly (and is still commonly) called vocational education” (n.d.b, para. 1).

CTE has had a negative connotation but has made efforts to rebrand itself in the United States. Blank (1999) insisted that the negative undertone towards CTE was the notion that CTE was a dumping ground for students who were not as an academically inclined, curriculum that was less challenging and rigorous, and equipped students with skills, knowledge, and dispositions that were only appropriate for low-wage positions. For example, in marketing and retail pathways, it is a common misbelief that pathways prepare students to enter low-wage sales floor positions. Instead, many pathways prepare students to enter high-wage lead or management

positions. In the early 2000s, the United States rebranded vocational education to career and technical education as we know it today. To address the negative stigma that came with the vocational education name, the 2006 Perkins IV legislation United States Congress replaced the term vocational education with career and technical education (i.e. CTE) in the primary federal law, which impacted secondary and two-year post-secondary CTE programs (Advance CTE, n.d.b; Scott & Sarkees-Wircenski, 2014).

Gordon and Schultz (2020) challenged that CTE in high schools and community colleges should not just be restricted to occupations that do not require a bachelor's degree or advanced degree. Instead, CTE should encourage collaboration between CTE and non-CTE educators to prepare students for education and the world of work. The Association for Career and Technical Education defines CTE as "…provides students of all ages with academic and technical skills, knowledge, and training necessary to succeed in future careers and to become lifelong learners… CTE prepares these learners for the world by introducing them to workplace competencies and makes academic content accessible to students by providing it in a hands-on context" (2021, para. 1). Through the integration of academics and CTE, all students will be prepared for all post-secondary opportunities.

PK–12 and post-secondary education with other stakeholders came together to visualize the future of CTE known as Reflect, Transform, and Lead (NASDCTEc, 2010). Stakeholders identified five core principles that would result in being in a competitive position and compete with the larger global workforce (NASDCTEc, 2010). The five core principles were (1) CTE is critical to the United States leading in global competitiveness; (2) CTE actively partners with employers to develop high-quality dynamic programs; (3) to prepare students for further

education and careers; (4) POS are aligned to National Career Clusters Framework; and (5) CTE is results driven that has a positive return on investment (NASDCTEc, 2010).

During the 2010 Reflect, Transform, and Lead CTE vision convening, the vision, and direction of CTE for the United States were developed (NASDCTEc, 2010). The vision statement indicated four goals according to Advance CTE (2021):

- CTE must let go of what no longer works and take steps to make changes to prepare for workforce preparation.
- Academics and CTE must no longer work in silos and must work together.
- Education and workforce systems must adapt to workplace needs through multiple pathways.
- Education and workforce must reward innovation and support different learning styles all through leadership.

Since the joint effort in 2010, there has been a new release of the vision of CTE in 2020, known as CTE Without Limits. CTE Without Limits included an updated five core principles. These newly updated principles were developed by nearly 200 national, state, and local education and workforce development leaders supported by 42 national organizations (ACTE, 2020). The five updated principles included (1) a learner engages in flexible career preparation ecosystem; (2) learners are welcomed and supported by the career preparation ecosystem to be successful; (3) learners can skillfully navigate their career journey; (4) learner skills are valued and portable; and (5) each learner can access CTE without borders (Advance CTE, 2020).

In the 2020 CTE Without Limits gathering, stakeholders recognized that a great deal of work must be done to improve the quality of CTE in the United States (Advance CTE, 2021). In addition to the five core principles, the principles will be supported by all dimensions of equity,

high-quality programs in response to industry, meaningful public-private partnerships, actionable partnerships, and continuous improvement and collaboration by leaders at all levels within the system (Advance CTE, 2021).

The 2010 and 2020 CTE vision conferences, principles, and vision statements have similar tenants with slightly different views. The 2010 Reflect, Transform, and Lead version and the 2020 Without Limits version both identify students are to be successful in a global society (NASDCTEc, 2010; Advance CTE, 2021). In 2010, the principles signified that students could be globally competitive. In 2020, the principles supported that learners can engage and feel welcome in a career preparation ecosystem (NASDCTEc, 2010; Advance CTE, 2021). While there are slight differences in the wording, both identify how students are to be successful and competitive on a larger scale. The 2010 goals determined that students would be able to succeed in education and further careers, whereas the 2020 goals identified that students would be able to skillfully navigate their career journey (NASDCTEc, 2010; Advance CTE, 2021). Each of these goals demonstrates that students should be able to be successful in their educational pursuits as it relates to their career growth through their course taking in CTE. The last significant similarity exists in the vision statements of 2010 and 2020. Both vision statements emphasize the need to continually improve the quality of CTE programs, tie CTE programs to the workforce and industry partners, and encourage coordination among leaders at all levels within the system to push CTE forward.

While there were many similarities between the 2010 vision and the 2020 statements, there were also some differences. Each statement aimed to increase all students' equity and access to CTE (NASDCTEc, 2010; Advance CTE, 2021). 2020 Without Limits gathering made it a specific goal to increase equity and access in CTE (Advance CTE, 2021). In addition, the

2020 CTE vision calls out equity by upholding the principles that will all be supported by all dimensions of equity and quality programs in response to industry (Advance CTE, 2021). The 2020 vision statement emphasizes that learners can navigate their CTE journey through the career preparation ecosystem, valuable learner skills, and access to CTE without borders. The focus on the learner differs from 2010 as the vision statement mentions preparing students for their future. It also had other goals: having more meaningful partnerships with employers, having data-driven results systems, and providing high-quality CTE programs (NASDCTEc, 2010).

Both 2010 and 2020 had goals and vision statements to move CTE forward. 2010 focused on improving the quality of CTE programming by supporting CTE infrastructures, having comprehensive POS, being more results-driven, understanding the economy's needs, and integrating academics and CTE more than before (NASDCTEc, 2010). 2020 focused more heavily on preparing students for their future careers and navigating the future careers through the quality of programming, equity of CTE, and holistic partnerships with all stakeholders, such as industry, post-secondary partners, and leaders at all levels within the system (Advance CTE, 2021).

Through the commitment to improving the CTE Forward summit, PK–12 CTE, post-secondary CTE, private industry, and public organizations collaborated to keep improving CTE and moving CTE forward (Advance CTE, 2020). The working definition of CTE that came out of the summit is, “CTE has a central role in building an inclusive and equitable future that enables each learner to access the education and training they need to be successful in a meaningful career that offers financial security and self-sufficiency and ensures that industry can find the talent it needs to thrive” (Advance CTE, 2021, p.1). According to Advance CTE (2020), CTE professionals must significantly reflect, identify investments in systems and programs to

support each learner, and have fundamental changes to systems and structures that currently limit learner success.

CTE in PK–12

CTE has a rich history in PK–12 schools within the United States. However, one must know its history to understand CTE's current context. CTE, upon its inception, was rooted in preparing people to enter apprenticeships for adults to take productive roles in society. The apprenticeships at the time were targeted at children of the poor and meant for them to gain labor-market skills (Stone, 2014). Dewey (1938) asserts, "The principle that development of experience comes about through interaction means that education is essentially a social process. This quality is realized in the degree in which individuals form a community group" (p. 58). Dewey believed in a hands-on approach to learning, which is the basis of CTE that later became industrial arts and turned into technology education courses in modern times. CTE often prepares students for the workforce through hands-on learning, which Dewey believed in for CTE. Many pieces of history have led to CTE's current development over the past 100 years.

Within the United States, there is a push to integrate core academics and CTE with common core state standards (Cannon et al., 2012). CTE and scholars have been at odds, especially with "college for all" initiatives in the United States. It was poised that the Common Core had been accepted as strictly an academic endeavor (Meeder & Suddreth, 2012) and that going to college is the way to be career-ready (Kendall, 2011). Among CTE professionals, there may be issues with academic initiatives that push for students who may or may not be college-bound (Kendall, 2011).

Students who enroll in CTE career academies or courses are generally higher performing than their non-academy peers, have an improved likelihood of graduating high school, and an

increased chance of attending college (Gottfried & Plasman, 2017; Hemelt et al., 2019; Neild et al., 2013). According to Defeo (2015), 1,134 high school students were enrolled in a CTE course for which they could receive articulated credit at the local community college. Students took CTE classes because they were interested in the subject matter and thought they would learn something useful or had related career aspirations.

CTE serves a dual role in society, including serving as a career exploration and training for specific careers or occupations and preparing students for post-secondary education (Defeo, 2015). CTE has a rich history of teaching skills needed in everyday life, interpersonal skills required in the workplace, and preparing students to attend post-secondary education, including two-year, four-year, technical schools, trade schools, military, or go directly into the workforce to obtain high-demand high-wage jobs with skills learned in the CTE classroom (Lekes, 2007). According to Altmann (2021), high school youth apprenticeship students exhibited behaviors including problem-solving, critical thinking, motivation, adaptability, eagerness to learn, reliability/dependability, collaboration, punctuality, and following instructions based on responses in which employers responded to the development level of the employability skills of youth apprentices they have employed or still employ.

CTE students have higher graduation rates compared to non-CTE students. According to the U.S. Department of Education (2019) 94% of students who were CTE concentrators graduated by the expected graduation year and 98% of CTE concentrator students graduated within three years of expected graduation. These statistics compared to non-CTE concentrators by 84% of students graduated by expected graduation year and 92% of non-CTE concentrators graduate within three years of expected graduation year. CTE-concentrated students overall have outperformed non-CTE concentrators across the United States. According to the U.S.

Department of Education (n.d.), a CTE concentrator is a student who has taken two courses in a single occupational area. Throughout the United States, nearly all school districts offer CTE courses (U.S. Department of Education, 2019).

According to Stone (2017), CTE addresses education challenges today by (1) helping youth finish high school—which is not sufficient to lead to a productive adulthood; (2) preparing students to continue formal learning after high school; (3) equipping students with recognized industry credentials as evidence of preparation for employment for continued occupational development. This is commonly done by integrating high-quality CTE frameworks. These frameworks include: Frameworks include industry-recognized standards and industry-recognized credentials built into the CTE curriculum, students being challenged with problems that require the use and application of technical skills and academic knowledge through real-world problems, allow students to struggle a bit to figure it out, encourage deeper learning, and develop noncognitive skills such as persistence, and show connections between academic learning (i.e., math, reading, writing, science, social science), and adult use of the concepts (Alfeld et al., 2006; Jacobs, 2017; Pearson, 2015; Stone, 2017).

There are central elements CTE programming has to facilitate a smooth school-to-work or post-secondary education transition. CTE does this by aligning with high-quality programming by teaching students how to work together and be held accountable as team members (Stone, 2017). Many CTE programs align with high-quality programming by having a CTE advisory board that supports stackable industry credentials, dual credit, and other linking elements between PK –12, post-secondary, and industry to facilitate a smooth transition from high school to the world of work or post-secondary education (Stone, 2017). Marketing and business have industry credentials in marketing education, such as the national retail federation,

business credentials in Microsoft Office Suite, and many information technology credentials (e.g., Cisco). Pearson (2015) attests that CTE prepares students to be college and community ready through contextual learning, applying academic knowledge, and providing occupational and technical experiences that bridge the real-world and school to contribute to student's successful transition into post-secondary education and life as a productive citizen in today's society.

There are many aspects of the CTE curriculum that are important for a high-quality CTE program: specific career-orientated classes, in-school programs such as school-based enterprises to promote workplace readiness, apprenticeships, internships, career-oriented experiences, and hands-on training that translates directly to attractive careers upon graduation for students who are not college or university bound (Jacobs, 2017). PK–12 CTE teachers have a breadth of responsibilities that include\ teaching courses, managing program budgets, advising CTSOs, advising and supervise school-based enterprises, and other program management responsibilities as part of their day-to-day teaching responsibilities (Cannon et al., 2012). Marketing and business education includes school-based enterprises such as a student store, CTSOs such as DECA and FBLA, and work-based learning opportunities in marketing and business in the field. Other possibilities include regional competitions, cyber patriots competitions for information technology, and virtual enterprise.

CTE in Post-Secondary Two-Year Institutions

Two-year post-secondary institutions in the United States have been integral to the success of CTE at the secondary and two-year post-secondary levels. In the United States, the most common two-year institutions are community colleges, junior colleges, and technical colleges (Scott & Sarkees-Wircenski, 2014). All three have their definition and purpose

depending on the region of the United States one is in. Community colleges are “colleges with technical skills that focus on general education” (Midwest Technical Institute, 2021). Community colleges have a two-year post-secondary CTE focus and general education courses (Scott & Sarkees-Wircenski, 2014). According to Cohen and Brawer (2008), community colleges are defined as “any institution regionally accredited to award the associate in arts or the associate in science as its highest degree” (p. 17). Junior colleges are also referred to as community colleges. The other type of institution in the United States is a technical college. A technical college is a “two-year college that focuses on career-specific technical skills” (Midwest Technical Institute, 2021, para. 3).

Community colleges and technical colleges have been a part of the United States CTE system since the early 1800s. They have made significant contributions to CTE in the United States with rapid growth and expansion in its history. Private academies offered the first two-year post-secondary educational training and then was formal through the Morrill Act of 1862 by developing land-grant universities in every state that integrated agriculture and mechanical arts in classical education (Scott & Sarkees-Wircenski, 2014). William Rainey Harper developed the first junior college at the University of Chicago, where the college freshman and sophomore years consisted of general education and then the last two years focused on more professional studies (Harbeson, 1941). According to Gordon and Schultz (2020), Hollinshead (1936), and Harbeson (1941) coined the term “community college” referring to the culture of a community and providing lifelong learning opportunities, advisory boards to oversee the community college, and removal of duplication between K–12 and the grades 13–14, which are still present in today’s two-year post-secondary education system.

A few factors have influenced the expansion of community and junior colleges throughout history. Significant occurrences such as the Great Depression, World War II, the GI Bill, economic recessions, and the decline of young people after the baby boom impacted the growth of the community and junior colleges in the United States (Gordon & Schultz, 2020). During the Great Depression after the 1929 market crash, people sought community colleges to provide a pathway to a job in the community at an affordable cost. As a result of needing to train and put people back to work, there was a significant surge in the 1930s to build new community colleges. World War II caused a decline in enrollments due to men and women joining the war. However, vocational programs grew, and some programs ran around the clock to meet the demand for the war; extension campuses were set up in other communities due to gas rationing; accelerated programs were offered so students could finish before being called to military duty (Gordon & Schultz, 2020). Many of these elements still exist and have shaped community colleges today. The GI Bill, known as the Servicemen's Readjustment Act of 1944, addressed the issue of young people returning from service to pay for veterans' tuition, fees, books, and provide a monthly subsistence allowance (Scott & Sarkees-Wircenski, 2014). Enrollments in degree programs nationwide went from 89,326 to 241,000 in 1948, with 63% of enrollments in public community colleges (Walker & Grant, 1962; Witt et al., 1994). Other events, such as the Korean War, the Vietnam War, and the launch of Sputnik in 1957, increased the enrollment of community colleges (Gordon & Schultz, 2020). In 1975, the enrollment peaked at 4.1 million students and then decreased because of the end of the baby boom, fewer veterans, and part-time students (Gordon & Schultz, 2020).

Throughout the 1980s to the present, federal legislation has impacted community colleges to address workforce needs. Acts that have affected two-year post-secondary education and

community colleges are the Carl D. Perkins Act of 1984 to support colleges in expanding vocational programs, the Carl D. Perkins Vocational and Applied Technology Education Act of 1990, and reauthorization in 1998 to create funding for articulated secondary and two-year post-secondary programs—which brought secondary education students into community college vocational programs, the Workforce Investment Act of 1998 to bring attention to community colleges and their impact of training displaced workers and unemployed adults and youth, and Perkins IV and V with the continued support of community colleges and their mission to provide workforce development programs based on local needs (Gordon & Schultz, 2020). This has led to what community colleges and two-year post-secondary education offer to students and their communities today.

Community colleges today offer open-access admission, technical education aligned to community business standards, comprehensive program offerings, college transfer education, community services, and all with a teaching and learning focus (Gordon & Schultz, 2020; Scott & Sarkees-Wircenski, 2014). Today's two-year post-secondary education institutions achieve their mission by offering programs such as apprenticeship training, certificate programs, associate degree programs aimed at local workforce needs, and associate degree programs aimed at college transfer options. These dual credit programs have agreements with local area high schools, noncredit programs, adult basic education, courses for personal enrichment, short-term contract training, English as a second language, and all with support services to meet local community needs (D'Amico, 2017). Examples include associate degree programs in marketing, business, and information technology. These programs are commonly transferrable to four-year universities or prepare students to enter the workforce. There are stackable credentials in

marketing, such as electronic marketing, business, such as QuickBooks, and many certifications in information technology.

Despite all the great things that two-year post-secondary CTE programs offer the community, these programs still face many challenges. Two significant obstacles will affect and continue to affect two-year post-secondary institutions and their programming: funding and student enrollment trends. For example, in California, funding per full-time equivalent (FTE) community college student in 2016–2017 was $14,653. However, the University of California system funding per FTE student was $31,469, and the California State University system funding per FTE student was $16,656 (California Proposition 98, 2018). The lack of funding is shallow since the FTE enrollment of California Community Colleges averages about 1.1 million.

In contrast, California State University System has 401,706 FTE students, and the University of California System has 279,145 FTE students (California Proposition 98, 2020). The California University and California State University systems receive more funding for fewer students compared to the California Community College system. Enrollments and the need for community college services have increased in the United States (Bailey & Morest, 2006; Brown, 2012). According to Gordon and Schultz (2020), reducing resources will move community colleges to new funding models, such as program completion, due to tight state budgets calling for accountability in higher education, in which performance-based funding will continue.

Student enrollment trends continue to affect the way community colleges offer their programs. According to Bailey and Morest (2006), enrollments increased from 2000 to 2003 by 20%, and enrollments spiked at a peak in 2010 (Gordon & Schultz, 2020). Enrollments in community colleges decreased in 2013–2016 by 9.6% (American Association of Community

Colleges [AACC], 2017). However, enrollment has declined more over the past couple of years. Burke & Willis (2021) reported a 16.8% decline in headcount from the fall of 2019 and fall of 2020 for community colleges around the country. California had a decrease of about 15% from the school year 2019–2020 had enrollments of about 2.1 million, whereas in 2020–2021, enrollments of 1.8 million (Burke, 2021). Community colleges have a diverse group of students in which that attend, including ethnic diversity, first-generation students, older students looking to upskill, students who are taking noncredit courses, traditional students, homeless students, working students, and other types of special populations that choose to attend community colleges (AACC, 2017; Burke, 2021; Gordon & Schultz, 2020). Community colleges have had to find different ways to attract students, including expanding dual credit programs with high schools, increasing noncredit course options, adapting curriculum for different entrance and exit points, and delivery methods for face-to-face, hybrid, and online options. It will be necessary for high school CTE instructors and two-year post-secondary instructors to understand perceptions of one another so both can collaborate to improve their programming to make it attractive for PK–12 students and future enrollments of two-year post-secondary students.

Perceptions of CTE

There has been growing importance related to career opportunities within education programming and curricula because of the ever-increasing economic development of the United States (Perkins V, 2018; Obama, 2014; The Obama Whitehouse, 2014; Tucker, 2018). This also calls into question the role of CTE. Many leaders have supported CTE, including legislators, governors, United States presidents, and other impactful stakeholders in our society. For example, former First Lady Michelle Obama stated, "…I don't know how many people know about CTE, but more people should because in today's world…if you want to learn cutting edge

skills, if you want to prepare yourself for college and a good career, if you want to go into the culinary arts, like [Jacob], or start your own business, or work in a hospital, or go into 3D-printing, or whatever it is, students need to realize a four-year university is not your only option" (The Obama Whitehouse, 2014). In former President Obama's state of the union address of 2014, there was a focus on training Americans with skills that are needed by employers and matching people with jobs that need to be filled through on-the-job training, youth apprenticeships, and connecting companies and community colleges to design specific training needs (Obama, 2014). Former President Obama encouraged Congress to "concentrate funding on proven programs that connect more ready-to-work Americans with ready-to-be-filled jobs" (Obama, 2014). Former President Trump's State of the Union Address in 2020 contained a vision for United States high schools to offer vocational and technical education in all high schools in the United States (Trump, 2020). Former President Trump's proposal included nearly $900 million in additional funding directed to CTE, which was a $680 million increase (53%) for Perkins Basic State Grants, an $83 million increase (1112.8%) for Perkins National Programs, and $100 million in additional funds for Perkins with changes to the H-1B visa program (Budget of the United States, 2020). Dynamic leaders and politicians have shown more and more support for CTE and its programs throughout the past decade.

There is a duality of positive and negative perceptions regarding PK–12 and two-year post-secondary systems relating to CTE. It is recognized that CTE has positive perceptions, including increasing student's academic engagement in core subjects, less likelihood of failing, less likelihood of dropping out, the importance of contributing to the success of 21st century skill development and two-year post-secondary education preparation, and CTE being nimble in adjusting their curriculum for better alignment to industry (Gauthier, 2021; Kelly & Price, 2009;

Shanklin, 2014; Tucker, 2019; Tucker & Hughes, 2020). However, some stigmas still exist about CTE—CTE students being looked down upon because students do not want to pursue a four-year university degree, students taking CTE courses will not meet California university entrance requirements, and the curriculum at two-year institutions are less rigorous (Lazerson 2010; NACAC, n.d.).

Tucker and Hughes (2020) and Tucker (2019) implicated that core teachers viewed students not attending a four-year university as a failure, and if students wanted to pursue a career that is not a white-collar type of position, then core teachers became uninterested in the potential of their students. Tucker and Hughes (2020) also inferred that core teachers believed that students who take CTE courses are precluded from attending college and completing California's university entrance requirements known as A–G requirements. However, Kelly and Price (2009) indicated that at-risk students engage in academics and are more unlikely to fail or drop out of school because of their CTE experiences. Core teachers recognized the importance of CTE in two-year post-secondary education preparation and increasing student academic engagement (Kelly & Price, 2009). According to Shanklin (2014), academic and CTE teachers have indicated similarities in preparing students for 21st-century skill development and its importance.

Just as stakeholders have perceptions of PK–12 CTE, there are perceptions both positive and criticisms of two-year post-secondary CTE programs. Two-year post-secondary institutions are known for preparing students for high-wage, high-demand jobs (Gauthier, 2021). Two-year post-secondary CTE institutions prepare students to be proficient in their respective fields but struggle with soft skills such as talking to clients or colleagues. Two-year post-secondary CTE institutions have been known for being nimble in adjusting curricula to meet the demands of

industry and employers in the community and offering courses in various delivery methods with high-quality instruction (Carver & Kosloski, 2015; Hora et al., 2016).

However, a stigma is still attached to two-year post-secondary CTE programs. Stigma is defined as "labeling, stereotyping, separating, status loss and discrediting occur in a power situation that allows these processes to occur" (Link & Phelan, 2001, p. 382). Community colleges are, for many students, a backup plan to being accepted into a four-year university, and there are many school counselors and parents that do not view going to a two-year post-secondary institution as a good first choice (Gauthier, 2020b; Kandalec Holm, 2019; Lazerson 2010; Ravitch, 2013). Some perspectives of CTE are that it does not offer a rigorous curriculum because of its focus on CTE and its transferability to four-year universities is not possible due to the less rigorous two-year post-secondary college curriculum, despite the transfer agreements between two-year and four-year institutions (Lazerson 2010; NACAC, n.d.).

Perceptions of PK–12 CTE

CTE has a vision of preparing students to be career and college ready. That also includes, ensuring that CTE is aligned to career opportunities and preparing students to enter high-wage, high-demand jobs. Greathouse Holman et al. (2017) poised that CTE students in Southern Texas who took courses in business and industry and public services indicated that they viewed themselves as ready to enter higher education. Students in the B&I and PS described themselves as prepared for careers due to facilities, teacher knowledge, and extracurricular. Handy and Braley (2012) implied that core content instructors perceive that CTE students are not academically driven and appreciate a hands-on approach versus core content students who are academically driven and have more divergent scholarly interests and capabilities. Subjects also indicated that academic content students would be more likely to be admitted and prepared to go

to college than a CTE student whose college entrance would vary greatly depending on scholastic performance and future career goals. However, the participants indicated that a CTE student would be preferable to an academic content student regarding employer preferences because the CTE student had the skills necessary to be successful (Handy & Braley, 2012). There are conflicting outlooks on CTE that CTE is not as rigorous and does not prepare students to go to college. However, there are perspectives that CTE prepares students to have skills to be successful in work, and students have a positive learning experience through hands-on application, real-world problems, and integrated extra-curricular to be prepared to enter college and the world of work.

Students in PK–12 have a positive prospect of CTE and their CTE courses. Gentry et al. (2007), poised students who attended school both at a CTE center and a traditional high school had spoken positively of their CTE experiences and negatively of their traditional high school experiences. When students have a choice among their decisions or autonomy, they have more of a buy-in and a positive experience than being forced into courses such as core-academic courses. Gaunt and Palmer (2005) reported that in a study of 451 seniors, which 126 were enrolled in CTE programs and 325 were not enrolled in CTE programs, 80 of both CTE and non-CTE students believed that CTE is designed for students of all ability levels, less than 40% believed that CTE is for those who struggle academically. More than 50% of those not involved in CTE programming knew that CTE is for students who want to go to college.

While CTE prepares students for college and career opportunities, counselors do not always suggest CTE as a first option when suggesting course offerings to high school students. Kandalec Holm (2019) poised that there are many counselors that share the same viewpoint on CTE and that CTE is rigorous and valuable in preparing students for future careers. However,

many counselors perceive CTE as a backup plan and not the first choice, and even fewer perceive CTE as for students who are not succeeding in their academic courses, is manual labor, and has very little academic rigor (Kandalec Holm, 2019).

Federal legislation has encouraged the integration of CTE and core academics (Carl D. Perkins Vocational Education Act of 1984, 1984; Carl D. Perkins Vocational Education Act of 1990, 1990; Carl D. Perkins Act of 1998, 1998; Carl D. Perkins Career and Technical Education Improvement Act of 2006, 2006; Strengthening Career and Technical Education for the 21st Century Act of 2018, 2018). However, some teachers are scared or do not want to integrate CTE and core academic curricula (Handy & Braley, 2012). Aliaga et al. (2012) assured that the dichotomous academic and CTE courses are no longer a reality. Rather, PK–12 educators need to prepare the whole child by preparing students to be college and career ready depending on a student's post-secondary plans (Aliaga et al., 2012). CTE is for all students, not just those who are not college-bound but rather students who take higher-level CTE courses also take her level academic courses (Aliaga et al., 2012).

Perceptions of Two-Year Post-Secondary CTE

Two-year post-secondary CTE has a long history of preparing students for occupations that the economy greatly needs. Gauthier (2021) endorsed that community college faculty perceive community college CTE as a CTE program that must include habits of mind, support students' social and emotional development, CTE programs should be credit-bearing, and offer students a holistic education. The top priorities in community college CTE are soft skills, employment, and curriculum (Gauthier, 2021). Employers hire from community colleges expecting specific technical knowledge and employability skills but will fire employees for poor soft skills.

Community colleges have had a history of meeting the community's needs through delivery of CTE programs and programming available based on the economic need for high-demand and high-wage jobs. Students who took online CTE courses felt that instructors were supportive and prompt when teaching their online CTE courses (Carver & Kosloski, 2015). Students who favored autonomy and active learning preferred online learning. In contrast, for those who favored student-to-student interaction, collaboration, and enjoyment, students' perceptions favored the face-to-face CTE classroom environment (Carver & Kosloski, 2015).

Gauthier (2020a) affirmed that students who graduate from community college career and technical education programs are proficient in their technical skillset but struggle to talk with clients or colleagues and solve day-to-day situations and problems. Research has called for soft skills in community college CTE curricula to ensure graduates are prepared to enter the world of work in middle level positions (Gauthier, 2018). According to Gauthier (2019), community college administrators sometimes prescribe a purpose for career and technical education, which can lead to misaligning CTE programs and outcomes. That can cause ambiguity and confusion in the institution's mission and vision.

Community colleges have been given a lot of accolades and attention because of their nimbleness in adjusting curricula to industry standards. Gauthier (2020a) and Belfield and Bailey (2011), recounted that community college CTE programs teach students the technical skills and knowledge needed in their respective fields to get high-wage and high-demand jobs. Gauthier (2019) and Hora et al. (2016) attested that community college administration believes that CTE faculty have contemporary curricula that align with business and industry standards, meeting with advisory boards to inform faculty of industry standards, faculty with industry experience are invaluable to the organization, and that CTE can provide holistic education by applying

knowledge learned in general education courses into the CTE curriculum. There are positive notions regarding community college CTE programs. Contrarily, there are critics of CTE community college programs with varied stances.

Community colleges have denunciation despite their affordability and ability to educate those for high-wage and high-demand positions. Shulock (2011) commended that CTE community colleges have great benefits and potential, but they are not meeting their potential through not having good data to make informed decisions; student progress is not translating into credentials, and pathways structures are not promoting the attainment of CTE credentials. According to Gauthier (2020b), Crawford (2011), Handel (2007), and Hernandez-Gantes (2016) community colleges still have a stigma because parents believe that community colleges are a second chance if not accepted into a four-year university. Gauthier (2020b), Crawford (2011), Handel (2007), and Hernandez-Gantes (2016) also attested that parents believe community colleges prepare students for low-wage jobs; community colleges are stigmatized in general because the public does not understand what community colleges do, and the belief that community college graduates start at low salaries upon graduation. Community college CTE is also stigmatized in the workforce through professionals looking down upon a community college degree and the view that because someone has a community college degree, they are not as competent (Crawford, 2011; Gauthier, 2020b; Handel, 2007). Community colleges are looked down upon because of the belief that they do not hold rigorous college curricula and that it is only a fallback plan for those who do not get accepted into four-year universities (Handel, 2007; Lazerson, 2010; Ravitch, 2013). Finally, community colleges could utilize their advisory boards more to find internship and apprenticeship placements, update curriculum, and job placement for graduates, and better understand market labor data (Stokes, 2015).

International Perception of CTE

Career and technical education, as it is known in the United States is known as technical vocational education and training internationally. Other countries have stayed in the vocational education term opposite of what the United States did in the late 1990s and early 2000s. In Spain, vocational education and training is school based, where students learn in the classroom and are placed in a workplace environment to be trained on more workplace skills through a dual selection process of the school and company (Martín Artiles et al., 2020). This certifies that students who come to school are selected by the school and a human resources recruiter in the company (Martín Artiles et al., 2020). In Germany, vocational education and training is known as a dual system, as students are in the classroom and the world of work during their education. Hence, the system is a dual system (Haasler, 2020). In addition, youth employment rates are low because of the dual system and smooth school-go-work transition.

The transition from school to work is smoother in countries with work experience programs (Organisation for Economic Cooperation and Development [OECD], 2013; Renold et al., 2017). Countries have work experience programs in upper secondary and two-year post-secondary non-tertiary levels, including Australia, Austria, Belgium, Germany, Italy, and other countries in Europe and the United Kingdom. Renold et al. (2017) claimed that the strongest Vocational Education and Training (VET) programs have strong ties with education and employers. Renold et al. (2017) conducted an in-depth study of the top 20 VET programs in the world and found that if schools have too much dominance in the skills training process, then there will be a skills mismatch where the skills being taught are not needed in the labor force. On the other side of the spectrum, if employers have too much dominance or on-the-job-training, then employers can fill positions with practical experience but likely not invest in any further

training, which creates too specific of a training program and is not aligned with the goals of the educational system (Renold et al., 2018). Countries such as Austria, Switzerland, Germany, and Denmark are known to have a “Dual VET” system. This includes a curriculum based on employer input and the application of the curriculum in work experiences. Features of the Swiss VET System is known as the Gold Standard of upper-secondary VET systems (Hoffman & Schwartz, 2015). The Swiss VET model has students learning under work contracts in work experiences and the classroom every week. Most of the program’s content and learning are transferrable to pathways (Renold et al., 2018).

Based on studies in lower tertiary and upper-secondary VET models, the best models available are those with a curriculum that has input from employers and includes work experience paired with classroom experience (Renold et al., 2018). Having a work experience component helps with a smoother transition for younger people from school to work, with less likely to have skills mismatch among skills of employers and skills needed by employers. Cappelli (2015) asserted that the United States is of the top four countries in the world with the most skills mismatch but with the lowest vocational credits earned by upper-secondary educational institutions.

Legislation That Has Affected Secondary and Two-Year Post-Secondary CTE

Many legislative acts over the past 100 years have affected and changed the course of CTE. Acts such as the 1862 Morrill Land-Grant Colleges Act and 1917 Smith-Hughes Act created colleges that focused on agriculture, homemaking, and industrial arts to support the United States’ economic needs but kept vocational education separated from comprehensive high schools (Scott & Sarkees-Wircenski, 2014). Since the 1917 Smith-Hughes Act, the next 100 years of legislation called to integrate CTE and core curricula, collect data to make better

decisions regarding CTE, and provide support to produce high-quality programs at the two-year post-secondary level and PK–12 level for students to be career and college ready (Gordon & Schultz, 2020; Scott & Sarkees-Wircenski, 2014).

1862 Morrill Land-Grant Colleges Act and 1917 Smith-Hughes Act

One of the first pieces of legislation attributed to CTE was the 1862 Morrill Land-Grant Colleges Act, which was the first piece of legislation in which the federal government inserted itself into technical education to create colleges for young men to learn about agriculture and mechanical arts (Scott & Sarkees-Wircenski, 2014). This legislation was the precursor to the 1917 Smith-Hughes Act, where vocational education was funded and segregated from the regular curriculum in the comprehensive high school. Agriculture, homemaking, and trade and industrial education were to be supported by Smith-Hughes Act funds and were not only separate from the comprehensive high school curriculum but also the vocational programs as well. This helped the development of business education because one of the provisions in the Smith-Hughes act was to provide federal money for organization and maintenance of part-time schools and classes to give business training for employed persons (Wanous, 1957). However, reimbursement for regular high school business courses was not allowed (Wanous, 1957). Through this act, vocational education boards at the state level were created, and a federal board for vocational education was created—secretaries of commerce, agriculture, and labor; commissioner of education; three appointed citizens, and states had to have a plan for preparing teachers before they could accept the money (Gordon & Schultz, 2020; Moore, 2017; Scott & Sarkees-Wircenski, 2014).

George Acts and George Amendments 1929–1956

Later Acts were introduced, including the George-Reed Act of 1929, the George-Ellzey Act of 1934, the George-Deen Act of 1936, the George-Barden Act of 1946, and the George-Barden Amendments of 1956 were introduced to expand vocational education. The George-Reed Act of 1929 increased annual appropriations in agriculture, home economics, and industrial education. George-Ellzey Act of 1934 was a supplementary law that replaced the George-Reed Act of 1929, which increased appropriations to $3 million per year for agriculture, home economics, and industrial arts. George-Deen Act of 1936 increased appropriations up to $14.5 million to include agriculture, home economics, and industrial arts and included distributive education (now known as marketing) and the U.S. Office of Education (Gordon & Shultz, 2020). The George-Barden Act of 1946 authorized an appropriation of $29 million annually because of the need to provide a means for thousands of returning World War II veterans to acquire employment skills to be competitive in the economy (ACTE, 2002). This legislation authorized $10 million for agricultural education, funds for Future Farmers of America (FFA) and New Farmers of America, $8 million for home economics, $8 million for trade and industrial education, and limited funds for marketing occupations to support for part-time (cooperative) and evening courses for employed workers—no preparatory courses in other fields were authorized (Gordon & Schultz, 2020). Finally, the George-Barden Amendments of 1956 included adding practical nursing for $5 million and fishery occupations for $375,000 to a list of approved areas of instruction (Venn, 1964).

Vocational Education Act of 1963 and Vocational Amendments of 1968 and 1976

The Vocational Education Act of 1963 is one of the most significant pieces of legislation for vocational education since the Smith-Hughes act of 1917. The primary goals of this act were

to maintain, extend, and improve existing vocational education programs and provide part-time employment for youth who needed money to continue their studies full-time (Scott & Sarkees-Wircenski, 2014). Initially, this act did not include the term “business education” within the bill. However, a committee consisting of Hamden Forkner, Russel Hosler, and Paul Lornax was appointed to meet with Carl D. Perkins to include business education within the bill. The committee was successful as this was the first time “business education” was directly mentioned and supported in a vocational education bill (Hosler, 2002). This act provided vocational training and retraining that suited people’s needs, interests, and abilities while still being high-quality. Congress also supported this bill in ways in which special populations that would not be able to succeed in regular vocational programs would be thriving, allowing funds to be used for the construction of area vocational schools, broadening the scope of vocational education based on states’ needs, and included other occupations such as business and health occupations in comprehensive high schools (Friedel, 2011).

The Vocational Education Act of 1963 was amended in 1968, 1972, and 1976. These amendments it broadened the definition of vocational education to bring it closer to general education (Gordon & Schultz, 2020). Under the amendments, federal funds could be used for (1) high school and post-secondary students; (2) those who have completed or left high school; (3) those in the labor market in need of retraining; (4) those who have academic, socioeconomic, or other obstacles; (5) those who are mentally retarded, deaf, or otherwise disabled; (6) construction of area vocational school facilities (7) vocational guidance for all persons mentioned; (8) ancillary services (preparation of state plans, administration, teacher education, evaluation of programs); and (9) training in private schools under contract with public schools (Friedel, 2011; Gordon & Schultz, 2020). The amendments eliminated specific occupational areas and included

vocational student organizations in the vocational education definition (Friedel, 2011). Since VSOs were essential to vocational education instruction, they could use federal funds for VSOs (Friedel, 2011). Vocational student organizations included DECA and Future Business Leaders of America which is commonly known as FBLA, directly related to marketing and business education.

The vocational education amendment of 1976 extended and increased funding for vocational education. The amendment also included overcoming and eliminating sex discrimination and sex stereotyping in vocational education programs (Friedel, 2011; Scott & Sarkees-Wircenski, 2014). Other purposes of the 1976 amendment were to develop new vocational education programs, provide part-time employment to youths who needed the earnings to continue their training on a full-time basis, provide continued support in vocational education through (1) vocational guidance and counseling; (2) pre-service and in-service training for personnel; (3) renovation and remodeling of facilities; and (4) grants to overcome sex bias (Friedel, 201; Gordon & Schultz, 2020).

Job Training Partnership Act of 1982

Job training partnership act (JTPA) replaced the comprehensive employment training act of 1973.The comprehensive employment training act of 1973 consolidated previous labor and public service programs. JTPA also authorized funds for employment counseling, supportive services, classroom training, on-the-job training, work experience, and public service employment. Each of these essential services incorporated essential principles of revenue sharing by giving state and local governments more control over the use of funds and determination of programs (Gordon & Schultz, 2020). JTPA established programs for unskilled youth and adults to enter the labor force to afford job training for economically disadvantaged individuals facing

barriers to employment. The act also included federal job training programs, performance standards, limited support services, and a new program for retraining displaced workers (Guttman, 1983; Gordon & Schultz, 2020).

Carl D. Perkins Vocational Education Act of 1984

This Act had two primary goals: economic and societal goals like many of the vocational acts leading up to the Carl. D. Perkins Vocational Act of 1984 was to improve the workforce in the United States to address the needs of business and industry and continue to be globally competitive. The economic objective included modernization and program improvement in vocational education (Advance CTE, 2002; Gordon & Schultz, 2020; Scott & Sarkees-Wircenski, 2014). The societal goal was ensured access to quality programs for those who were disadvantaged, handicapped, entering nontraditional occupations for their sex, those adults in need of training or retraining, homemakers and single parents, English language learners, and those who are incarcerated (Advance CTE, 2002; Gordon & Schultz, 2020; Scott & Sarkees-Wircenski, 2014). Specific funding formulas were specified, but the monies were given to the states. The funds and subjects were given to each state each fiscal year, an amount based on formulas using allotment ratios for each state and relative state populations based on specific age groups (United States Congress House, 1984).

Carl D. Perkins Vocational and Applied Technology Education Act of 1990

The Carl D. Perkins Vocational and Applied Technology Act of 1990 was signed into law by former President George H. W. Bush. This Act was an extension and amendment to the 1984 Act. This act emphasized vocational training and disadvantaged populations such as English language learners and special populations (Gordon & Schultz, 2020). Miller (2014) asserted that this was the most significant funding amount that the federal government provided

for vocational education and training. This act has been commonly referred to as Perkins II. Perkins II had three significant changes: (1) integration of academic and vocational education; (2) articulation between education that provided workforce preparation—known for the first time as tech prep in the legislation; and (3) closer linkages between school and work (Gordon & Schultz, 2020). The integration of vocational education and academics provided a significant shift because, before this act, all aspects of vocational education were isolated and separated from other parts of education.

The term tech prep was introduced in this legislation (Scott & Sarkees-Wircenski, 2014). This combines a minimum of two years of secondary education and a minimum of two years of two-year post-secondary education in a sequential course of study. The sequential course of study integrates vocational and academic instruction, utilizes work-based learning where appropriate, and available, leads to an associate or baccalaureate or post-secondary certificate, and leads to placement in proper employment or future education.

Congress provided a template for secondary and two-year post-secondary institutions and business and labor to integrate and not isolate vocational education. Perkins II, a common name referred to this act, required states to develop systems of performance measures and standards for secondary and two-year post-secondary career and technical education as state agencies would no longer administer funds but rather directly to local education agencies (Gordon & Schultz, 2020).

School-to-Work Opportunities Act of 1994

The school-to-work opportunities act (STWOA) was passed in 1994, emphasizing school-to-work and providing funding for these programs. According to the STWOA (1994), there was an emphasis on collecting information related to labor markets, economic

development, skill standards, employers' capacity to provide work-based learning opportunities, and the ability to carry out STWOA programs and information. According to ACTE (2002), program components included school-based learning, work-based learning, and activities connecting the two. Examples included student stores and placing students out in the field of marketing and business. President Bill Clinton endorsed the Act, which dated back to his time as the Arkansas Governor when his apprenticeship program passed legislation. President Bill Clinton wrote, "Today we are failing, miserably, our non-college-bound young people, because we don't have a real school-to-work system in America. We are laboring under the belief that our kids can get a high school education that is internationally competitive without working as hard as students in competitor nations" (ACTE, 2002). Key elements of the STWOA included (1) collaborative partnerships; (2) integrated curriculum; (3) technological advances; (4) adaptable workers; (5) comprehensive career guidance; (6) work-based learning; and (7) step-by-step approach (ACTE, 2002; Scott & Sarkees-Wircenski, 2014; STWOA, 1994). This act also amended the Tech-Prep Education Act to include two or four years of secondary school preceding graduation as well as two years of higher education or an apprenticeship program (STWOA, 1994). STWOA appropriations were not renewed by the federal government and expired in 2001.

Workforce Investment Act of 1998

The Workforce Investment Act (WIA) repealed and replaced the JTPA. The focus of the WIA was to provide a streamlined and strengthened American job-training system (ACTE, 2018; Gordon & Schultz, 2020; Scott & Sarkees-Wircenski, 2014). The WIA emphasized the improvement of the long-term prospects of youth by providing basic skills, work readiness skills, occupational training, and citizenship skills (Workforce Investment Act of 1998 [WIA], 1998).

WIA included local areas to create opportunities for young people that integrated key components: post-secondary opportunities, linkages between academic and occupational learning, connections to the local job market, and appropriate follow-up services (Gordon & Schultz, 2020; Scott & Sarkees-Wircenski, 2014; WIA, 1998). Secondary CTE that wanted to provide youth services had to accommodate changes put forth by WIA. This included long-term intervention, summer employment as one part of an integrated and year-round program to increase a youth's work readiness, provision of all 10 required program elements, assessment of youth's skills levels and service needs, development of an individual service strategy for each youth, and limits funding devoted to non-low-income and in-school youth (Gordon & Schultz, 2020). According to the WIA (1998) eligible WIA youth must meet the following requirements:

- low-income
- in- or out-of-school
- age 12–21
- Have one or more of the following barriers to employment:
    - deficient in basic literacy skills
    - high school dropout
    - homeless, a runaway, or in foster care
    - pregnant or parenting
    - an offender
    - An individual who requires additional assistance to complete an educational program or to secure and hold employment including a youth with a disability.

Lastly, youth were eligible to attain training credentials, prepare for two-year post-secondary educational and employment opportunities, and secure employment.

Carl D. Perkins Vocational and Technical Education Act of 1998

President Clinton signed the Carl D. Perkins Vocational and Technical Education of 1998 into law, where vocational programs were authorized for five years. This law was commonly referred to as Perkins III. Scott (2014) asserted that there was greater flexibility of states in terms of spending. Surrounding the time of this legislation, there was a national concern around the lack of readiness of high school graduates and the basic skills needed to be successful in a globalized economy (Scott & Sarkees-Wircenski, 2014). According to Scott (2014), the required skills in the 21st century were strong basic and advanced academic skills, computer and technical skills, theoretical knowledge and communication, problem-solving, teamwork, employability skills, and the ability to acquire additional knowledge and skills.

Because of the flexibility of state spending, there were a variety of state accountability and leadership activities that included student participation in and completion of vocational and technical education programs, which led to nontraditional training and employment, an assessment of programs including how special populations were being met, expanding the use of technology in vocational and technical education, and support for programs for special populations that led to high-wage and high-skills careers. Special populations included nontraditional training and employment, individuals in correctional institutions, individuals with disabilities, economically disadvantaged families, single pregnant women, displaced homemakers, and individuals with other barriers to educational achievement, including English language learners (Gordon & Schultz, 2020). Like many of the different vocational education acts, Perkins III emphasized the integration of academics and vocational education within the comprehensive school along with how the needs of special populations are being met, modernizing programs, and linking secondary and post-secondary programs, including Tech

Prep (Gordon & Schultz, 2020). States had specific performance measures of their educational offerings, including student attainment of academic, vocational, and technical skill proficiencies, student attainment of a secondary school diploma or recognized equivalent, placement/retention/completion of two-year post-secondary education/advanced training, military service, or placement/retention in employment and student participation and completion of vocational and technical education programs that led to nontraditional training and employment (Gordon & Schultz, 2020). Finally, Tech Prep was once again emphasized in Perkins III. Tech Prep was a combined 2 + 2 program (i.e., two years of secondary education and two years of post-secondary education) in a sequential course of study, integrating academic and vocational instruction, including work-based learning where appropriate and available, providing technical preparation (i.e., engineering technology, applied science, mechanical, industrial, or practical art or trade, agriculture, health occupations, business or applied economics, building student competence in academics and workplace skills through integrated instruction, lead to a higher education degree or post-secondary certificate, and leads to placement in appropriate employment or on to further education; Gordon & Schultz, 2020). In this case, business does not only include business education. Business education can commonly be an umbrella term for marketing and business education.

Perkins IV: Carl D. Perkins Career and Technical Education Improvement Act of 2006

The Carl D. Perkins Career and Technical Education Improvement Act of 2006, also known as Perkins IV, was signed into law by former President George W. Bush. The purpose of Perkins IV was to more fully develop secondary and two-year post-secondary students who chose to enroll in career and technical education programs (Perkins IV, 2006). This is also the first-time vocational education was entirely replaced by career and technical education, which is

how CTE programs are referred to in the United States. According to the Perkins IV legislation (2006), there were seven primary purposes: (1) states and localities develop challenging CTE standards to prepare students for high-demand and high-wage jobs, (2) integration of academic and CTE instruction that links secondary and two-year post-secondary education for participating CTE students, (3) increased state and local flexibility to in providing CTE services and activities including Tech Prep, (4) improve CTE programs through conducting national research and disseminating best practices; (5) promotes leadership and professional development and improve CTE programs through the quality of CTE teachers, administration, counselors, and other professionals, (6) supporting partnerships between secondary, post-secondary, baccalaureate institutions and business and industry, (7) and providing life-long educational opportunities paired with other education to keep the United States competitive. Many of these elements are still structured today. States prepare marketing and business for high-wage and high-need jobs that are needed (e.g., accountants, social media marketers, product managers, help desk agents, and other occupations).

Perkins V: Strengthening Career and Technical Education for the 21st Century Act of 2018

According to the Strengthening Career and Technical Education for the 21st Century Act (i.e., Perkins V; 2018) CTE provides individuals with rigorous academic content and relevant technical knowledge and skills to prepare for further education. Perkins V legislation (2018) also calls out careers that include high-skill, high-wage, and in-demand jobs that are aligned to state academic standards adopted by the state of the Elementary and Secondary Education Act of 1965 and with coordination between secondary and post-secondary programs through POS, articulation agreements, early college school programs, dual or concurrent enrollment program opportunities, or other credit transfer agreements that provide post-secondary credit or advanced

standing which may include career exploration at the high school level or as early as middle school grades as defined in ESEA of 1965. Some significant changes to Perkins V include requiring a comprehensive local needs assessment which must consist of a review of student performance, program quality, labor market needs, and a specific set of stakeholders to be completed every two years, increased stakeholder involvement, revised accountability indicators, and the enhancement of efforts to serve populations including chronically unemployed or underemployed, homeless individuals, and youth with active duty military parents (Gordon & Schultz, 2020). Perkins V also includes a competitive grant to include funds that may be used for grades 5 through 8 to allow for career exploration for younger students, which funds had to be used for grades seven and above in previous acts. Marketing and business education can start early as 6th grade in middle school. Courses can include an introduction to business, computer applications, and other related marketing and business courses. In addition, DECA and FBLA can start as early as middle school.

Dual Credit

Dual credit in the United States has continued to evolve. It was first developed in the 1970s as high school students could simultaneously earn high school and post-secondary credit. Secondary instructors teach many dual credit classes in the high school classroom or post-secondary instructors in the post-secondary college classroom. According to Tobolowsky and Allen (2016) and Zinth (2015b), dual credit has a variety of definitions (i.e., dual credit, dual enrollment, joint credit, and concurrent enrollment). Dual credit is when a student takes courses or completes courses where high school students can earn both college and high school credit without taking a standardized test to earn the credits (An & Taylor, 2019; Tobolowsky & Allen, 2016). Other programs compete with dual credit programs, including advanced placement (AP)

and international baccalaureate (IB). Both commonly known programs have students who are primarily high achieving, take coursework in a set curriculum, take a standardized test to earn the credit, and not all institutions take the credit earned in AP or IB classes (Tobolowsky & Allen, 2016). However, there are benefits for students who enroll in a dual credit program.

Taylor (2015) found that from a sample of 41,797 students in Illinois, 91% of students who enrolled in dual credit enrolled and college, and 52% completed college compared to non-dual credit students who had 63% enrolled in college and 29% completed college. This is a positive aspect of the college as that includes higher enrollments for the college. In addition, students are enrolling, finishing their studies, and able to have workplace skills to take into their next position or expand on in higher educational endeavors. Tobolowsky and Allen (2016) asserted that there are other benefits to taking dual credit courses, including saving money and reducing the cost of college, increasing the likelihood of graduating from a post-secondary institution, understanding college rigor, and being introduced to the college environment. Dual credit allows students of all abilities to earn college credit—not just high academic achievers. According to a study conducted by Rodriguez and Gao, 112,000 students in California participated in dual enrollment in 2019–2020—an increase of 56% from 2015–2016, 20% of dual credit courses were career education focused, and dual credit participants are more likely to enroll in a two-year or four-year college or university (2021).

Research has supported the transition from PK–12 to post-secondary through POS and career pathways (An & Taylor, 2019; Fink et al., 2017; Rodriguez & Gao, 2021; Taylor, 2015; Zinth, 2015a). However, there are drawbacks to dual credit in the United States. Many states have their own dual credit priorities, which are not standardized throughout the United States (Borden et al., 2013; Zinth, 2015b). While there are financial benefits to students, there are also

financial drawbacks. Some districts must negotiate with the community college to pay for the credits students take (Zinth, 2015b). For example, in Iowa and Florida, the districts now absorb student attendance costs. States such as North Carolina and Minnesota have formal funding structures to support high school students' costs, such as annual appropriations of $2 million in North Carolina and a funding formula in Minnesota (Zinth, 2015a). There have been other notable downfalls, including courses becoming part of a permanent record and students earning a poor grade in a dual credit course, issues with credits transferring to other post-secondary institutions and having to retake those courses, remarks from college faculty towards high school students taking dual credit courses at the college campus, and limited support systems (Kanny, 2015). While taking dual credit coursework can benefit students in attending college and cost savings to the student, there are drawbacks, including student frustrations with the transferability of courses, negative comments from faculty, and limited support systems for those taking dual credit courses.

Marketing and Business Education

Business education, once known as commercial or vocational office education, has deep roots in history dating back to colonial times (Hosler, 2002). Business Education in the United States was first called out in the Vocational Education Act of 1963, which read, "…those programs which were previously supported and business education for the office" (Carl D. Vocational Education Act, 1963). Business education first focused on office competencies such as word processing, computer programs, information management systems, fax machines, shorthand, and bookkeeping (Gordon & Schultz, 2020; Hosler, 2002). However, business education had to change its curriculum to meet labor market demands. This shifted from secretarial to business management competencies and from a local focus to an international one,

which included courses such as management systems and entrepreneurship (Gordon & Schultz, 2020). Future legislation have emphasized three significant aspects regarding technical education: (1) integration of academic and technical education; (2) articulation between education segments—all secondary and post-secondary and workforce preparation (i.e., Tech Prep); and (3) closer linkages between school and work (Gordon & Schultz, 2020; Hosler, 2002; Perkins III, 1998; Perkins IV, 2006; Perkins V, 2018). The STWOA also supported this by integrating academic and technical education, work-based learning, and apprenticeships (Gordon & Schultz, 2020; Hosler, 2002; STWOA, 1994).

Marketing education and business education have a rich history within the United States. Wanous (1957) identified that in 1635 business education entered the new world in Plymouth colony. Wanous identified evidence that business education was the first schoolmaster in 1683 in Philadelphia, which is the foundation of business in the frontier of selling imported and exported goods. It is further emphasized that boys who wanted to learn business went to work for stores and became apprentices to learn bookkeeping and business methods. Throughout the early 1700's many other advances in business education came about, such as offering bookkeeping as a course in 1709 by John Green in Boston, business courses offered in vocational "Grammar Schools" in secondary grades throughout the 18th century that were taught using real-world business methods of import and export trades, John Mair's book for business education was used in 1736 throughout Maryland and Virginia colonies, and the start of Franklin's Academy of business which prepared students for business (Wanous, 1957).

Throughout the 1800s, the first American book for teaching business education was published in 1818 by James Bennett called *American System of Practical Bookkeeping to the Commerce of the United States and Exemplified in One Set of Books, Kept by Double Entry:*

Designed for Schools (Wanous, 1957). The following year, 1819 shorthand was created for notetaking, bookkeeping was offered in the first high school in 1823. In 1834 the first business college opened in Philadelphia. 1835 the first college in Distributive Education (now marketing education) opened in New York City and in 1868 the first typewriter was invented and commercialized. The Business Educator's Association was founded in 1878. Throughout the late 1800's many pivotal moments in business education occurred. 1881, the first university was started— Wharton School of Finance and Commerce, University of Pennsylvania. 1890, the first public school of commerce began in Washington D.C. In 1895 the National Commerce Teachers Association is formed. Finally, 1898 Drexel offers the first business educator instructor courses (Wanous, 1957). These developments paved the way for business education throughout the 1900s.

In the 1900s, more impactful happenings in business education continued to move forward. 1901 the international society of business education was started in Switzerland (Wanous, 1957). 1902 was the first junior college which started in Illinois. Further, 1903 and 1915 the first two reports on business education were written for the National Education Association that included curricula for collegiate and high school business programs. 1914 the first commercial education program was created by a business teacher in Fitchburg, Massachusetts. 1919 the Balance Sheet textbook was published by South-Western publishing that covered all areas of business education. 1925 the American Vocational Association (now called Association of Career and Technical Education) was created with a division of business education. 1937 the first mention of funding for courses and teachings of distributive education (now marketing education) in the George-Deen Act. Finally, 1946 the United States Business

Education Association (now called National Business Education Association) was formed with other regional divisions started throughout the 1940s and 1950s.

Throughout the 1960s and 1970s, the changes in business and marketing education were significant. Hosler (2002) identified typewriting, shorthand, and bookkeeping as the most popular business education courses in the 1960s. Other courses included business law, introduction to consumer education, introduction to business, and office, clerical, secretarial, and practice. In the 1970's typewriting, shorthand, and bookkeeping continued to be the most popular, with general business and business arithmetic being the most popular alongside the other popular subjects. Distributive education and typewriting enrollments increased tremendously, which the Vocational Education Acts and Amendments supported the growth of marketing and business education (Hosler, 2002). In the 1970s and 1980s the shift from typewriters to computers occurred in the classroom. Typewriting soon changed from typewriting to keyboarding (Hosler, 2002).

Previously known as distributive education, marketing was first mentioned in vocational education legislation as part of the George-Deen Act of 1936 with an authorization of $1.4 million (Gordon & Schultz, 2020; Hosler, 2002; Leventhal, 2002). According to Hosler (2002) this act was passed in the middle of the Great Depression due to the distribution inefficiencies, hence the name distributive education. However, a round of legislation after the George-Deen Act of 1936 moved marketing education forward in career and technical education. The George-Barden Act of 1946 doubled appropriations for marketing education but focused only on co-op education and night courses for employed workers (Scott & Sarkees-Wircenski, 2014).

In the early 1900s, marketing education was focused on preparing employees for jobs in the retail industry. Marketing education was first introduced to high schools in 1910 in

Providence, Rhode Island, and the first retail training cooperative program in Boston high schools in 1912 (Gordon & Schultz, 2020; Hosler, 2002; Leventhal, 2002). In today's marketing education programs, the curriculum has moved from retail position training to contemporary marketing (e.g., electronic marketing, product information, sales, and promotion; Leventhal, 2002). Marketing education also brought in the project-based learning instructional method, teaching marketing skills along with soft skills such as communication and providing related supervised work experience since federal legislation specified half a day of instruction and half a day paid 15 hours a week of work experience (Gordon & Schultz, 2020; Leventhal, 2002). Efforts to place and supervise students in the workplace have led marketing education teacher-coordinators to be experts in cooperative education (Gordon & Schultz, 2020; Leventhal, 2002). Marketing education is vital as positions and employment in marketing are expected to rise, and it will be important for PK–12 marketing educators, two-year post-secondary CTE marketing educators, and marketing teacher preparation programs to prepare students for future marketing employment or continue further education.

There are three major aspects to technical education—marketing and business education is no exception: curriculum, CTSOs, and work-based learning. The three CTSOs that have influenced marketing and business education have been FBLA, DECA, and BPA. According to Kosloski (2014), CTSOs provide contextualized learning to the classroom curriculum and course competencies; learn about community service, leadership, and competitive events; are an authentic learning opportunity for students and are an essential part of the CTE program. Public Law 81-740 was passed in 1950 and established an integral part of Future Farmers of America (FFA) and the vocational education curriculum (Scott & Sarkees-Wircenski, 2014). This law only chartered FFA but established a precedent of treating future CTSOs are essential

components of their CTE program for the benefit of students (Gordon & Schultz, 2020). Federally recognized CTSOs in marketing and business education are BPA, FBLA, and DECA (formerly Distributive Education Clubs of America), now known as an association of marketing students. FBLA and PBL is commonly seen written as FBLA—PBL. FBLA—PBL was founded in 1937 at Columbia University and now "inspires and prepares students to become community-minded business leaders in a global society through relevant career preparation and leadership experiences" (FBLA—PBL, n.d., para. 1), BPA formed in 1966 in Iowa, Kansas, and Wisconsin then known as the Vocational Office Education Clubs of America and now has "served as an innovator in Career and Technical Education, providing its members with opportunities for growth through education, competition, community service, and personal development" (Business Professionals of America, 2022, para. 1), and DECA was founded in 1946 and serves as the association of marketing students where "DECA prepares emerging leaders and entrepreneurs for careers in marketing, finance, hospitality and management in high schools and colleges around the globe" (DECA, n.d., para. 1). CTSOs and work-based learning have a close relationship because of how CTSOs play an integral role in providing work experiences through SBEs and cooperative (i.e., co-op) occupational education programs (Scott, 2014). For example, DECA offers a competitive event in presenting the school's SBE in a professional format and a written report on the SBE's results based on ten standards of up to 30 pages. Business, marketing, and related services accounted for 11% or 390,600 of all associate degrees awarded by degree-granting institutions in the academic year 2018 -2019 (NCES, 2021).

California CTE and Marketing and Business Education

California has had much improvement in CTE over the years. California has had many initiatives regarding CTE, including Proposition 86 California Career Pathway Trust, Linked

Learning Pilot, an act to amend Section 48980 of and to amend, repeal, and add Section 51225.3 of the Education Code relating to graduation requirements, and Perkins V. CTE exists in California at the PK–12 level and post-secondary level in middle schools, high schools, community colleges, technical colleges, adult schools, and technical education centers. According to Advanced CTE (n.d.b), there are 368,950 total CTE enrollments in secondary CTE programs and 1.8 million full-time and part-time public community college enrollments, with a total two-year post-secondary CTE enrollment of 928,853 in California. In 2020 368,193 associate degrees and certificates were awarded, which comprises 52.7% of all degrees and certificates awarded statewide in California (Advance CTE, 2021). Business degrees and certificates are the highest awarded among all degrees and certificates awarded at the PK–12 level and two-year post-secondary level in the state of California (NCES, 2021). The California Department of Education received almost $129 million worth of Perkins funding in the 2020 fiscal year, which 46% was allocated to secondary CTE and 54% to two-year post-secondary CTE. Secondary CTE, two-year post-secondary CTE, and workforce systems collaborate through statewide advisory committees, aligning POS with career pathways and sharing labor marketing information (Advance CTE, n.d.a).

The Association of Accrediting Body Western Association of Schools and Colleges (ACS WASC) is the accrediting body of all educational institutions on the West Coast. Educational institutions include PK–12 schools, two-year post-secondary colleges, and four-year universities. ACS WASC serves schools throughout California, Guam, Hawaii, Asia, the Middle East, Africa, and Europe (Accrediting Commission for Schools, Western Association of Schools and Colleges [ACS WASC], n,d.). ACS WASC ensures that the school fulfills its mission and vision through a viable education program (ACS WASC, n.d.). The accreditation process is an

initial visit, a self-study, a full review, and follow-up strategies to complete action plans to improve areas of growth. ACS WASC also works with the state of California regarding A–G university admissions requirements.

California Marketing and Business Education

Marketing and business education in California serves about 90,000 high school students annually, with approximately 4,000 business and marketing programs throughout California (California Department of Education, n.d.). The 4,000 instructional programs in the state of California exist in comprehensive high schools, Regional Occupational Programs, and adult schools. California recognizes DECA, an association of marketing students, and FBLA, future business leaders of America, as marketing and business co-curriculars which serve about 12,000 students annually (California Department of Education, n.d.a.). Since CTSOs are an integral part of the CTE program, to participate in DECA or FBLA in the state of California, the advisor must be a credentialed teacher—either a CTE credential or single subject business credential, students must be enrolled in or have taken a CTE business or marketing course in one of the content areas, and CTSOs are tied to the curriculum (California Department of Education, 2015). CTSOs are available for both secondary and two-year post-secondary marketing and business programs. The two-year post-secondary CTSOs are Collegiate DECA and Phi Beta Lambda, which is the collegiate equivalent of high school FBLA.

There are many different resources in California for marketing and business education. The California Business Education Association is an association that focuses on providing professional networks to instructors and resources to instructors. California belongs to the Western Business Education Association, which is an affiliate of the National Business Education Association (WBEA, n.d.). Students can compete in California DECA since its charter

in 1951 (California DECA, n.d.). FBLA-PBL has a more extended history in California, as the first charter was at Fullerton Junior College in 1947 (California Future Business Leaders of America, n.d.). California marketing and business classes cover three industry sectors of marketing, business, and information technology.

California business and marketing encompasses the following industry sectors: marketing, sales, and service; business administration and finance; and information and communication technologies (California Department of Education, n.d.b). Standards of career readiness organize the standards based on the common career technical core, anchor standards, pathway standards, and an academic alignment matrix (California Department of Education, n.d.b). The career readiness standards that should be taught to any student who would like to pursue a career or post-secondary education are not industry specific. The anchor standards are commonly taught across all CTE pathways and are slightly modified to align with the industry. The pathway standards are unique to each industry sector, including anywhere from three to seven pathways (California Department of Education, n.d.b). The business and finance industry sector includes the following pathways: business management, finance, and international business (California Department of Education, n.d.b). The marketing and service sectors include the following pathways: marketing, professional sales, and entrepreneurship. The communication and information technology sector include the following pathways: information support and services, networking, game simulation, and software and systems development (California Department of Education, n.d.b).

California marketing and business programs include work-based learning opportunities for students. Students have opportunities to complete pre-apprenticeship programs in marketing and business pathways, including cyber security, finance, and business administration. For

example, Moreno Valley Community College offers registered apprenticeships in cyber security and information technology (Moreno Valley College, 2022). Students may enter these programs if requirements are met before students enter the registered apprenticeship program.

Dual Credit in California

Dual credit is well-researched for its benefits, including college attainment, saving money when enrolling in post-secondary education, being introduced to college rigor, and an introduction to the college environment (An & Taylor, 2019; Borden et al., 2013; Fink et al. 2017; Taylor, 2015; Tobolowsky & Allen, 2016; Zinth, 2015a). Rodriguez and Gao (2021) assert that dual credit has increased as 112,000 students in California participated in dual credit options in the 2019–2020 school year, with a rise of 56% from the 2015–2016 academic year. In addition, all 114 community colleges in the state of California in the California community college system participated in dual credit somehow (Rodriguez & Gao, 2021). In 2016–2017 only 10% of high schools in California were offering dual credit programs, whereas 36% of high schools in California were offering dual credit programs in 2018–2019 (Rodriguez & Gao, 2021). The dual credit programs throughout California have increased their equity access as students who identify as Latino and Black increased from 7% in the 2016–2017 academic year to 38% in the 2018–2019 academic year (Rodriguez & Gao, 2021). Dual credit in California has grown significantly and has focused on special populations through improving equity access to Latino and Black students and improving access for California students. 11% of dual credit courses are not transferrable to the University of California, and California State Universities (known as A–G California State and University of California entrance requirements), which is frustrating as students can only count courses that are transferrable for A–G high school graduation requirements (Rodriguez & Gao, 2021). Examples of courses include retail,

marketing, business, information technology, and other courses related to business, marketing, or information technology.

Legislation and Initiatives in California

The California Career Pathway Trust was developed in 2014 to create and expand career pathway programs between PK–12 education, two-year post-secondary education, and workforce stakeholders. The $500 million grant focused on money that would interlace curriculum, new equipment that met industry standards, and support of implementation in the pathways (Bonilla, 2020). The grant is intended to be seed money for districts and then utilize other state, federal, or grant funding to continue to fund the pathways. Bonilla (2020) asserted that districts that applied for and received the California Career Pathway Trust grant saw a reduction in high school dropout rates of over 20%, with higher reduction rates among females. In addition, students could learn skills that would allow them to enter into middle-class careers such as healthcare.

In 2009, California rolled out an initiative called the Linked Learning Pilot, which included 20 school districts forming distinct pathways in grades 9–12 to two-year, four-year, or high-wage work after high school. The pathways were to integrate core academics, CTE courses with an emphasis on real-world application of academic learning, work-based learning to provide exposure to workplaces and professional skills needed to thrive in a career, and services to address individual needs of students to ensure the equity of access, opportunity, and success of the program (Warner et al., 2016). Participating districts include Long Beach Unified, Los Angeles Unified, Oakland Unified, Pasadena Unified, Antioch Unified, Montebello Unified, Porterville Unified, Sacramento City Unified, and West Contra Costa Unified. According to Warner et al. (2016), students who participated in the Linked Learning initiative demonstrated higher academic performance compared to traditional high school peers; students reported

improved 21st-century skills such as communication and collaboration, high school experiences were important in their major or program focus compared to peers, and students in Linked Learning reported higher job quality. The quality of CTE programming in Linked Learning aligned with high-quality CTE programs that were in federal legislation such as Perkins IV.

Other initiatives have been set forth by the state of California. For example, the state of California local educational agencies can accept a CTE course as an optional high school graduation requirement instead of one course in visual or performing arts or foreign language (An act to amend Section 48980 of and to amend, repeal, and add Section 51225.3 of the Education Code relating to graduation requirements, 2011). This allows students who do not have an aptitude for the arts or foreign language to develop career skills and prepare for college after graduation. California also adopted the Common Career Technical Core (CCTC), which established a set of rigorous, high-quality standards for CTE. CCTC was informed by state and industry standards, educators, state leaders, business and industry, and the public (Advance CTE, n.d.c). The CCTC has high-quality standards for each of the 16 career clusters.

Summary

CTE, including marketing and business education, has had a significant presence in PK–12 and two-year post-secondary institutions through a relevant curriculum that focuses on applied learning and real-world situations, relevant supervised work experience, integrated academics, and CTSOs (Lekes, 2007). This has been supported by federal and state initiatives such as the Smith-Hughes Act of 1917, the George-Deen Act of 1936, the Vocational Education Act of 1963, and the many Carl D. Perkins Acts and reauthorizations of 1984–2018. In California, 38% of high schools offer dual credit, and all 114 public community colleges in the California Community College System (Rodriguez & Gao, 2021). While dual credit is offered to

many high school students across California, it is still met with the competition of AP and IB courses. There are perceptions of PK–12 CTE that it prepares students to be career and college-ready (ACTE, 2002). The United States continues to look at CTE in a stigmatized fashion, even though that CTE today is different than CTE was in the past. School counselors typically do not suggest going to a two-year post-secondary school after graduation, and core content instructors perceive CTE for those less academically inclined (Handy & Braley, 2012; Kandalec Holm, 2019). There is a push for CTE and academic content to integrate to make smooth transitions for students to obtain high-wage jobs after high school or continue to further education after high school, but that has been challenging as many core teachers do not want to integrate CTE and core curriculum (Aliaga et al., 2014).

Two-year post-secondary institutions have made their growth in the United States and in California starting with the Morrill Act and changed based on high economic need times of the Great Depression, World War II, the GI Bill, recessions over the 1980s to the present (D'Amico, 2017; Gordon & Schultz, 2020). However, two-year post-secondary CTE continues to be underfunded compared to its public four-year university counterparts. California is no exception, as the funding per FTE student at a community college is significantly less than the University of California and California State University systems. Two-year post-secondary CTE programs are viewed as backup plans for those who are not accepted into four-year programs and do not have a rigorous curriculum (Handel, 2007; Lazerson, 2010; Ravitch, 2013).

Research supports that there are perceptions of CTE—both positive and negative (Gauthier, 2021; Kelly & Price, 2009; Shanklin, 2014; Tucker & Hughes, 2020; Tucker, 2019). There is a gap in the research on the perceptions that PK–12 marketing and business instructors

and two-year post-secondary marketing and business instructors have of the respective PK–12 and two-year post-secondary marketing and business programs.

Chapter III: Methods and Procedures

This mix-method research study aimed to explore the perceptions that PK–12 marketing and business instructors and two-year post-secondary marketing and business faculty perceptions have of the respective marketing and business program. Currently, there is a gap in the research on the perceptions that PK–12 and two-year post-secondary marketing and business instructors have of the respective marketing and business program. This research could provide insights and clarity for continued and improved collaboration among marketing and business education leaders in PK–14 in Southern California.

This study addressed the following research questions:

1. What perceptions do PK–12 marketing and business CTE faculty have about marketing and business two-year post-secondary programs?
    a. What is the purpose of PK–12 marketing and business programs?
    b. What role does two-year post-secondary marketing and business education serve in collaborating with PK–12 marketing and business instructors in preparing students for two-year post-secondary marketing and business?
    c. How does PK–12 align itself with two-year post-secondary marketing and business programs?
2. What perceptions do two-year post-secondary marketing and business CTE faculty have of PK–12 marketing and business programs?
    a. What is the purpose of PK–12 marketing and business programs?
    b. What role does PK–12 marketing and business education serve in preparing students for two-year post-secondary marketing and business?

c. How does PK–12 align itself with two-year post-secondary marketing and business programs?

Research Methodology

This research study utilized a nonexperimental single-phase convergent mixed-methods research design. Mixed-methods can provide more insight into a problem by integrating quantitative and qualitative data (Creswell & Creswell, 2018). Quantitative research typically examines the relationship through instruments so that data expressed in numbers can be analyzed using statistical procedures. Patten and Newhart (2018) asserted that quantitative research focuses on collecting data that will be represented numerically through existing datasets, polls, and surveys. Qualitative research utilizes an approach where questions are addressed as to why or how something occurred (Creswell & Creswell, 2018).

A quantitative approach paired with a qualitative approach was deployed to gain insight into the two research questions. Creswell and Creswell (2018) asserted that the convergent mixed-method design is best when comparing quantitative and qualitative data perspectives through integrating quantitative and qualitative data. Single-phase convergent mixed-method design is utilized when both qualitative and quantitative data are collected simultaneously and analyzed to see if the data confirm or not confirm each other (Creswell & Creswell, 2018).

Creswell and Creswell (2018) identified three components in research: philosophical worldview, design, and research methods which lead to a research approach. A postpositive philosophy lens is based on careful observation and measurement of the knowledge that exists in the world's reality. This research will be conducted in a postpositive worldview. The focus of postpositive philosophy is the causes or outcomes of research. Through the lens of the post-positivist, it is vital to reduce ideas into small numeric studies of behaviors and observations

(Creswell & Creswell, 2018). The second component is the research design. This research collected self-reported behaviors utilizing quantitative numeric outcomes and open-ended qualitative questions. According to Creswell & Creswell (2018), the final component of research is research methods. This mixed-method research approach utilized a researcher-developed survey instrument deployed with questions with numeric values (Creswell & Creswell, 2018). A survey instrument is best for collecting data on attitudes, observations, and perceptions. The quantitative data were statistically analyzed and interpreted by the researcher. Four open-ended questions were analyzed and reported within each survey using thematic reduction and focused coding. The focused coding was merged into numeric data transformation (Creswell & Creswell, 2018). These three components are what led to the convergent single-phase mixed-methods research approach that the researcher employed. As part of research question one, the research questions were answered through the survey instrument that the researcher developed.

As part of research question two, there were three sub-research questions: What is the purpose of PK–12 marketing and business programs; what role does PK–12 marketing and business education serve in preparing students for two-year post-secondary marketing and business; how does PK–12 align itself with two-year post-secondary marketing and business programs? It is noted that the first and third sub-questions for research question two was the same as the first and third sub-questions from research question one (what is the purpose of PK–12 marketing and business programs and how does PK–12 align itself with two-year post-secondary marketing and business programs?). This was done to compare responses from PK–12 instructors and two-year post-secondary instructors.

Subject Selection and Description

The target population is defined as the focus population of the study (Fraenkel et al., 2018). The population of this study was PK–12 marketing and business instructors and two-year post-secondary marketing and business instructors who were teaching full-time or part-time in Southern California. Southern California encompasses the following counties: Los Angeles, Imperial, Riverside, Orange, San Bernardino, Santa Barbara, San Diego, Ventura, San Luis Obispo, and Kern. It is noted that for this study, marketing and business were seen as one discipline. This study viewed marketing and business as not disaggregated. Instructors in the population varied in years of experience in their field of expertise and in the field of education. Instructors were employed in the department of business administration, business education, marketing, or other marketing and business department as defined by the PK–12 school or two-year post-secondary college.

This study used a convenience sampling technique or volunteerism. Patten & Newhart (2018) conveyed that a survey may be sent to an entire population, but only volunteers may fill out the survey. All population members had an equal opportunity to participate in the study. No defined number of subjects is needed for a sample from a larger population (Patten & Newhart, 2018). The researcher makes the decision of how many subjects are needed in order to provide useful results when conducting statistical analysis. The sample size also needs to be large enough to represent the population and the variations that align with the areas of the study inquiry (Patten & Newhart, 2018).

The surveys for PK–12 and two-year post-secondary population were sent out to lists of Southern California PK–12 and two-year post-secondary marketing and business instructors from the National Business Education Association, the California Business Educators

Association, the California Department of Education, online social media groups where California business and marketing instructors are a part of the online social media groups, and researcher developed lists of PK–12 and post-secondary educational institutions in Southern California. An email letter was sent to PK–12 and two-year post-secondary marketing and business instructors to be part of the study (see Appendix A). All levels of teaching experience were included in this study. Before the completion of the survey, informed consent was asked one more time.

The Institutional Review Board (IRB) approval was gained from the University of Wisconsin-Stout (UW-Stout) by the researcher. The study met all ethical research standards set forth by UW-Stout. Ethical considerations must have command of all research designs and all steps during the research process (Creswell & Creswell, 2018). Ethical research includes protecting research subjects, developing trust, protecting research integrity, protecting research against misconduct that might be a reflection of the institution, and coping with new and challenging problems that exist in research.

Instrumentation

Creswell and Creswell (2018) discussed that in mixed-method convergence design, quantitative and qualitative data will collect the same concepts through instrumentation. Patten and Newhart (2018) identified instruments used in quantitative research as instruments can provide accessible numerical data. An example is a questionnaire with closed-answer or quantifiable questions (e.g., Likert scale). In addition, questions in quantitative research are more targeted as the aim of quantitative research is to generalize to a larger population (Patten & Newhart, 2018). This study followed the single-phase convergent mixed-methods research design (Creswell & Creswell, 2018).

A survey was utilized to gather perceptions about PK–12 and two-year post-secondary instructors. Survey research is conducted to examine variables as they exist and can include descriptive questions (Creswell & Creswell, 2018). Survey research focuses on a population's quantitative or numeric trends, opinions, and attitudes by studying a population sample (Creswell & Creswell, 2018; Patten & Newhart, 2018). Fowler (2008) discussed that survey research could include cross-sectional and longitudinal studies utilizing surveys or structured interviews to generalize a sample to a population. Survey instruments were researcher developed for PK–12 and two-year post-secondary marketing and business instructors. Each survey question was aligned with the 11 elements of a high-quality CTE program in California for PK–14 programs (see Appendix B). The 11 elements of high-quality CTE in California are (1) Leadership at All Levels; (2) High-Quality Curriculum and Instruction; (3) Career Exploration and Guidance; (4) Student Support and Student Leadership Development; (5) Industry Partnerships; (6) System Alignment and Coherence; (7) Effective Organizational Design; (8) System Responds to Economic Demands; (9) Skilled Faculty and Professional Development; (10) Evaluation, Accountability, and Continuous Improvement; and (11) CTE Promotion, Outreach, and Communication (see Appendix B). This framework is used for local K–16 CTE programs to self-evaluate their programs and for the state of California to evaluate local CTE programs to receive CTE funding from California. The questions from the researcher-developed survey were structured to get the perceptions of PK–12 and two-year post-secondary instructors.

The survey included open-ended and close-ended questions where the population expressed their perceptions utilizing a Likert scale for close-ended questions and open-ended questions where the population could describe their perceptions in detail. The open-ended responses were aligned with each primary research question and sub-research question. Each

population responded to statements and questions utilizing a Likert scale of degree of agreeance: 1 (*strongly disagree*), 2 (*disagree*), 3 (*neither agree or disagree*), 4 (*agree*), or 5 (*strongly agree*). Likert scales are commonly used in quantitative and survey research (Creswell & Creswell, 2018; Patten & Newhart, 2018). Lichtman (2012) refers to open-ended questions as writing by others. Writing by others is written material created by participants that can be used to capture participants' thoughts, ideas, and meanings. At the end of each survey, participants responded to demographic information and types of marketing and business courses taught. Demographic data included what county of Southern California the instructor led in, how many years of experience the instructor had teaching PK–12 or two-year post-secondary, what type of teaching credential the instructor possessed (CTE designated or single subject business) for PK–12 instructors, school site/educational institution, and if local PK–12 school site had two-year post-secondary agreements set up with a community college. Patten & Newhart (2018) expressed that each marker will have a score associated to analyze the data using statistical analysis.

Validity and reliability are important concepts that every researcher must consider when conducting mixed-method research. Internal validity in quantitative research is defined as whether the researcher can make meaningful and useful inferences from the instrument's scores (Creswell & Creswell, 2018). The researcher must keep validity in mind while conducting this study as it will determine if a survey or instrument is good to one to use in survey research.

External validity in this research was content validity and concurrent validity. Content validity is the measure of the appropriateness of its contents, or if the questions being asked to measure the content it was intended to measure (Creswell & Creswell, 2018; Patten & Newhart, 2018). To address content validity in this study, all questions were aligned to the 11 elements of high-quality CTE assessment used in California. The high-quality CTE assessment-aligned

questions also are aligned with the research questions and sub-research questions. This was important to establish the content validity of an instrument.

Concurrent validity and reliability are also crucial in any research study. Concurrent validity is a coefficient in which the test or instrument is collected at about the same time and analyzed based on the same trait (Creswell & Creswell, 2018; Patten & Newhart, 2018). Concurrent validity was necessary as there were two instruments in this study that were given to two different groups of subjects at the same time (Creswell & Creswell, 2018). Reliability is the consistency or repeatability of an instrument (Creswell & Creswell, 2018). Creswell and Creswell (2018) identified that internal consistency or "the degree to which sets of items on an instrument behave in the same way" (pp. 153).

To account for concurrent validity and content reliability, Creswell and Creswell (2018) identified pilot testing or field testing. When an instrument is pilot-tested, or field-tested, feedback can be provided on how long it takes to take the survey, instructions, and the questions being asked (Creswell & Creswell, 2018). In this study, the surveys were field-tested with three PK–12 and two-year post-secondary-level instructors. In addition, this study collected data from the PK–12 marketing and business instructor population and the data for the post-secondary marketing and business population simultaneously. Each survey included both quantitative and qualitative components, which were collected at the same time. The researcher utilized statistical analysis and conducted a *t*-test for each of the questions that were the same among the two surveys.

In mixed-methods research, triangulation is also recommended for validity (Creswell & Creswell, 2018; Lichtman, 2012). Triangulation is several points of data for validation (Lichtman, 2012). In this mixed-methods study, there were several validation points, including

quantitative data analysis, qualitative data analysis, and data transformation that assigns quantitative values to the qualitative data. The study utilized the following closed-ended and open-ended questions for participants (see Appendix C and Appendix D).

Data Collection Procedures

Data collection was kept in a secret location. All subjects' identifying information was kept secure. After all the data was collected and analyzed, all files and data related to the research were kept in a non-accessible location to respect the subjects' privacy. Any subject that responded electronically via Qualtrics (qualtrics.com) was kept in a computer-protected computer that only the researcher had access to.

A survey instrument was utilized via Qualtrics (see Appendix C and Appendix D) for research question one and two. An email introduction was sent out to PK–12 and two-year post-secondary instructors (see Appendix A) explaining the purpose of the study and an invitation for PK–12 and two-year post-secondary marketing and business instructors to participate in the study. A reminder email was sent out to subjects who had not participated one week after the survey was deployed and two days before the survey closed. Once the instructor clicked on the link that was included in the introduction email, they were asked again for informed consent (see Appendix E). Once the subject completed the survey, a thank you message was automatically generated from Qualtrics (qualtrics.com).

Data Analysis

Creswell & Creswell (2018) explained a single-phase convergent mixed-methods as when a survey is distributed with quantitative and qualitative elements. Data analysis includes presenting the results in tables or figures and interpreting the results. Interpretation in quantitative research includes drawing conclusions from the research questions' results and the

results' larger meaning (Creswell & Creswell, 2018). In this research the results help to generalize perceptions of PK–12 and two-year post-secondary marketing and business instructors of two-year post-secondary and PK–12 marketing and business programs in Southern California. This mixed-methods utilized data transformation to further analyze the survey data (Creswell & Creswell, 2018).

The quantitative data was analyzed utilizing descriptive statistics, *t*-test, and Cohen's *d* for close-ended questions. A *t*-test and Cohen's *d* were utilized to compare results of one survey to another with the same question. Cohen's *d* can be interpreted by the standardized difference in effect sizes of two means. When Cohen's *d* is closer to 0, it is a smaller effect size; when Cohen's *d* is closer to -1 or 1, it is a higher effect size (Creswell & Creswell, 2018). A larger *t*-test score was interpreted as the two responses from each population were different, whereas a smaller *t*-test score was interpreted as the responses for each population were similar (Creswell & Creswell, 2018). According to Fraenkel et al. (2018), quantitative researchers want to establish generalizations that are established in environments and situations. Quantitative research can include non-experimental methods such as survey research (Patten & Newhart, 2018). The researcher reported via table with mean, median, mode, standard deviation, and the number of subjects. A smaller standard deviation indicated that more responses are within the mean value (Patten & Newhart, 2018).

Qualitative research comprises writings by participants that are used to capture the thoughts, ideas, and meanings of participants (Lichtman, 2012). In this study, at the end of each instrument, there was an open-ended question asking the subject to explain their answers to any of the questions in the survey instrument. These open-ended responses were analyzed by thematic reduction and coded for analysis using focused coding (Mezmir, 2020). After

winnowing the data or aggregating the data, focused coding happened through identifying the most frequent codes and organizing them into categories and subcategories (Mezmir, 2020).

In mixed-methods research, triangulation is recommended (Creswell & Creswell, 2018; Lichtman, 2012). Triangulation, in this case, was closed-ended responses, open-ended responses collected simultaneously, and data transformation (Creswell & Creswell, 2018; Lichtman, 2012). Data transformation involves categorizing qualitative themes or codes to form quantitative measures (Creswell & Creswell, 2018). This allowed the researcher to interpret quantitative data and explain via the quantifiable themes from the open-ended qualitative questions.

Limitations

There were several limitations in this study based on the design of the research. It is noted that marketing and business can be seen as two separate disciplines (Advance CTE, n.d.d). In this research, marketing and business were viewed as one and was not disaggregated. Many times, marketing and business exist together under one department. To mitigate this limitation, a disclaimer was put on each survey to instruct the population that marketing and business will not be disaggregated when questions are asked.

The researcher utilized a convenience sample, and there was no way to truly understand how biased the sample was with volunteerism (Creswell & Creswell, 2018). To mitigate this bias, the demographic question of county location helped the researcher understand if all areas of Southern California were represented. The survey instrument was sent via Qualtrics to possible subjects in Southern California using a researcher developed lists of marketing and business educators, social media that marketing and business educators are a part of, lists from the National Business Education Association (NBEA), and lists from the California Business Educators Association (CBEA). When the survey was sent to the population, the subject was

asked to participate on a volunteer basis. This can cause a sample to be biased as subjects can select to participate (Patten & Newhart, 2018).

Content reliability was also a concern as the researcher developed the instruments. The researcher had to take care to avoid leading questions, work to keep the questions simple, and used common language when creating questions. If these considerations were not addressed, it could have caused participants to answer questions differently (Fraenkel et al., 2018). The researcher field-tested the instrument with three professionals in the field to receive feedback and improve the instrument before it was sent out to the greater population. The feedback that was received: how long it takes to take the survey, instructions, and questions being asked (Creswell & Creswell, 2018). Potential concerns regarding the instrument can be addressed when field-tested, such as participant fatigue (Creswell & Creswell, 2018).

When analyzing each research question and sub-research question, the researcher triangulated data by utilizing data transformation. Data transformation was utilized to transform qualitative themes into quantitative groupings (Creswell & Creswell, 2018). When analyzing the qualitative responses of each sub-research question and research question, focused coding was utilized. When focused coding and content analysis are used, frequent codes can have varying degrees of belonging (Mezmir, 2020). When coding and analyzing, categories and subcategories were utilized to best interpret the open-ended question at the end of each instrument to mitigate this limitation (Mezmir, 2020).

Summary

The mixed-method study involved PK–12 marketing and business instructors and two-year post-secondary marketing and business instructors from Southern California in the following counties: Los Angeles, Imperial, Riverside, Orange, San Bernardino, Santa Barbara,

San Diego, Ventura, San Luis Obispo, and Kern. Only instructors who are full-time or part-time instructors when the survey was deployed were invited to participate in the study. The researcher utilized a single-phase convergent mixed-method research design to evaluate the perceptions of PK–12 and two-year post-secondary perceptions of PK–12 and two-year post-secondary marketing and business programs in Southern California.

There was a multitude of analyses that were conducted with the quantitative and qualitative data. The open-ended questions were analyzed by winnowing and aggregating the data and utilizing focused coding (Mezmir, 2020). The quantitative data and open-ended responses were collected through a survey via Qualtrics. Descriptive statistics were reported from the quantitative analysis of the findings. A *t*-test and Cohen's *d* were utilized to compare the different responses of the two populations. Focused coding was used when analyzing qualitative data. Finally, data transformation was utilized to triangulate this study's data (Creswell & Creswell, 2018; Lichtman, 2012).

Chapter IV: Presentation of the Findings

The purpose of this mixed methods research study was to further the research on the perceptions that PK–12 and two-year post-secondary marketing and business instructors have of PK–12 and two-year post-secondary marketing and business programs in Southern California. Specifically, the purpose of PK–12 marketing and business programs, alignment between PK–12 and post-secondary, and how PK–12 and post-secondary marketing and business instructors collaborate. This study may also contribute to the research on how PK–12 CTE instructors prepare students for college and career readiness and improvements that can be made for a better college and career pipeline. This chapter will review the research methodology, the demographics of the data collected, and the presentation of this study's quantitative and qualitative findings. The following research questions and sub-research questions organize the results of this study:

1. Research Question 1: What perceptions do PK–12 marketing and business CTE faculty have about marketing and business two-year post-secondary programs?
2. What is the purpose of PK–12 marketing and business programs?
3. What role does two-year post-secondary marketing and business education serve in collaborating with PK–12 marketing and business instructors in preparing students for two-year post-secondary marketing and business?
4. How does PK–12 align itself with two-year post-secondary marketing and business programs?
5. Research Question 2: What perceptions do two-year post-secondary marketing and business CTE faculty have of PK–12 marketing and business programs?
    a. What is the purpose of PK–12 marketing and business programs?

b. What role does PK–12 marketing and business education serve in preparing students for two-year post-secondary marketing and business?
c. How does PK–12 align itself with two-year post-secondary marketing and business programs?

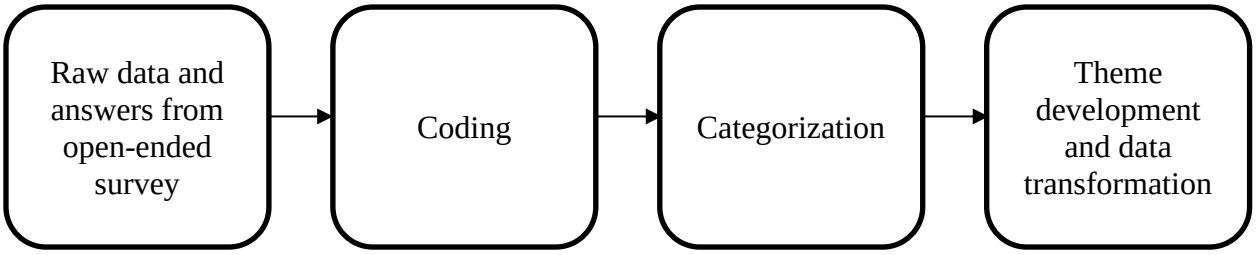
Review of Methodology

Data collection occurred utilizing quantitative and qualitative methods for this study. Research question 1 and research question 2, both utilized a survey research approach which included closed-ended and open-ended questions. The researcher utilized descriptive statistics and reported using a table with the number and percentage of participants. The researcher utilized *t*-tests for sub-research questions 1a and 2a, *what is the purpose of PK–12 marketing and business programs,* and sub-research questions 1c and 2c, *how does PK–12 align itself with two-year post-secondary marketing and business programs.* The statistical analysis included mean, standard deviation, *t*-tests, *p*-values, and Cohen's *d*. For each research question and sub-research question for each population, PK–12 marketing and business instructors and two-year post-secondary marketing and business instructors, an open-ended question was asked of participants to respond to. The open-ended question related to the group of closed-ended questions or the research question overall. In mixed methods research, triangulation is also recommended for validity (Creswell & Creswell, 2018; Lichtman, 2012). Triangulation, in this case, was closed-ended responses, open-ended responses collected simultaneously, and data transformation (Creswell & Creswell, 2018; Lichtman, 2012). After data transformation was conducted, themes were reported based on the frequency in which they occurred in the qualitative responses (see Figure 1). Each survey included quantitative and qualitative components, which were collected simultaneously. The researcher utilized statistical analysis to determine the *t*-tests of the

questions that were the same between the two surveys. The qualitative questions were analyzed by thematic reduction of the short-answer responses and coded for analysis using focused coding (Mezmir, 2020). After winnowing or aggregating the data, focused coding happened to identify the most frequent codes and organize them into categories and subcategories (Mezmir, 2020).

Figure 1

Process to Analyze Qualitative Data including Data Transformation



Demographics

Demographics are essential to understand as part of the research. Demographics describe participants within a research study. PK–12 and two-year post-secondary participants had different demographics as part of this study.

Demographics Research Question 1

The first research question was answered by distributing a survey through Qualtrics to 224 PK–12 marketing and business instructors who teach in Southern California, to which $n = 17$ responded. Instructors completed 16 closed-ended Likert scale questions and four open-ended questions directly related to the research question or one of the three sub-research questions. For the closed-ended Likert scale questions, participants rated each question on a scale of one to five: (1) *strongly disagree*; (2) *disagree*; (3) *neither agree nor disagree*; (4) *agree*; (5) *strongly agree*.

The instructors varied in years of experience and in the pathways taught. Table 1 shows the demographics of the 17 PK–12 marketing and business instructors who participated in the survey research. Of the 17 participants, one had 1–5 years of teaching experience, three had 6–10

years of teaching experience, zero had 11–15 years of teaching experience, three had 16–20 years of teaching experience, seven had 21–25 years of teaching experience, and three had 25+ years of teaching experience.

Table 1 displays the marketing and business pathways that the PK–12 marketing and business instructor currently taught at the time of the survey. Of 17 participants, seven taught in the business administration pathway, six in the entrepreneurship pathway, four in the information technology pathway, six in the management pathway, six in the marketing pathway, six in a pathway that was not listed, and four in the sales pathway. It is noted that the number of pathways being taught is larger than the participant number. Participants had the option to select all pathways that they taught. Some instructors taught courses in more than one pathway as part of their teaching position.

Table 1 also includes PK–12 instructors' comfort level in teaching a dual credit course from a two-year post-secondary institution. The majority, 12 of the 17 participants were extremely comfortable. Of the other participants, zero were extremely uncomfortable, one was somewhat uncomfortable, one was neither comfortable nor uncomfortable, and three comfortable.

Table 1 displays the counties that PK–12 marketing and business instructors teach in Southern California, including nine instructors in Los Angeles County, one in Orange County, two in Riverside County, three in San Bernardino County, one in Santa Barbara County, one in Ventura County, and zero in the following counties: Imperial County, Kern County, San Luis Obispo County, and San Diego County.

Table 1 shows how many instructors were full-time or part-time; where out of 17 instructors, 15 were full-time, and two were part-time.

Table 1

Demographic Characteristics of PK–12 Marketing and Business Instructors

Demographic characteristic	PK–12 instructors	
	n	%
Years of teaching experience		
1–5 years	1	5.88
6–10 years	3	17.65
11–15 years	0	0
16–20 years	3	17.65
21–25 years	7	41.18
25+ years	3	17.65
Marketing and business pathways currently teaching [a]		
Business administration	7	17.95
Entrepreneurship	6	15.38
Information technology	4	10.26
Management	6	15.38
Marketing	6	15.38
Other	6	15.38
Sales	4	10.26
Teachers comfortable teaching a dual credit course		
Extremely uncomfortable	0	0.00
Somewhat uncomfortable	1	5.88
Neither comfortable or uncomfortable	1	5.88
Comfortable	3	17.65
Extremely comfortable	12	70.59
County in which teacher currently teaches		
Imperial	0	0.00
Kern	0	0.00
Los Angeles	9	52.94
Orange	1	5.88
Riverside	2	11.76
San Bernardino	3	17.65
Santa Barbara	1	5.88
San Luis Obispo	0	0.00
San Diego	0	0.00
Ventura	1	5.88
Full-time and part-time teaching status		
Full-time	15	88.24
Part-time	2	11.76

Note. $n = 17$

[a] $n = 39$. Participants could select more than one pathway related to their teaching position.

Demographics Research Question 2

The second research question gathered responses by distributing a survey through Qualtrics (qualtrics.com) to two-year post-secondary marketing and business instructors who teach in Southern California. Instructors completed 14 closed-ended Likert scale questions and four open-ended response questions directly related to the research questions or one of the three sub-research questions. For the closed-ended Likert scale questions, participants rated each question on a scale of one to five: (1) *strongly disagree*; (2) *disagree*; (3) *neither agree nor disagree*; (4) *agree*; (5) *strongly agree*.

Two-year post-secondary marketing and business instructors varied in years of teaching experience. Zero instructors had 1–5 years of teaching experience, six had 6–10 years of teaching experience, four had 11–15 years of teaching experience, five had 16–20 years of teaching experience, one had 21–25 years of teaching experience, and three had 25+ years of teaching experience.

Table 2 shows the varied marketing and business pathway areas that are described. Nineteen instructors taught in the business administration pathway, ten instructors taught entrepreneurship, two taught information technology, 11 taught management, nine taught marketing, two taught in other pathways that were not represented, and one taught in the sales pathway. It is noted that the number of pathways being taught is larger than the participant number. Participants had the option to select all pathways that they taught. Some instructors taught courses in more than one pathway as part of their teaching position.

Table 2 displays two-year post-secondary instructors' comfort in administering dual credit courses to PK–12 marketing and business instructors. Out of 19 instructors, one was extremely uncomfortable, one somewhat uncomfortable, three neither comfortable nor

uncomfortable, six comfortable, and eight extremely comfortable when administering a dual credit course.

There were a variety of counties instructors taught in. Table 2 shows the counties where two-year post-secondary instructors taught within Southern California. Out of 19 participants, zero taught in Imperial County, one taught in Kern County, eight taught in Los Angeles County, three taught in Orange County, two taught in Riverside County, zero in San Bernardino County, one taught in Santa Barbara County, three taught in San Luis Obispo County, one taught in San Diego County, and zero taught in Ventura County.

There were a variety of full-time and part-time two-year post-secondary instructor participants. Out of 19 participants, ten were full-time, and nine were part-time.

Table 2

Demographic Characteristics of Two-Year Post-Secondary Marketing and Business Instructors

Demographic characteristic	Two-year post-secondary instructors	
	n	*%*
Years of teaching experience		
1–5 years	0	0.00
6–10 years	6	31.58
11–15 years	4	21.05
16–20 years	5	26.32
21–25 years	1	5.26
25+ years	3	15.79
Marketing and business pathways currently teaching [a]		
Business administration	16	41.03
Entrepreneurship	10	25.64
Information technology	2	5.13
Management	11	57.89
Marketing	9	47.37
Other	2	5.13
Sales	1	2.56
Teachers comfortable administering a dual credit course		
Extremely uncomfortable	1	5.26
Somewhat uncomfortable	1	5.26
Neither comfortable nor uncomfortable	3	15.79
Comfortable	6	31.58
Extremely comfortable	8	42.11
County in which Teacher Currently Teaches		
Imperial	0	0.00
Kern	1	5.26
Los Angeles	8	42.11
Orange	3	15.79
Riverside	2	10.53
San Bernardino	0	0.00
Santa Barbara	1	5.26
San Luis Obispo	3	15.79
San Diego	1	5.26
Ventura	0	0.00
Full-time and Part-time Teaching Status		
Full-time	10	52.63
Part-time	9	47.37

Note. n = 19

[a] *n*=59. Participants could select more than one pathway related to their teaching position.

Findings

The objectives of this research were to understand PK–12 marketing and business instructor perceptions of two-year post-secondary marketing and business programs and two-year post-secondary marketing and business instructor perceptions of PK–12 marketing and business programs. Not every institution has marketing and business programs within the secondary and two-year post-secondary system. This study specifically focused on educational institutions that had marketing and business programs.

Research Question 1: What Perceptions Do PK–12 Marketing and Business CTE Faculty Have About Two-Year Post-Secondary Marketing and Business Programs?

This research question aimed to identify perceptions that PK–12 marketing and business instructors have of two-year post-secondary marketing and business programs. To answer this research question, there were three sub-research questions that participants responded to with closed-ended and open-ended responses. The three sub-research questions are (1) what is the purpose of PK–12 marketing and business programs; (2) what role does two-year post-secondary marketing and business education serve in collaborating with PK–12 marketing and business instructors in preparing students for two-year post-secondary marketing and business; and (3) how does PK–12 align itself with two-year post-secondary marketing and business programs? There were a group of closed-ended questions per sub-research question: one open-ended question per sub-research question and one open-ended question aligned to each research question.

Appendix F is a sample of how the focused coding process was completed. Column one identifies relevant phrases and words to be coded from raw data. Any words or phrases crossed out where not used. Any words or phrases highlighted were used. Column two was essential

meaning that was disaggregated from the raw data in column one. Column three was the final themes that was disaggregated from column two and the data transformation relative to the qualitative statements.

Table 3 displays the quantitative data transformation process once the qualitative thematic analysis was completed. Seventeen PK–12 marketing and business instructors responded to the open-ended question. The major themes that occurred from this research question were: (1) prepare students for their future with job skills or academics; (2) positive programs and excellent staff; and (3) no opinion or negative perception or community college will not collaborate. Table 3 shows the themes in order of frequency based on coding.

Table 3 shows the qualitative themes of the open-ended question that directly aligned to research question 1. The three themes are: prepare students for their future with job skills or academics was the top theme, followed by a positive program and excellent staff, and ended with no opinion, negative perception, or community college will not collaborate.

Table 3

Pk–12 Instructor Data Transformation Responses to the Open-Ended Research Question: What Perceptions Do You Have of Two-Year Post-Secondary Marketing and Business Education Programs?

Theme	PK–12 instructors	
	n	*%*
Prepare students for their future with job skills or academics	11	52.38
Positive program and excellent staff	6	28.57
No opinion or Negative Perception/ community college will not collaborate	4	19.05

Note. $n = 21$.

Theme 1: Prepare Students for Their Future with Job Skills or Academics

The first theme focused on how two-year post-secondary marketing and business programs prepare students for their future with job skills or continuing with formal education. Participant 10 discussed ways that two-year programs support students:

> I think the post-secondary programs try their best to meet the needs of the community and also to encourage the students to transfer to the next level for their bachelor's degree. There are many certificates available at the community college level that help our students get employability skills so they can get a job right away, which help the families in our community. However, it takes a lot of efforts to help students see the connection between these programs and their immediate future.

Two-year post-secondary marketing and business programs help teach students about business and marketing by preparing students for jobs and encouraging students in their next educational or career step. This is demonstrated by participants three and 11, who discussed how post-secondary marketing and business programs prepare students for the workforce and future education. Participant 3 discusses, “Business and marketing education program in conjunction with academic study preparing students for lifelong success.” Participant 11 discusses, “The 2-year marketing and business programs work well and prepare students for jobs. However, they have to engage in so much makeup work (not being done correctly by the PK–12 system) that less time is available for job-specific skill training.”

Post-secondary marketing and business programs provide educational certificates, industry certifications, and associate of arts/associate of science degrees related to marketing and business subjects. Participant 4 discusses how two-year marketing and business programs support students interested in those subject areas, “Two-year post-secondary marketing and

business education programs help students who have an interest in business finance, marketing, management, accounting, Business administration, business law and personal finance."

PK–12 marketing and business instructors are advocates for two-year post-secondary marketing and business programs and how they prepare students for the workforce and continuing with their education.

Theme 2: Positive Program and Excellent Staff

PK–12 marketing and business instructors had positive perceptions regarding two-year post-secondary marketing and business education programs. Participant 12 discusses their positive views about two-year post-secondary marketing and business programs, "I am fully on board. I have nothing but positive views."

Two-year postsecondary colleges have excellent programming that meets the community's needs, is valuable and necessary, is taught by faculty with industry experience, and is cost-effective. These positive qualities of two-year post-secondary marketing and business programs are demonstrated by participant 5, "I believe these programs are valuable and necessary because of the programs are easily accessible, cost effective, and often taught by faculty with relevant industry experience."

PK–12 marketing and business instructors positively view two-year post-secondary marketing and business programs. The positive views include positive interactions, accessibility, cost, and faculty with industry experience.

Theme 3: No Opinion or Negative Perception That Community College Will Not Collaborate

Theme three discusses negative perceptions and lack of opinion that PK–12 has of post-secondary marketing and business programs. There are two-year colleges that are hesitant to collaborate with PK–12 programs or are unaware of PK–12 programs. This is discussed by

participant 7 with their experience, “[They] wouldn’t allow us to articulate with anything of any merit. Not a great experience.”

In addition, there are two-year colleges that will not collaborate and articulate with PK–12 business and marketing programs and instructors. That is a bad experience when working with two-year colleges. “I have no idea and I cannot speak on their behalf. I am a high school business teacher; CC will not collaborate with me.”

There can be struggles when PK–12 collaborates with post-secondary marketing and business programs. Why post-secondary marketing and business programs would not articulate or collaborate with PK–12 instructors is unknown.

Research Question 1, Sub-Research Question A: What Is the Purpose Of PK–12 Marketing and Business Programs?

This sub-research question aimed to understand the perceptions that PK–12 marketing and business instructors have of PK–12 marketing and business programs. This same question was asked of two-year post-secondary marketing and business instructors to understand two-year post-secondary marketing and business instructor perceptions of PK–12 marketing and business programs. To answer this question, participants ranked closed-ended questions based on a five-point Likert scale to the degree to which they agree: (1) *strongly disagree*; (2) *disagree*; (3) *neutral*; (4) a*gree*; and (5) s*trongly agree*. Participants also answered an open-ended question directly aligned with the sub-research question and closed-ended Likert scale questions. Results were separated by PK–12 marketing and business instructors and two-year post-secondary marketing and business instructors.

Table 4 refers to the responses to the closed-ended questions that were answered by PK–12 marketing and business instructors and two-year post-secondary marketing and business

instructors. Table 4 indicates the mean and standard deviation for the PK–12 and two-year post-secondary instructor responses. The same questions were asked of PK–12 instructors and two-year post-secondary instructors, and a *t*-test was conducted to compare the responses from the two populations. Cohen's *d* was also reported, which can be interpreted by the standardized difference in effect sizes of two means. When Cohen's *d* is closer to 0, it is a smaller effect size; when Cohen's *d* is closer to -1 or 1, it is a higher effect size (Creswell & Creswell, 2018).

PK–12 has a few purposes, such as preparing students to enter the workforce and preparing students to enter post-secondary education. PK–12 instructors agree that PK–12 marketing and business programs prepare students to enter two-year post-secondary marketing and business programs and prepare students to go directly into the workforce with a score above 4.0 on a 5.0 agreeability scale as indicated in Table 4. Table 4 also shows that PK–12 instructors are neutral, above 3.0 but below 4.0, that PK–12 marketing and business programs collaborate with industry to get feedback on the curriculum, PK–12 students receive specific career education guidance for marketing and business two-year post-secondary opportunities, and PK–12 marketing and business programs provide high-quality work-based learning opportunities.

PK–12 marketing and business instructors reported a higher response for the following question, *provides high quality work-based learning opportunities. (e.g., internships or pre-apprenticeship)*, in Table 4 compared to two-year post-secondary marketing and business instructors' responses. All questions were statistically significant. In addition, four out of the five questions from Table 4 were highly statistically significant with a $p < .001$. All questions in Table 4 had a Cohen's $d < .6$, which indicates a high degree of difference among all questions between PK–12 responses and two-year post-secondary responses.

Table 4

Two-Year Post-Secondary and PK–12 Marketing and Business Instructor Responses to Sub-Research Question: What Is the Purpose Of PK–12 Marketing and Business Programs?

Statement	PK–12 instructors		Two-year post-secondary instructors		*t*	*p*	*d*
	M	*SD*	*M*	*SD*			
Prepares students to enter two-year post-secondary marketing and business programs.	4.10	1.06	2.89	1.21	3.544	.001	1.198
Prepares students to go directly into the workforce.	4.19	.79	2.15	0.91	6.694	0.00	2.264
Provides high quality work-based learning opportunities. (e.g., internships or pre-apprenticeship).	3.57	1.09	2.55	0.92	3.694	.001	1.249
Receive specific career and education guidance for marketing and business regarding two-year post-secondary opportunities.	3.71	1.16	2.90	1.09	2.713	.011	.917
Collaborates with industry to review and provide feedback on the PK–12 marketing and business education curriculum.	3.76	1.11	2.68	1.17	4.180	0.00	1.414

Note. *n = 36.* Mean parameter values for each of the analyses are shown for the PK–12 marketing and business instructors (*n* = 17) and two-year post-secondary marketing and business instructors (*n* = 19), as well as the results of *t*-tests (assuming equal variance) comparing the parameter estimates between the two groups.

*$p < .05$.

Eighteen PK–12 marketing and business instructors responded to the open-ended question. The themes that emerged from this research question were: (1) prepare students for the workforce; (2) postsecondary preparation in business; (3) develop soft skills or skills for after high school; and (4) curriculum focused on retail. Table 5 shows the themes in order of frequency based on coding.

Table 5

PK–12 Instructor Data Transformation Responses to the Open-Ended Research Question: What Is the Purpose Of PK–12 Marketing and Business Programs?

Theme	PK–12 Instructors	
	n	*%*
Prepare for workforce	29	56.86
Postsecondary preparation in business	10	19.61
Develop soft skills or skills for after high school	7	13.73
Curriculum focused on retail	5	9.80

Note. n =51.

Theme 1: Prepare for the Workforce

PK–12 prepares students with career skills, business and marketing skills, and experience to enter the workforce directly after high school. These skills expose students to business-related situations that students would encounter in the workforce. Participant 3 discusses the purpose of PK–12 and how students are introduced to workforce foundational skills:

> The purpose is to introduce the students to some basic principles of business: marketing, finance, sales, operations, and management. I do this through a project-based class where students develop business plans, interact with community business leaders, and create a real business generating real revenue. Students learn to deal with problems like delayed work from vendors, software glitches, human resources, and all the little things a small business owners deal with on a daily basis.

PK–12 instructors provide various experiences, including what to expect in the workplace, to students who may have little to no experience. Participant 5 discusses the impact PK–12 marketing and business programs have on students before entering the workplace:

> I believe these courses are offered to give students insight on what to expect in the real-world workplace. Since students have little or no experience before leaving high school or college, these courses better prepare them on what to expect.

PK–12 instructors prepare students on foundational workplace skills and skills that students can use in business-related positions. Participant 13 discusses business-related skills and foundational skills that PK–12 instructors teach their students, “prepare students for business related positions and supports fundamental skills necessary to succeed in such positions.”

Theme 2: Post-Secondary Preparation in Business

PK–12 marketing and business programs prepare students to continue to post-secondary, university, and college education in business and marketing. While college preparation is essential to enter various business programs, there is a focus within the business program. Participant 7 describes how PK–12 focuses on preparing students to enter post-secondary education in marketing and business:

> As both college and career readiness should be a goal in any business program, it may best fit students' needs to have slightly more focus on one over the other in curriculum planning if that is more aligned with the needs and abilities of the overall student base. For example, college readiness skills in business teaching may require more foundational theory and rigor to adequately prepare students to enter competitive business programs in places such as UPenn's Wharton School of Business.

In addition to preparing students for post-secondary marketing and business programs, there must be some alignment to skills needed in the industry. Participant 9 describes PK–12 ’s purpose in preparing students and entry level employment, “prepare students for Business industry employment or college level Business courses.”

Preparing students for post-secondary education in marketing and business while providing opportunities for PK–12 students to gain real-life experiences is further advocated by participant 14:

> *I believe the intent of these programs is to prepare students for college programs in these areas while providing real-life experience.*

PK–12 marketing and business instructors teach students in various environments, depending on their student base. Instructors prepare students to enter various post-secondary education institutions while staying aligned with the industry in business for employment, ensuring that students have foundational business concepts.

Theme 3: Develop Soft Skills or Skills for After High School

PK–12 marketing and business programs develop students with soft and social skills that will be utilized after high school and in the workplace, including leadership and critical thinking. Soft skills include attributes such as leadership, which participant four highlights:

> In the 21st century, it also involves training students in softer skills such as leadership. With the increase of globalization, most companies now face competition from around the world and not just from other businesses in their own communities.

There is some discussion that students develop professional social, soft, and life skills when coming out of PK–12 marketing and business programs. The development of these skills is advocated by participant 10:

> Students are building soft skills, social skills, life skills from PK - 12. These skills are greatly lacking in our students today. All students should leave high school with a certification or a AA degree, I believe. All student who had the opportunity to take a

> marketing and business class will tell you they have learned more in that class for life them more of their other classes.

There are technical skills that students learn from PK–12 marketing and business classes that prepare students for the workforce. While technical skills are important, soft skills are just as essential and can be easily transferrable to any area in and out of marketing and business.

Theme 4: Curriculum Focused on Retail

PK–12 marketing and business curriculum is focused on preparing students to leave with industry certifications, more aligned with the needs and abilities of students, and more on college and career in curriculum planning—not just college and not just career. There is a balance that PK–12 marketing and business instructors must maintain while implementing hard skills or technical skills, critical thinking, and college readiness skills. This balance is shared by participant seven:

> In this case, curriculum of the program must implement hard-skills just as a career focused program but with added levels of critical-thinking and advanced topics to adequately prepare the student base for advanced business programs. Thus, the medium between college and career readiness and business curriculum planning must ultimately rely on the student base and needs in each perspective area for optimal application.

It is essential to teach students how to gain soft skills and technical skills. It is also a skill to obtain a job. Getting a job includes searching for a job to starting the first day and on up through their career. Participant 18 emphasizes the skills that are taught in PK –12 marketing and business programs in addition to soft skills and technical skills:

> Prepare students for work during and after high school. My Marketing curriculum focused a lot on Retail. The goal was for students to acquire a retail job/internship while

in high school and learn how to move up to a management position and so on. Resumes, Cover Letters, Digital Presence (digital resumes, etc.), attain a job, keep a job, and most importantly quire and practice good essential skills (soft skills).

Essential skills are taught in PK–12 marketing and business programs, such as soft skills and career development skills. PK–12 programs also teach technical skills in marketing and business. All these skills can be transferred to other jobs and positions as students continue to further their education and/or move up in their careers.

Research Question 1, Sub-Research Question B: What Role Does Two-Year Post-Secondary Marketing and Business Education Serve in Collaborating With PK–12 Marketing And Business Instructors In Preparing Students For Two-Year Post-Secondary Marketing And Business?

This sub-research question aimed to understand the perceptions that PK–12 marketing and business instructors have regarding two-year post-secondary marketing and business education collaborating with PK–12 marketing and business instructors to prepare students for two-year post-secondary marketing and business programs. This question was only asked of PK–12 instructors. To answer this question, participants ranked closed-ended questions based on a five-point Likert scale to the degree to which they agreed: (1) *strongly disagree*; (2) *disagree*; (3) *neutral*; (4) *agree*; and (5) *strongly agree*. Participants also answered an open-ended question directly aligned with the sub-research question and closed-ended Likert scale questions.

Table 6 refers to the responses to the closed-ended questions that were answered by PK–12 marketing and business instructors and two-year post-secondary marketing and business instructors. Seventeen PK–12 marketing and business instructors filled out the questions for this sub-research question. Table 6 reports the mean, standard deviation, and range for the PK–12

marketing and business instructor responses. Among the highest responses were provides feedback to PK–12 marketing and business education, how to prepare students for post-secondary education, provides opportunities for high school students to receive articulated credit, and attends PK–12 marketing and business advisory committees. Among the lower responses were provides feedback on curriculum, attends similar professional development as PK–12 marketing and business instructors, and collaborates with PK–12 marketing and business programs. The standard deviation ranged from 1.21 to 1.47 among the responses. All question responses ranged from 1, strongly disagree, to 5, strongly agree.

Table 6

PK–12 Marketing and Business Instructor Responses to Sub-Research Question: What Role Does Two-Year Post-Secondary Marketing and Business Education Serve in Collaborating with PK–12 Marketing and Business Instructors in Preparing Students for Two-Year Post-Secondary Marketing and Business?

Statement	*M*	*SD*	*Range*
Collaborates with PK–12 marketing and business education programs.	3.16	1.23	1–5
Attends similar professional development as PK -- 12 marketing and business educators.	3.56	1.21	1–5
Provides feedback on curriculum to PK–12 marketing and business education instructors.	3.21	1.47	1–5
Provides opportunities for high school marketing and business education to offer articulated credit. **Articulated credit meaning high school instructors teach two-year post-secondary curriculum for college and high school credit**	3.74	1.33	1–5
Attends PK -- 12 marketing and business education/career and technical education advisory committees.	3.72	1.37	1–5
Provides feedback to PK–12 marketing and business education in what ways students can be more prepared upon entering two-year post-secondary marketing and business programs.	3.89	1.29	1–5

Note. $n = 17$.

Appendix H refers to the open-ended question that aligned to research question 1 sub-research question b: *what role does two-year post-secondary marketing and business education serve in collaborating with PK–12 marketing and business instructors in preparing students for two-year post-secondary marketing and business?* Eighteen PK–12 marketing and business instructors responded to the open-ended question. The major themes that occurred from this research question were: (1) alignment of curriculum; (2) articulation with community college business classes; (3) serve on CTE Advisory Committees, guest speakers/mentors for high school students, and build relationships among PK–12 and post-secondary; and (4) lack of participation or difficulty with collaborating with community college. Table 7 shows the themes in order of frequency based on coding.

Table 7

PK–12 Instructor Data Transformation Responses to the Open-Ended Research Question: What Role Does Two-Year Post-Secondary Marketing and Business Education Serve in Collaborating with PK–12 Marketing and Business Instructors In Preparing Students for Two-Year Post-Secondary Marketing and Business?

Theme	PK–12 Instructors	
	n	%
Alignment of curriculum	17	44.74
Articulation with community college business classes	8	21.05
Serve on CTE Advisory Committees, guest speakers/mentors for high school students, and build relationships among PK–12 and post-secondary	7	18.42
Lack of participation or difficulty with collaborating with community college	6	15.79

Note. $n = 38$.

Theme 1: Alignment of Curriculum

Theme one identifies how two-year colleges collaborate with PK–12 marketing and business programs to align their curriculum. Some collaborations lead to alignment between PK–12 and post-secondary very organically, whereas some collaboration between PK–12 and post-secondary is a bit forced because of outside forces. Participant six describes the role that two-year post-secondary business programs have when collaborating with PK–12 marketing and business instructors,"I believe the role for two-year post-secondary marketing and business education is to help align PK–12 instructor and course curriculum with post-secondary marketing and business education curriculum."

Alignment is essential as high school students decide what is next in their educational and career paths. PK–12 instructors value bringing college-level courses into the curriculum for students, as demonstrated by participant nine, "Prepares students for college level courses."

While there are a lot of positive elements of collaboration and alignment between PK–12 and post-secondary, some do feel the alignment and partnership can be forced. Participant 17 asserts that a primary driver of collaboration is because of a grant, and much time is spent on finals to meet the requirements of post-secondary partners, "Simply put, we are required under grant to "collaborate" with two-year postsecondary to keep our articulation agreements. A lot of the time is spent hashing out finals to meet the requirements of the post-secondary."

Post-secondary plays a vital role in PK–12 programming and alignment. Two-year post-secondary programs play a role in preparing students to take college classes and PK–12 marketing and business curriculum aligned to post-secondary marketing and business curriculum. Some partnerships are forced, with federal and state grant requirements being a significant driver.

Theme 2: Articulation with Community College Business Classes

Theme two discusses how two-year colleges can serve as partners to assist with articulation agreements and maintain strong connections between PK–12 and two-year colleges. The articulation agreements are to align PK–12 marketing and business curriculum to two-year post-secondary curriculum. This is demonstrated as participant two discusses how articulation and curriculum alignment discussion happens and participant 11 highlights the benefits of articulating with a two-year post-secondary marketing and business program. Participant 2 discusses, “We work together to articulate our business classes and align curriculum the best we can with real world practices.” Participant 11 highlight, “It helps me learn what they are teaching, allowing articulation.”

PK–12 marketing and business instructors view two-year post-secondary programs as pragmatic partners. This is commonly done through articulation and dual credit. However, participant 12 brought to light the close partnership they have with the community colleges in their area:

> Fortunately for us, we do have two community colleges in our area that work closely with our students. Some of the courses do have an active articulation agreement with the colleges and that have helped motivate our students to move on to the next level. Some of the community college professors do offer to come in as guest speakers for the business classes if time permits.

Articulation can be the catalyst for developing partnerships between PK–12 and post-secondary marketing and business programs. Some partnerships can include dual credit, articulated credit, or more fruitful partnerships with professors coming in as guest speakers.

More developed partnerships can consist of all these elements to cultivate a dynamic collaboration.

Theme 3: Serve on CTE Advisory Committees, Guest Speakers/Mentors for High School Students, and Build Relationships Among PK–12 and Post-Secondary

Theme three explores how two-year colleges serve and work directly on PK–12 advisory committees, serve as mentors, and foster relationships between two-year post-secondary and PK–12 programs. However, there are some frustrations in PK–12 and two-year college programs as many times, relationships are filtered through the counseling departments to be disseminated to the CTE faculty. A common way that PK–12 and post-secondary marketing and business instructors collaborate and grow their programs is through participation in advisory committees. Participant five discusses advisory committees, who is on them, and how the collaboration impacts students and communities, “Advisory committees which have administrators, teachers and industry workers/owners, and junior college liaisons helps bring together cohesiveness and collaboration of stakeholders to better serve students and our communities.”

PK–12 instructors advocate that community colleges or two-year post-secondary marketing, and business programs work closely with PK–12 instructors. This is demonstrated by participant 14 as they discuss advisory committee participant, what they offer students, and advisory committee’s benefit, “Community colleges work directly with PK–12 advisory committees and also offer students dual-enrollment, which continues to grow.”

There are barriers to coordination and collaboration between PK–12 and two-year post-secondary marketing and business programs. One of the significant barriers that participant 13 identified is that information many times is filtered through counseling departments:

> Little and non-coordinated relationships between PK–12 programs and 2 Year college programs. The problem is that such relationships and information are filtered through the PK–12 and 2 Year counseling departments and these departments often do not understand the material.

PK–12 marketing and business instructors identify that post-secondary instructors participate in advisory committees and see their value to marketing and business programs and students. There is some frustration that there are barriers to the relationships between PK–12 and post-secondary when coordinated by counseling departments.

Theme 4: Lack of Participation or Difficulty with Collaborating with Community College

Theme four discusses barriers when post-secondary marketing and business instructors collaborate with PK–12 marketing and business instructors. There is a perception or belief that two-year colleges do not want to participate with PK–12 marketing and business programs. Participant 7 identified their experience being a new teacher and connecting with post-secondary marketing and business instructors to collaborate:

> In my experience as a new Business Teacher and program coordinator. I have not had much experience connecting with post-secondary levels for articulation or tools. I will say, the connection is well needed and the assistance in bridging this gap would be most welcome.

There is a lack of post-secondary instructors willing to be open to working with PK–12 marketing and business programs on articulation, curriculum alignment, and developing relationships between the two programs. Participant 17 describes their perception of what two-year post-secondary instructors perceive PK–12 marketing and business programs:

> For the most part, they don't like "giving away" their credits. Their perception is that we are infringing upon their territory and that there is no way we are teaching to their level of proficiency. This is not all two-year postsecondary schools. I have relationships with others who welcome me and the articulation agreements with open arms and are happy to see me - I bring them students.

Furthermore, frustration among PK–12 instructors does exist, as there are difficulties with partnerships between PK–12 and post-secondary marketing and business programs. Participant 18 presents their challenges with the collaboration between their high school and the business department at their local community college:

> For many years, the CC Business Department would not articulate or support our high school Business CTE Pathways. It was horrible considering the CC articulated and supported all of our other traditional CTE Pathways to include Medical, Welding, Culinary, Construction, Fire, EMT, Police, Agriculture, etc. - BUT NOT Business! In recent years, our CC came back and said they could not articulate our Business CTE Pathway because the Business courses at the CC are not CTE (this is their out to say no politely). We are the only CTE Pathway not articulated or able to work with our CC [community college].

There are challenges for PK–12 marketing and business instructors in collaborating with two-year post-secondary marketing and business programs, particularly regarding articulated credit. There are some challenges with connecting with community colleges from the perception of PK–12 schools. However, the perceptions from the PK–12 marketing and business instructors are that there are challenges, such as the community college not willing to collaborate with the PK–12 instructors and programs.

Research Question 1, Sub-Research Question C: How Does PK–12 Align Itself with Two-Year Post-Secondary Marketing and Business Programs?

This sub-research question aimed to understand the perceptions of PK–12 marketing and business instructors of PK–12 aligning themselves with two-year post-secondary marketing and business programs. This same question was asked of two-year post-secondary marketing and business instructors to compare the perceptions among PK–12 and two-year post-secondary marketing and business instructor responses. To answer this question, participants ranked closed-ended questions based on a five-point Likert scale to the degree to which they agree: (1) *strongly disagree*; (2) *disagree*; (3) *neutral*; (4) *agree*; and (5) *strongly agree*. Participants also answered an open-ended question directly aligned with the sub-research question and closed-ended Likert scale questions. Results were separated by PK–12 marketing and business instructors and two-year post-secondary marketing and business instructors.

Table 8 refers to the responses to the closed-ended questions that were answered by PK–12 marketing and business instructors and two-year post-secondary marketing and business instructors. Table 8 indicates the mean and standard deviation for the PK–12 and two-year post-secondary instructor responses. The same questions were asked of PK–12 instructors and two-year post-secondary instructors, and a *t*-test was conducted to compare the responses from the two populations.

PK–12 instructors have neutral agreeability that they align themselves with two-year post-secondary marketing and business programs. All other questions have lower neutral agreeability ranging from 3.41 to 3.50 on a scale of 5.0. PK–12 instructors know there is a strategic plan and are invited to two-year post-secondary CTE advisory committees.

PK–12 marketing and business instructors reported a statistically significant higher response than two-year post-secondary instructors in all questions except for questions two and three. Their p-values were below .05. Cohen's *d* was above .8 for all questions except for questions two and three. If Cohen's *d* is above .6, that indicates a high degree of difference in PK–12 marketing and business instructor responses compared to two-year post-secondary marketing and business instructor responses. For questions two and three, the p-value is greater than .05. This is not statistically significant, and Cohen's *d* is .473 for question two and .481 for question three, which indicates a medium degree of difference among the PK–12 marketing and business instructor responses compared to two-year post-secondary marketing and business responses.

Table 8

Two-Year Post-Secondary and PK–12 Marketing and Business Instructor Responses To Sub-Research Question: How Does PK–12 Align Itself with Two-Year Post-Secondary Marketing and Business Programs?

Statement	PK–12 Instructors		Two-year post-secondary instructors		*t*	*p*	*d*
	M	*SD*	*M*	*SD*			
Aligns itself with two-year post-secondary marketing and business programs.	3.82	1.25	2.74	0.96	2.628	.013	0.889
Is invited to be a part of two-year post-secondary marketing and business advisory committees.	3.47	1.19	2.79	1.24	1.397	.172[a]	0.473

Collaborates with two-year post-secondary marketing and business education faculty on articulated courses taught at PK–12 sites.	3.41	1.42	2.84	1.14	1.414	.167 [a]	0.481
Prepares students with industry credentials that are taught by two-year post-secondary marketing and business programs.	3.47	1.29	2.32	1.03	1.694	.011	0.911
Has a strategic plan that aligns to two-year post-secondary marketing and business education.	3.50	1.41	2.33	1.00	2.716	.011	0.933

Note. $n = 36$. Mean parameter values for each of the analyses are shown for the PK–12 marketing and business instructors ($n = 17$) and Two-year Post-secondary marketing and business instructors ($n = 19$), as well as the results of *t*-tests (unequal variance not assumed) comparing the parameter estimates between the two groups.

[a] Results of *t*-tests (not assuming equal variance) comparing the parameter estimates between the two groups.

*$p < .05$.

Fourteen PK–12 marketing and business instructors responded to the open-ended question. The two major themes from this research question were: (1) yes, PK–12 marketing and business program aligned with post-secondary program and (2) no, PK–12 marketing and

business program not aligned with the post-secondary program. Table 9 shows the themes in order of frequency based on coding.

Table 9

PK–12 Instructor Data Transformation Responses to Open-Ended Research Question: How Does PK–12 Align Itself with Two-Year Post-Secondary Marketing and Business Programs?

Theme	PK–12 Instructors	
	n	%
Yes, PK–12 marketing and business program aligned with post-secondary program	9	33.33
Same curriculum, knowledge, skills, and industry professional skills	12	32.43
Articulation	4	14.81
Alignment type unidentified	2	7.41
No, PK–12 marketing and business program not aligned with post-secondary program	4	36.36
Not aware of alignment of PK–12 and two-year college marketing and business programs	2	18.18
Counseling department serves as barrier	2	18.18
Community college will not collaborate or participate in PK–12 advisory	2	18.18
Not every subject due to depth of concepts	1	9.09

Note. Yes responses $n = 27$. *No* responses $n = 11$. Percentages are based on Yes or No answers. While many of the frequencies are not over four, it was essential to include them in this table as they contributed to the findings of the participants for this research.

Theme 1: Yes, PK–12 Marketing and Business Program Aligned with Post-Secondary Program

Theme one discusses how PK–12 institutions align with two-year community colleges. PK–12 instructors believe they align with post-secondary marketing and business programs in articulation agreements, offering college courses, teaching the same curriculum, and having

similar knowledge, and industry professional skills as the community college instructors. Participant 9 exemplifies this by using the exact text, “I use the same book and cover everything they cover.”

In addition to using the same book, some PK–12 instructors align their curriculum as much as possible with exposure to content and future career options. Participant 10 explains how they align their curriculum with two-year post-secondary marketing and business programs:

> We try to align ourselves with the community college programs if possible. Not every subject is feasible due to the depth of the content that can be covered. But at the very least, students are definitely exposed to the content of their future majors and also their future career options.

Some PK–12 instructors go above and beyond to ensure that all courses meet A–G college admissions requirements in California, align their curriculum, and fight for articulation for their marketing and business courses. Participant 13 demonstrates their course alignment between PK–12 marketing and business courses and two-year post-secondary, “Every course I teach is aligned with a two-year postsecondary program. They are also A-G approved electives should the students want more than a two-year approach after high school. The articulation credits are fought for and hard won.”

PK–12 marketing and business instructors believe they align with two-year post-secondary marketing and business programs. PK–12 instructors perceive they are aligned in similar course materials, depth of content as much as possible, articulation, and overall alignment.

Theme 2: No, PK–12 Marketing and Business Program not Aligned with Post-Secondary Program

Some PK–12 marketing and business programs are not aligned to community college marketing and business programs because of a lack of awareness of alignment with two-year college programs, not all subjects because of course content depth, and barriers of collaboration due to counseling or community college itself. There are many lines of communication within a school, and this includes both PK–12 schools and two-year post-secondary institutions. Participant 11 describes the barriers to being buffered by PK–12 counseling system and post-secondary counseling systems, "PK–12 business and marketing programs are buffered by the PK–12 counseling system, which is further buffered by the 2-year counseling system. Coordinating any kind of planning or goals are distorted by going through counseling (on both sides)."

PK–12 instructors perceive that there are barriers to collaborating that hinder collaboration with two-year post-secondary marketing and business programs. Participant 14 described the lack of cooperation between them and the post-secondary institution and PK–12 instructors' willingness to integrate industry certifications used by the post-secondary institution if aware of the certifications:

> Again, our CC will not collaborate with our high school Business Pathway. Although, we are invited to their advisory they will not attend our high school advisory. I am not aware of the CC Industry Certifications or I would use them too.

While there are many reasons for the lack of collaboration, there is undoubtedly a lack of cooperation between PK–12 and two-year post-secondary marketing and business programs in Southern California. Lack of collaboration exists for many reasons, including being buffered by

PK–12 and post-secondary counseling, lack of general collaboration despite being invited to the post-secondary advisory committee, and others.

Research Question 2: What Perceptions Do Post-Secondary Marketing and Business CTE Faculty Have of PK–12 Marketing and Business Programs?

This research question aimed to identify the perceptions that post-secondary marketing and business instructors have of PK–12 marketing and business programs. To answer this question there were three sub-research questions that participants responded to with closed-ended and open-ended responses. The three sub-research questions were: (1) *what is the purpose of PK–12 marketing and business programs*; (2) *what role does PK–12 marketing and business education serve in preparing students for two-year post-secondary marketing and business*; (3) *how does PK–12 align itself with two-year post-secondary marketing and business programs?* There were a group of closed-ended questions per sub-research question, one open-ended question per sub-research question, and one open-ended question aligned to research question 2.

Nineteen post-secondary marketing and business instructors responded to the open-ended question. The major themes that occurred from this research question were: (1) students not prepared in business and marketing concepts and to take post-secondary coursework; (2) curriculum is created in siloes and not collaborative effort between PK–12,post-secondary education, and the workforce; (3) there is a need for business and marketing education which exposes students to introductory skills and hands-on learning. Two findings from the qualitative analysis were not identified as themes but were interesting in regard to the themes: (1) PK–12 schools do a good job teaching marketing and business education, and (2) not necessary to teach PK–12 marketing and business. Both findings had two coded responses but were interesting in their intersection with the other three major themes. Each of these had two answers. Some

instructors believe that PK–12 is doing a good job teaching marketing and business, whereas some believe that PK–12 is not doing a good job. Alternatively, post-secondary believe that it is not necessary to teach marketing and business in PK–12 due to having to teach those concepts in post-secondary. However, there are few programs that teach marketing and business in Southern California.

Table 10 shows the qualitative themes of the open-ended question that directly aligned to research question two. Nineteen post-secondary marketing and business faculty responded. Three themes emerged from the data: students are not prepared for post-secondary coursework in marketing and business, followed by curriculum is created in siloes and no collaborative effort, and there is a need for marketing and business to expose students to introductory skills and hands-on learning.

Table 10

Two-Year Post-Secondary Instructor Responses: What Perceptions Do Post-Secondary Marketing and Business CTE Faculty Have of PK–12 Marketing and Business Programs?

Theme	Post-secondary Instructors	
	n	*%*
Students not prepared for post-secondary coursework in marketing and business	10	41.67
Curriculum is created in siloes and no collaborative effort	9	37.50
There is a need for marketing and business to expose students to introductory skills and hands-on learning	5	20.83

Note. $n = 24$.

Theme 1: Students Not Prepared for Post-Secondary Coursework in Marketing and Business

Theme one discusses how post-secondary marketing and business instructors believe that PK–12 marketing business programs are weak because students are not prepared with marketing and business concepts, incoming students' ability to take post-secondary marketing and business

courses, students are not prepared to enter directly into the workforce, and students unaware of the basic technology used in marketing and business. Participant 11 asserts how PK–12 programs are not effective in preparing students for post-secondary studies, “It seems that the program is not effective in preparing students to take a required college level work. The funny thing about it (I do not know if it is funny), they think they already know about business/marketing.”

In addition to not preparing PK–12 students for post-secondary study, post-secondary instructors perceive that PK–12 instructors do not teach students enough to enter directly into the workforce. Participant 16 discusses the gaps in PK–12 marketing and business programs, “My overall perception of PK–12 marketing and business education programs is that they are weak and do not do enough to advance students towards real careers. My perception is that is all done in post-secondary.”

Post-secondary instructors believe that they must recuperate the gaps between PK–12 marketing and business instructors and their students that attend post-secondary programs. In addition, post-secondary instructors do not believe that PK–12 prepares students with skills to enter the workforce; that is all done at post-secondary.

Theme 2: Curriculum is Created in Siloes and No Collaborative Effort

Theme two discusses two-year post-secondary marketing instructors’ perceptions of how PK–12 marketing and business instructors develop their curriculum. Post-secondary instructors indicated that it is not necessary to teach the following: marketing and business in PK–12 except for electives for high achieving students, offer dual credit courses for high achieving students and focus on two-year post-secondary marketing and business programs. Participant 9 asserted that PK–12 creates its curriculum in siloes and does not involve post-secondary input, *“separate silos.”*

In addition to creating curriculum in siloes, there is more of a need to align curriculum starting at PK–12 and through two-year post-secondary and further to CSU and UC systems. Participant 11 advocated that there should be alignment from PK–12 through CSU and CU systems with heavier intervention from state policies and resources to break down the existing barriers due to the weakness at the PK–12 level:

> Unless we can overcome the inherit weakness at the PK12 and we can work across the boundaries to align the curriculum, it would be a waste of time for both students and our time. Somebody at the higher ups or probably at the state level should have some kind of educational policies and visions to be able to align the need to the community (the students and the PK12 faculty) and the CC faculty and better yet, align it with the UC and CSU systems. Without the strong visions and providing enough resources we all work in siloes.

Post-secondary marketing and business instructors believe that PK –12 is weak in aligning business and marketing curricula. There is also a call for concern that PK–12 develops curriculum in siloes without input from post-secondary marketing and business instructors. To achieve the vision of alignment, there will need to be significant intervention and resources from the state to make the vision where PK–12 and post-secondary marketing and business courses are aligned a reality.

Theme 3: There is a Need for Marketing and Business to Expose Students to Introductory Skills and Hands-On Learning

Theme three presents how marketing and business programs and occupational programs are ideal for students in high school. These programs expose students to business concepts, marketing and business pathways, provide hands-on experiences for high school students, and

can increase opportunities for internships for students. Participant one exemplifies how these programs can expose students to a college experience while in high school for greater access:

> The program is ideal for students in high school, who want to experience what a college class would look like. The program is also very helpful for first-time generation college students, as it is affordable and provides students with credited classes easily transferred to state universities.

There are post-secondary marketing and business instructors who advocate for high school occupational programs, as described by participant 10, “There is a need for more Occupational Programs at the High School level.”

Just as there are better post-secondary programs compared to others, there are better PK–12 programs. Participant 13 describes an ideal marketing and business program that includes engagement, curriculum, and cross-educational system alignment, “The best programs are ones with engaging teachers and students with a well-planned curriculum and alignment of the programs with a guided pathway from PK–12 through 2-year community colleges.”

Two-year post-secondary marketing and business instructors see the value and necessity of PK–12 marketing and business programs. Post-secondary instructors advocate for alignment from PK–12 to post-secondary, providing access to post-secondary marketing and business courses and having high-quality programs with engaging PK–12 instructors.

Sub-Research Question 2A: What is the Purpose of PK–12 Marketing and Business Programs?

This sub-research question aimed to understand the perceptions of post-secondary marketing and business instructors of PK–12 marketing and business instructors and the purpose of PK–12 marketing and business programs. This same question was also asked of PK–12

marketing and business instructors. This was to understand PK–12 perceptions of PK–12 marketing and business instructors' purpose of PK–12 marketing and business programs. To answer this question, participants ranked closed-ended questions based on a five-point Likert scale to the degree to which they agreed: (1) *strongly disagree*; (2) *disagree*; (3) *neutral*; (4) *agree*; and (5) *strongly agree*. Participants also answered an open-ended question directly aligned with the sub-research question and closed-ended Likert scale questions. Results were separated by PK–12 marketing and business instructors and two-year post-secondary marketing and business instructors (see Table 4).

Table 4 refers to the responses to the closed-ended questions that were answered by PK–12 marketing and business instructors and two-year post-secondary marketing and business instructors. Table 4 indicates the mean and standard deviation for the PK–12 and two-year post-secondary instructor responses. The same questions were asked of PK–12 instructors and two-year post-secondary instructors, and a *t*-test was conducted to compare the responses from the two populations.

Table 4 indicates that two-year post-secondary marketing and business instructors disagree that PK–12 marketing and business programs prepare students to enter two-year marketing and business programs and prepare students to go directly into the workforce with a 2.85 and 2.15 respectively, on a 5.0 agreeability scale. The highest mean was the statement: *receives specific career guidance for marketing and business regarding two-year post-secondary opportunities.*

PK–12 marketing and business instructors reported a significantly higher response for the following question in Table 4 compared to two-year post-secondary marketing and business instructors' responses: *provides high quality work-based learning opportunities. (e.g.,*

internships or pre-apprenticeship). The only question that was not highly statistically significant was the question of receive specific career and education guidance for marketing and business regarding two-year post-secondary opportunities. However, every question was statistically significant. The following questions had statically higher responses for two-year post-secondary compared to PK–12: (1) prepares students to enter two-year post-secondary marketing and business programs; (2) prepares students to go directly into the workforce; and (3) collaborates with industry to review and provide feedback on the PK–12 marketing and business education curriculum. Cohen's *d* is reported above 1 for all questions except one question. That question has a Cohen's *d* of very close to 1 or .917. All questions have a high degree of difference, above .6 for Cohen's *d*, of PK–12 marketing and business responses compared to two-year post-secondary responses.

Nineteen two-year post-secondary marketing and business instructors responded to the open-ended question. The major themes that occurred from this research question were: (1) determine if students want to pursue a career in business; (2) prepare students for post-secondary study; (3) find employment and engage in internships & projects; (4) programs non-existent, inconsistent, or no basis to answer question; (5) introduce students to basic business concepts. Table 11 shows the themes in order of frequency based on coding.

Table 11

Two-Year Post-Secondary Instructor Data Transformation Responses to the Open-Ended Research Question: What is the Purpose Of PK–12 Marketing and Business Programs?

Theme	Post-secondary instructors	
	n	*%*
Determine if students want to pursue career in business	8	29.63
Prepare students for post-secondary study	7	25.93
Find employment and engage in internships & projects	4	14.81
Programs non-existent, inconsistent, or no basis to answer question	4	14.81
Introduce students to basic business concepts	4	14.81

Note. $n = 27$.

Theme 1: Determine if Students Want to Pursue a Career in Business

Theme one discusses how PK–12 marketing and business programs should expose students to careers in business. Exposure to business includes basic business concepts, linking theory and application, awareness of employment, and job opportunities in marketing and business. Participant three discusses how PK–12 marketing and business programs expose students to the discipline, "Helps to determine if this discipline is something students would want to pursue."

PK–12 has some limitations in exposing students to every part of the field. Some internal reasons and some external causes. Participant 4 asserts that PK–12 exposes students to marketing and business, but there are some limitations, *"Students have limited exposure to marketing and business education in k-12."*

There are other aspects of PK–12 marketing and business programs other than just exposing students to the field of marketing and business. Participant 18 highlights how PK–12

programs prepare students with basic college skills in addition to getting students excited about potential career opportunities, “To get students excited about career opportunities and prepare them with basic college skills.”

Post-secondary marketing and business instructors see the value that PK–12 marketing and business instructors bring to the table. PK–12 instructors get students excited about career opportunities while preparing students with basic college skills.

Theme 2: Prepare Students for Post-Secondary Study

Theme two discusses how PK–12 marketing and business instructors should prepare students to enter post-secondary education with basic college skills. Post-secondary skills are not inclusive of only marketing and business concepts but also math and writing skills at a post-secondary level and incorporate post-secondary curricula such as dual enrollment. Participant two and 18 highlight frustrations regarding the math and writing skills of high school graduates, “Students are graduating high school without sufficient math and writing skills” and “…prepare them with basic college skills.”

Post-secondary instructors further express concerns about how prepared high school graduates are when entering post-secondary programs. Participant 12 claims that PK–12 instructors are letting students slide by and depending on post-secondary programs to fix students’ skill levels, “It seems that they let students to just slide passing the HS and hopefully we can "fix" them at the CC level.”

Post-secondary marketing and business instructors present an idea of getting PK–12 marketing and business more involved with dual enrollment. Participant 13 advocates that dual enrollment programs work directly with PK–12 programs, “Dual Enrollment programs work

directly with the PK–12 programs and we offer business, finance, accounting, and marketing classes to these students in Santa Barbara County."

Among post-secondary marketing and business instructors, there are some frustrations in the preparedness of the students coming to post-secondary programs. Post-secondary instructors claimed that PK–12 instructors are letting students slide by and depend on post-secondary programs to fix the gaps in student skills. However, post-secondary advocated to improve dual enrollment programs and work directly with PK–12 programs.

Theme 3: Find Employment and Engage in Internships and Projects

Post-secondary marketing and business instructors believe that PK–12 marketing and business instructors should prepare students for the world of work, engage in internships and projects, and help them find employment. Participant 9 considers how PK–12 marketing and business programs should prepare students to find employment, "to find an employment."

While preparing students to engage in hands-on work, it is also essential to integrate theory and practice. Participant 14 discusses how an integration of the two is the best way, "Exposure to theory and basic business concepts. Programs that engage business and institutions in internships or project opportunities offer the best way to link theory with practice."

Some well-known international models have been successful at this work which post-secondary marketing and business instructors have identified. Participant 19 discussed the German model and how it prepared students for college and career, "I lived in Germany for six years and there the internship programs that begin in high school and continue on into college do an adequate job of preparing students for real-world jobs."

Post-secondary marketing and business instructors believe PK–12 instructors should help students find employment, engage in internships, and utilize projects that emulate real-world

scenarios. Post-secondary marketing and business instructors have also identified international models, such as the model used in Germany, to complement models currently used in the United States.

Theme 4: Programs Non-Existent, Inconsistent, or Have No Basis to Answer Question

Many marketing and business programs are non-existent or inconsistent in their local areas. A few post-secondary instructors did not have enough knowledge to perceive PK–12 marketing and business programs accurately. For example:

> Participant 5: My sense is that they are inconsistent. Meaning programs are strong at some schools, non-existent at others. This seems to be largely driven by leaders/evangelists at give sites.
>
> Participant 7: I have not taught PK - 12 so I do not have a basis for responding to these questions.
>
> Participant 8: I have no idea what programs you are referring to.

Theme 5: Introduce Students to Basic Business Concepts

This theme describes post-secondary instructors should introduce students to basic business concepts, including technology, financial literacy, the language of business, and meet state CTE standards. Participant 11 exemplifies how students are not proficient in business applications and the Microsoft Suite that is used in industry:

> The students I have been getting are not using business applications. They have only used free Google applications and do not understand the business component at all. The students should learn desktop applications in MS Word, Excel and PowerPoint before they enter college.

Learning business applications is an important skill to know when in business. Participant 14 also advocated that each student should understand the language of business and business foundations, “Business foundations and learning the language of business. Exposure to theory and basic business concepts.”

In California, there are defined standards for each of the 16 industry sectors and overall CTE. Participant 15 indicated that PK–12 should meet state CTE standards as a primary purpose of PK–12 marketing and business education “meet state CTE standards.”

Post-secondary marketing and business instructors believe PK–12 programs should introduce high school students to technology, business foundations, integrate theory and practice, and meet state CTE standards.

Sub-Research Question 2B: What Role Does PK–12 Marketing and Business Education Serve in Preparing Students for Two-Year Post-Secondary Marketing and Business?

This sub-research question aimed to understand what role PK–12 marketing and business education plays in preparing for two-year post-secondary marketing and business programs from the perspective of two-year post-secondary marketing and business instructors. This question was only asked of two-year post-secondary marketing and business instructors. To answer this question, participants ranked closed-ended questions based on a five-point Likert scale to the degree to which they agreed: (1) *strongly disagree*; (2) *disagree*; (3) *neutral*; (4) *agree*; and (5) *strongly agree*. Participants also answered an open-ended question directly aligned with the sub-research question and closed-ended Likert scale questions.

Table 12 shows to the responses to the closed-ended questions that were answered by two-year post-secondary marketing and business instructors. Nineteen two-year post-secondary marketing and business instructors filled out the questions for this sub-research question. Table

12 indicates the mean, standard deviation, and range of two-year post-secondary marketing and business instructor responses. Among the highest responses was teach content that prepares students for two-year post-secondary marketing and business and CTSOs prepare students to enter two-year post-secondary marketing and business programs. Those two responses were the highest. However, their mean was 2.95 out of a 5.0 scale. That indicates that two-year post-secondary marketing and business instructors slightly disagreed with those statements. 2.95 is very close to a neutral rating, however, is below the neutral rating of 3.0 by .05. Among the lower responses were the statements: expose their students to all necessary aspects of the industry and collaborate with two-year post-secondary marketing and business instructors in the development of the curriculum. The standard deviation ranged from .92 to 1.11 among the responses. All question responses ranged from one, strongly disagree, to five, strongly agree.

Table 12

Two-Year Post-Secondary Marketing and Business Instructor Responses to Sub-Research Question: What Role Does PK–12 Marketing and Business Education Serve in Preparing Students for Two-Year Post-Secondary Marketing and Business?

Statement	*M*	*SD*	*Range*
Teach content that prepares students for two-year post-secondary marketing and business.	2.95	1.00	1–4
Expose their students to all necessary aspects of the industry.	2.50	1.07	1–4
Career and technical student organizations (e.g., DECA or FBLA-PBL) prepare students to enter two-year post-secondary marketing and business programs.	2.95	0.94	1–5
Collaborate with two-year post-secondary marketing and business instructors in the development of curriculum.	2.55	.92	1–4
Offer courses that meet the respective local labor market demand.	2.60	1.11	1–5

Note. $n = 19$.

Appendix K refers to the open-ended question that aligned to research question 2 sub-research question b— What role does PK–12 marketing and business education programs serve

in preparing students for two-year post-secondary marketing and business? This utilized a focused coding process: Column 1 yellow highlighted color identifies relevant phrases and words to be coded from raw capta. Columns two and three highlight color meanings: light green- math skills and soft skills need to demonstrate before leaving high school; gray- introduce to potential career fields; red- collaboration between PK–12 and two-year post-secondary marketing and business programs; and pink- prepare PK–12 students business fundamentals and advanced concepts.

Nineteen two-year post-secondary marketing and business instructors responded to the open-ended question. The major themes that occurred from this research question were: (1) not all students should go to college and should explore careers; (2) teach business curriculum that is aligned to the current workforce; and (3) collaboration between PK–12 marketing and business programs and two-year post-secondary marketing and business programs. Table 13 shows the themes in order of frequency based on coding.

Table 13

Two-Year Post-Secondary Instructor Data Transformation Responses to the Open-Ended Research Question: What Role Does PK–12 Marketing and Business Education Serve in Preparing Students for Two-Year Post-Secondary Marketing and Business?

Theme	Post-secondary Instructors	
	n	%
Teach business curriculum that is aligned to the current workforce	10	52.63
Not all students should go to college and should explore careers	5	26.32
Collaboration between PK–12 marketing and business programs and two-year post-secondary marketing and business programs	4	21.05

Note. *n* =19.

Theme 1: Teach Business Curriculum That is Aligned to the Current Workforce

Theme one provides insights into how post-secondary marketing and business instructors believe PK–12 marketing and business instructors should teach business concepts aligned to the current workforce beyond the fundamentals. Participant two indicated that high school students should take foundational business courses but have a focus on advanced business and marketing concepts, “Helps to focus on material beyond the fundamentals or to instill the fundamentals of marketing.”

Some post-secondary marketing and business instructors believe PK–12 marketing and business instructors do not have the credentials or experience to teach industry-relevant business concepts. Participant seven asserts PK–12 marketing and business instructors do not have enough experience to be considered a business expert, “My guess is these programs are a joke based on the fact that you have teachers in high school that are not experts in business. Also "business" curriculum is largely outdated with the workforce.”

Many instructors in CTE, post-secondary marketing and business instructors included, believe that the earlier students are exposed to concepts, the better it is. Participant 11 identifies that the earlier students are exposed to advanced business concepts, the better the likelihood of being involved with advancing topics in business, “The early the learning happens the better prepared students will be for learning advanced business concepts to the dynamic changes in the industry with VR, BA, 3D Printing, etc.”

Post-secondary instructors strongly believe PK–12 students should be taught concepts aligned to the current workforce. In addition, instructions should teach more than just the fundamentals, including starting marketing and business classes earlier.

Theme 2: Not All Students Should Go to College and Should Explore Careers

Theme two discusses how students should explore career options with an understanding that not all students need to go to college. In addition, PK–12 instructors should make sure students make a good career choice that fits them before attending any post-secondary education or training program. While many post-secondary marketing and business instructors do want students to go into business, participant one emphasizes that PK–12 instructors should ensure that a career fit is suitable for the student before entering post-secondary education:

> High Schools should also recognize that not all students should attend college. They should be teaching basic skills in a variety of trades so they can choose which one is a good fit for themselves before attending a bigger post high school program.

Participant 12 also believes in finding a potential career field, "It introduces students to potential career fields and helps to recognize student interests and strengths."

Education has many different components, including preparing students academically, providing career options after high school, introducing students to real-world scenarios, and collaborating with post-secondary partners. Participant 13 describes how PK–12 marketing and business' role should be in preparing students for post-secondary education, "PK–12 marketing and business education should prepare students academically to study business, introduce them to career options, familiarize them with how industry works in the real world, and it should collaborate with higher education."

Many facets go into preparing a student to take the next step in their journey after high school. Post-secondary marketing and business instructors asserted that high schools should recognize that not all students are on a pathway to college. For those who are on a path to college, students should have a good idea of their career direction. This should all be done by

preparing students academically, exposing students to career options after high school, collaborating with higher education, and introducing students to how the industry works in the real world.

Theme 3: Collaboration Between PK–12 Marketing and Business Programs and Two-Year Post-Secondary Marketing and Business Programs

Theme three discusses how collaboration between PK–12 and two-year post-secondary marketing and business programs needs to happen more frequently. When collaboration happens more regularly, it will prepare students for studies at the post-secondary level. Participant 10 advocates that collaboration should not be just one educational system's responsibility but a shared responsibility, "It should be a two-way road but it does not happen in real life due to various reasons such as Covid 19, budget, no collaborator available etc."

While each educational system needs to share the responsibility of collaboration, each educational system must make an effort to be available to collaborate.

Sub-Research Question 2C: How Does PK–12 Align Itself with Two-Year Post-Secondary Marketing and Business Programs?

This sub-research question aimed to understand the perceptions of two-year post-secondary marketing and business instructors of PK–12 aligning themselves with two-year post-secondary marketing and business programs. The same question was asked of PK–12 marketing and business instructors to compare the perceptions among PK–12 and two-year post-secondary marketing and business instructor responses. To answer this question, participants ranked closed-ended questions based on a five-point Likert scale to the degree to which they agree: (1) *strongly disagree*; (2) *disagree*; (3) *neutral*; (4) *agree*; and (5) *strongly agree*. Participants also answered an open-ended question directly aligned with the sub-research question and closed-ended Likert

scale questions. Results were separated by PK–12 marketing and business instructors and two-year post-secondary marketing and business instructors (see Table 8).

Table 8 refers to the responses to the closed-ended questions that were answered by PK–12 marketing and business instructors and two-year post-secondary marketing and business instructors. Table 8 indicates the mean and standard deviation for the PK–12 and two-year post-secondary instructor responses. The same questions were asked of PK–12 instructors and two-year post-secondary instructors, and a *t*-test was conducted to compare the responses from the two populations.

Table 8 indicates that two-year post-secondary instructors disagree that PK–12 aligns themselves with two-year post-secondary marketing and business programs. For all questions, post-secondary scores in the disagree rating on the Likert scale from 2.32 to 2.79 on a scale of 5.0. The statement with the lowest mean of 2.32 prepares students with industry credentials taught by two-year post-secondary marketing and business programs.

All questions, except questions two and three, scored $p < .05$, which is statistically significant. Cohen's *d* was above .8 for all questions except for questions two and three, which indicates a high degree of difference in PK–12 marketing and business instructor responses compared to two-year post-secondary marketing and business instructor responses. Cohen's *d* is .473 for question two and .481 for question three, which indicates a medium degree of difference among the PK–12 marketing and business instructor responses compared to two-year post-secondary marketing and business responses.

Nineteen two-year post-secondary marketing and business instructors responded to the open-ended question. The two major themes from this research question were: (1) yes, PK–12 marketing and business program aligned with post-secondary program and (2) no, PK–12

marketing and business program not aligned with the post-secondary program. Table 15 shows the themes in order of frequency based on coding.

Table 14

Two-Year Post-Secondary Instructor Data Transformation Responses to the Open-Ended Research Question: How Does PK–12 Align Itself with Two-Year Post-Secondary Marketing and Business Programs?

Theme	Post-secondary instructors	
	n	%
Yes, PK–12 marketing and business program aligned with post-secondary program	13	48.14
Classes and programs are aligned	5	38.46
Alignment type unidentified	5	38.46
Alignment exists due to dual credit	3	23.08
No, PK–12 marketing and business program not aligned with post-secondary program	14	51.85
Not aware of alignment of PK–12 and two-year college marketing and business programs	8	57.14
PK–12 marketing and business curriculum made in siloes without input from two-year college	4	28.57
Students who have taken PK–12 marketing and business classes do not have fundamental knowledge and concepts	2	14.29

Note. Yes, responses *n*=13. No responses *n*=14. Percentages are based on Yes or No responses. While many of the frequencies are not over 4, it was essential to include them in this table as they contributed to the findings of the participants for this research.

Theme 1: Yes, PK–12 Marketing and Business Program Aligned with Post-Secondary Program

Theme one discusses how post-secondary marketing and business instructors perceive alignment between PK–12 and post-secondary marketing and business programs. Classes and programs are aligned between PK–12 and post-secondary through coordination, two-year post-

secondary programs working with middle and high schools, post-secondary instructors teaching classes at the high school sites and ensuring that PK–12 meets post-secondary college standards to offer college credit. Participant one discusses how most courses are aligned between PK–12 and post-secondary marketing and business programs, “most classes are aligned, which is required for transfer (credit).”

Alignment also exists because the two-year post-secondary college teaches the classes in the PK–12 program or schools have implemented a good dual credit program—however it is not the norm rather it is the exception for students. Participants three and 12 discuss dual credit and how is not the norm:

> Participant 3 discusses: Some schools do a nice job with dual enrollment but is the exception not the norm.
>
> Participant 12 discusses: Yes, typically it is the two year community college classes that are being taught as the business classes in [the] PK–12 program.

Some post-secondary marketing and business programs work closely with middle and high schools to develop a close partnership and align curriculum. Participant 15 highlights the alignment from middle school through post-secondary, “Some do. I don't have specific details to share, but I know that my college works closely with middle schools and high schools to align CTE programs through postsecondary degree/certificate completion.”

While many good conversations happen to align programs between school districts and post-secondary institutions, there sometimes is a breakdown in communication that happens. Participant 18 discusses how a breakdown of communication occurs as information does not always make it to the instructors, “There is coordination between the local school district and our college. However, little of what is discussed or implemented makes it to the instructors.”

Post-secondary marketing and business instructors believe that alignment exists between PK–12 and post-secondary marketing and business programs. The type of alignment differs from place to place including partnerships in aligning classes and programs, dual credit, and articulated credit. A drawback is that some information does not make it to instructors with a breakdown in communication.

Theme 2: No, PK–12 Marketing and Business Program Not Aligned with Post-Secondary Program

Theme two discusses how there are post-secondary marketing and business instructors who are unaware of alignment, not a strong alignment by not passing on information discussed to instructors, little to no collaboration among two-year post-secondary and PK–12 marketing and business instructors, or post-secondary instructors are unaware of the PK–12 marketing and business programs at all. Participants four and five are unaware of marketing and business programs. Participant 4 asserts, “[No] information on K-12” and participant 5 discusses, “It is unclear to me as a community college professor if they do.”

Post-secondary instructors assert that PK–12 creates business and marketing curricula in silos and does not invite two-year post-secondary to collaborate on what is being taught to encourage alignment. Because of that, the PK–12 marketing and business programs are at an elementary level, and the two-year post-secondary college does not know what is being taught at the PK–12 level. Participant two advocates that what is being taught in PK–12 is not known, even at their college:

> I have sat with community leaders to discover what local businesses need but not with K-12 educators. In fact, our business school does have three people that communicate with

> the high schools regarding the hospitality and Automobile program but not about our business and marketing program.

Students who take a marketing and business class at the PK–12 level go into the two-year post-secondary colleges, struggle with foundational marketing and business concepts, and are not prepared for post-secondary programs, especially in marketing and business. Participants 11 and 14 assert that students who have taken marketing and business classes do not understand business concepts and PK–12 marketing and business education does not prepare students for post-secondary education:

> Participant 11 asserts: It does not. I have no idea what they teach there. It seems that the students who took business/marketing class, do not even know the simplest business concept such as the role of technology in marketing.
>
> Participant 14 addresses: No, their programs are a very basic level and do not prepare students for post-secondary programs.

Post-secondary marketing and business instructors struggle to see the collaboration between PK–12 and post-secondary marketing and business instructors. Participant 16 advocates that there is a lack of collaboration between PK–12 and post-secondary marketing and business programs:

> I have seen little to no collaboration between PK–12 educators and post-secondary educators. All I have seen is what my students tell me they studied in high school, some of whom are prepared, and some are not. I don't think there is a strong link between high schools and community colleges for business programs in my geographic area.

Some gaps exist in alignment between PK–12 and post-secondary marketing and business programs from the perception of post-secondary instructors. It is often because there is

a lack of knowing or communication and getting PK–12 and post-secondary marketing and business at the same table to create better alignment starting at middle school through post-secondary.

Summary

In this mixed method study, a survey that included Likert scale closed-ended and open-ended questions was deployed. A quantitative analysis was completed on the survey including descriptive statistics, *t*-test, and Cohen's *d*. For each research question and sub-research question, an open-ended question was answered. These questions were analyzed utilizing data transformation and a focused coding process (Creswell & Creswell, 2018).

Findings from research question one suggested that PK–12 educators believe that they are aligned to two-year post-secondary marketing and business programs, teaching students foundational skills of marketing and business, and that PK–12 programs should have articulation agreements with two-year post-secondary marketing and business programs. PK–12 marketing and business instructors indicated some struggles overall working with two-year post-secondary programs, such as collaboration, sitting on advisory committees for the PK–12 programs, and having difficulty specifically with marketing and business courses.

Findings from research question two suggested that two-year post-secondary marketing and business educators do not think PK–12 and two-year post-secondary are aligned to two-year post-secondary marketing and business programs. Two-year post-secondary instructors do not feel PK–12 instructors are teaching foundational marketing and business skills for students to succeed in post-secondary education. Instructors also suggested that PK–12 students lack basic math and writing skills that must be fixed at the two-year college level.

The findings for PK–12 and two-year post-secondary instructors show a disconnect in the perceptions of the other program and specifically the PK–12 marketing and business programs in Southern California. Chapter 5 will present the summary, conclusions, and recommendations from this study.

Chapter V: Discussion, Conclusion, and Recommendations

This mixed methods research study aimed to explore the perceptions that PK–12 and two-year post-secondary marketing and business instructors and faculty have of the respective program. Duncheon and Relles (2020) emphasized that there is a gap in PK–12 CTE and post-secondary CTE understanding of one another. This study has the potential to contribute to the gap in the research of perceptions of PK–12 and two-year post-secondary to further their collaboration. This study specifically looked at the perceptions PK–12 and two-year post-secondary had of the purpose of PK–12 marketing and business programs, the role post-secondary plays in collaborating with PK–12, how PK–12 aligns itself with post-secondary programs, and what role PK–12 serves in preparing students for post-secondary programs.

This study utilized a mixed methods approach. The following research questions guided the study:

1. What perceptions do PK–12 marketing and business CTE faculty have about marketing and business two-year post-secondary programs?
    a. What is the purpose of PK–12 marketing and business programs?
    b. What role does two-year post-secondary marketing and business education serve in collaborating with PK–12 marketing and business instructors in preparing students for two-year post-secondary marketing and business?
    c. How does PK–12 align itself with two-year post-secondary marketing and business programs?
2. What perceptions do two-year post-secondary marketing and business CTE faculty have of PK–12 marketing and business programs?
    d. What is the purpose of PK–12 marketing and business programs?

e. What role does PK–12 marketing and business education serve in preparing students for two-year post-secondary marketing and business?
f. How does PK–12 align itself with two-year post-secondary marketing and business programs?

This chapter discusses the research findings and conclusions by research question and sub-research question. This chapter will also enlighten how the two groups may collaborate to align PK–14 pathways. Finally, the chapter will provide implications of the findings with recommendations for further research.

Discussion

This study employed a nonexperimental single-phase convergent mixed methods research design, which utilized a survey for instrumentation. A direct email invite was sent to 224 PK–12 marketing and business instructors and 1,130 post-secondary marketing and business instructors who were employed in one of the 10 identified counties in Southern California via Qualtrics (see Appendix A). In addition, an email invitation was sent through national listservs, California marketing and business listserv, and other common CTE listservs in California. Volunteerism was utilized where 17 PK–12 instructors and 19 post-secondary instructors responded (Creswell & Creswell, 2018).

A researcher-developed survey included closed-ended Likert scale questions where the population was able to express their perceptions and open-ended questions where the population was able to express their perceptions in detail (see Appendices C and D). The survey that was developed in alignment with the California 11 Elements of High-Quality CTE rubric for PK–14 programs (see Appendix B). For closed-ended questions, a descriptive statistical analysis, standard deviation for the highest agreeability among the population, *t*-tests for questions that

were the same for PK–12 and post-secondary populations, p-value, and Cohen's *d* were all utilized (Patten & Newhart, 2018). Mezmir's (2020) analysis of each open-ended question was analyzed using thematic reduction of short-answer responses where focused coding occurred to organize data into categories and subcategories (see Appendix F). The two databases were merged utilizing data transformation where qualitative themes or codes and counted or grouped to form quantitative measures (Creswell & Creswell, 2018). The analysis of the quantitative and qualitative data within this study determined key findings within each research question and sub-research question.

Research Question 1: What Perceptions Do PK–12 Marketing and Business CTE Faculty Have About Two-Year Post-Secondary Marketing and Business Programs?

PK–12 marketing and business instructors have an overall positive perception of two-year post-secondary marketing and business programs. Even though there are overall positive perceptions, there is a weakness as described in the findings of this research question. After an analysis of the qualitative data, three major themes arose: (1) prepare students for their future with job skills or academics, (2) positive program and excellent staff, and (3) no opinion or negative perception/community college will not collaborate. Each of these themes will be discussed in this section.

PK–12 instructors discussed how two-year post-secondary programs prepare students for the workforce and the next step in their educational or career pathway. PK–12 instructors also discussed how two-year post-secondary marketing and business programs assist and encourage students to continue with their education. Students do this by obtaining their industry certifications that are recognized by businesses and industry. Post-secondary assisting students to be prepared for the next step in their educational or workforce pathway is aligned with the

literature. Post-secondary marketing and business programs preparing students for the next step in their educational pathway is seen as Belfield and Bailey (2011) discuss how community college CTE programs teach students the technical skills and knowledge needed in their respective fields to be employed in high-need and high-wage jobs. In addition, Gauthier (2020a) asserts that community colleges receive high accolades because of their nimbleness in adjusting curricula to industry standards. A quote from participant 10 exemplifies how two-year post-secondary marketing and business programs meet the needs of the community and encourages further education:

> I think the post-secondary programs try their best to meet the needs of the community and also to encourage the students to transfer to the next level for their bachelor's degree. There are many certificates at the community college level to help our students get employability skills so they can get a job right away, which help the families in our community.

PK–12 perceives that two-year post-secondary marketing and business programs prepare students for the next step in their educational or workplace pathway through industry credentials, teaching technical skills, and prepare students to continue with the next step in their educational pathway. Several of the themes align with the literature including post-secondary marketing and business programs having positive programs and excellent staff. Carver and Kosloski (2015) identified that CTE students in a community college felt that instructors were supportive and prompt when teaching their online CTE courses. The positive perception from faculty in this research study is upheld by PK–12 faculty as stated by participant 3 as they describe the value of post-secondary programs and faculty experience, "I believe these programs are valuable and

necessary because of the programs are easily accessible, cost-effective, and often taught by faculty with relevant industry experience."

PK–12 perceptions of high-quality programs and staff are further recognized as 6 out of 21 (28.57%) of the data transformation statements from participants were related to positive programs and excellent staff. Positive programs and excellent staff include meeting the needs of the community, being nimble with curricula, faculty teaching with relevant industry experience, and being cost-effective.

In contrast, there are challenges to the perceptions that PK–12 marketing and business collaborate with two-year post-secondary marketing and business faculty and programs. The theme of an overall negative perception of community colleges and community colleges will not collaborate with PK–12 instructors demonstrate this challenged perception. The challenge of community colleges not collaborating with PK–12 and overall negative perceptions are misaligned with the literature. Stone (2017) described that PK–12 and two-year post-secondary CTE programs align with one another and link elements between PK–12, post-secondary, and industry to facilitate a smooth transition from high school to the workforce or post-secondary education. The findings of this study indicate that PK–12 faculty feel that two-year post-secondary marketing and business programs will not collaborate or articulate with PK–12 marketing and business instructors. Participant 14 affirmed that there are struggles with collaboration, "I have no idea and I cannot speak on their behalf. I am a high school business teacher; CC will not collaborate with me."

The relationship between PK–12 and two-year post-secondary marketing and business instructors and programs is an important one, especially in the field of CTE. The Association of Career and Technical Education (ACTE) supports the relationship between PK–12 and two-year

post-secondary program alignment (NASDCTEc, 2010; Advance CTE, 2021). However, there is still work to do regarding collaboration among PK–12 and post-secondary in Southern California.

Overall, PK–12 instructors have an overall positive perception of two-year post-secondary marketing and business programs in Southern California which align with the findings of this study and the literature. There are challenges regarding collaboration among PK–12 and post-secondary marketing and business programs that are not aligned with the literature. The results of the study suggest that there are struggles with some collaboration but view positively of the post-secondary programs. While positive aspects are happening in PK–12 and post-secondary, there is still work to be done as noted by ACTE (Advance CTE, 2021).

Research Question 1A: What is the Purpose Of PK–12 Marketing and Business Programs?

PK–12 and two-year post-secondary marketing and business instructor perceptions of the purpose of PK–12 marketing and business programs varied in areas such as preparing students for entry-level positions in the workforce and curriculum. After qualitative analysis, four major themes emerged: (1) prepare for the workforce, (2) post-secondary preparation in business, (3) develop soft skills or skills for after high school, and (4) curriculum focused on retail. This section will discuss these themes in terms of PK–12 perceptions in more detail.

PK–12 marketing and business instructors discussed how PK–12 marketing and business courses prepare students for the workforce and provide high-quality work-based learning opportunities for students. This aligns with the literature as depicted by Stone (2017) when he asserted that CTE assists in helping youth finish high school, prepare students to continue formal learning after high school, and prepares students with industry-recognized credentials in preparation for employment. Lekes (2007) also identified that CTE has a rich history of teaching

skills needed for everyday life and preparing students to go directly into the workforce to obtain high-demand and high-wage jobs with skills learned in the CTE classroom. The literature and the results from this study are supported by participant five attesting that marketing and business courses provide insight into what to expect in the workplace:

> I believe these courses are offered to give students insight on what to expect in the real-world workplace. Since students have little or no experience before leaving high school or college, these courses better prepare them on what to expect.

PK–12 instructors believe they are preparing students for the workforce and there is a difference in perception among post-secondary instructors. There is a very high statistical significance among responses between PK–12 and post-secondary instructors with the following survey statements: (1) prepares students to go directly into the workforce and (2) provides high-quality work-based learning opportunities for students. The statistical significance suggests that there is a difference in perceptions of PK–12 programs between PK–12 instructors and post-secondary instructors. The statement, "prepares students to go directly into the workforce," PK–12 instructors had a mean of 4.10 whereas post-secondary had a mean of 2.89. These mean scores show a varied perception between PK–12 instructors and post-secondary instructors. The statement, "provides high-quality work-based learning opportunities," PK–12 instructors had a mean of 3.57 and post-secondary instructors had a mean of 2.55. Both statements had a $p < .001$ and a Cohen's $d < 1.0$, which identifies a high degree of difference among mean scores. Post-secondary instructors do not believe that PK–12 provides high-quality work-based learning opportunities for their students.

PK–12 perceive they are preparing students for the workforce as their score of 4.10 align to agree on the Likert scale. Post-secondary instructors' mean score of 2.89 aligns to disagree

ratings on the Likert scale, which demonstrates that post-secondary instructors do not perceive PK–12 instructors preparing students to enter the workforce. It can be suggested that post-secondary instructors are unaware of what is taught or what happens in PK–12 CTE. There is more understanding that PK–12 has of post-secondary programs with articulation and dual credit agreements. There is a great deal of work to be done for PK–12 and post-secondary marketing and business instructors to understand one another and collaborate.

There are differences in perception among PK–12 and post-secondary on whether PK–12 marketing and business programs prepare students to enter two-year post-secondary programs in business. PK–12 marketing and business instructors discuss how PK–12 programs in marketing and business prepare students for further post-secondary study. PK–12 perceives they prepare students to go into post-secondary study, which is aligned with literature as demonstrated by Greathouse Holman et al. (2017) who poised that CTE students who took courses in business and industry and public services viewed themselves as ready to enter higher education.

PK–12 instructors had a mean of 4.10 compared to post-secondary faculty where the mean was 2.89 for the statement *prepares students to enter two-year post-secondary marketing and business programs*. This statement was highly significant with $p < .001$ and a Cohen's *d* of 1.2 which identifies a high degree of difference among population groups. PK–12 marketing and business instructors preparing students for post-secondary education is supported by Aliaga et al. (2014) where CTE is for all students, not just those who are not college-bound, but rather students who take higher academically challenging CTE courses also take higher level academic courses. Participant 9 affirms that PK–12 prepares students for post-secondary study, "Prepare students for Business industry employment of college-level Business courses."

There is a high degree of difference between PK–12 and post-secondary marketing and business instructor perceptions regarding PK–12 preparing students to continue to post-secondary education in marketing and business. It is unknown whether post-secondary instructors were only referring to students who have previously taken marketing and business courses in high school when filling out the survey. PK–12 instructors have perceptions that they do prepare students for post-secondary study, which is aligned with the literature. Post-secondary marketing and business instructors do not perceive PK–12 marketing and business programs are preparing students to enter two-year post-secondary marketing and business programs.

PK–12 and post-secondary marketing and business instructors perceive that PK–12 marketing and business programs develop soft skills in students that will be utilized after high school. These perceptions are aligned with literature as Gauthier (2021) affirmed this by identifying top priorities in college CTE are soft skills, employment, and curriculum. PK–12 instructors discuss how PK –12 programs develop students with soft skills and social skills that will be utilized after high school and in the workplace. Participant 4 affirms the development of soft skills in PK–12 programs:

> In the 21st century, it also involves training students in softer skills such as leadership. With the increase of globalization, most companies now face competition from around the world and not just from other businesses in their own communities.

Post-secondary perceptions are in alignment with PK–12 perceptions as post-secondary instructors discuss linking theory with practice. Linking theory with practice as demonstrated by Participant 14, a post-secondary participant, identifies the purpose of PK–12 programs, “exposure to theory and basic business concepts.”

Both PK–12 and post-secondary marketing and business programs have similar perceptions that PK–12 marketing and business programs develop soft skills in students that they will utilize after high school.

The responses from PK–12 marketing and business instructors align very closely with the literature. The results of this sub-research question identified that the four major themes aligned with the workforce and the literature. PK–12 and post-secondary marketing and business faculty have different perceptions of PK–12 programs overall. PK–12 perceives they prepare their students for the workforce, post-secondary college ready, and collaborate with post-secondary partners. Post-secondary overall perceives PK–12 does not prepare students for the workforce, students from PK–12 programs are not post-secondary education ready, and PK–12 does not collaborate with post-secondary. Both do agree that PK–12 prepares students with soft skills.

Research Question 1B: What Role Does Post-Secondary Marketing and Business Education Serve in Collaborating With PK–12 Marketing And Business Instructors in Preparing Students for Post-Secondary Marketing and Business?

PK–12 have perceptions that two-year post-secondary marketing and business instructors play a role in collaborating with PK–12 instructors through ways such as curriculum, advising PK–12 what is happening at the higher education level, and providing opportunities for high school students. After data analysis, four major themes emerged: (1) articulation with community college business classes, (2) alignment of curriculum between PK–12 and two-year post-secondary, (3) serving on CTE advisory committees and building relationships among PK–12 and two-year post-secondary, and (4) lack of participation or difficulty collaborating with community college.

Post-secondary two-year marketing and business programs serve as partners to assist with articulation agreements and maintain strong connections between PK–12 and two-year colleges. There are many benefits to a strong PK–12 and post-secondary partnership as it allows instructors to know how to align their curriculum, understand what is being taught at the post-secondary level to better prepare students for post-secondary education, and provide post-secondary education opportunities to students.

The benefits of articulated credit or some states refer to it as dual credit, is well known in the literature as seen by Defeo (2015) who discussed that 1,134 high school students were enrolled in a CTE course for which they could receive articulated credit at the local community college. In this study, PK–12 instructors had a mean score of 3.89 out of 5 for the statement "provides opportunities for high school marketing and business education to offer articulated credit. (e.g., articulated credit meaning high school instructors teach two-year post-secondary curriculum for college and high school credit)." PK–12 instructors agree that articulation happens at the high school level through agreements with local community colleges in Southern California.

Participant 12 advocated for active articulation agreements with a local community college to motivate students, "Some of the courses do have an active articulation agreement with the colleges and that helped motivate our students move on to the next level."

The benefit that participant 12 saw in active articulation motivating students to the next level aligns with Tabolowsky and Allen (2016) who also discussed there are benefits to taking dual credit courses including saving money reducing costs of college, understanding college rigor, and increasing access for all to obtain college credit—not just high academic achievers. Out of 38 qualitative statements, eight statements (21.05%) of statements were related to

articulation with community college business classes. Rodriguez and Gao (2021) identified that out of 112,000 students in California that participated in dual enrollment in 2019–2020, 20% of dual credit courses were career education focused, and dual credit participants are more likely to enroll in a two-year or four-year college or university.

There are benefits to having active articulation agreements between PK–12 and post-secondary marketing and business programs. Benefits include higher achievement standards for students, alignment of curriculum, and access for more students to receive opportunities for post-secondary education credit. This is supported by the literature, quantitative results, and qualitative results of this study.

Alignment among PK–12 and post-secondary marketing and business education programs is important as post-secondary instructors call for better-prepared students entering post-secondary marketing and business programs. The question of "what role does two-year post-secondary marketing and business education serve in collaborating with PK–12 marketing and business instructors in preparing students for two-year post-secondary marketing and business," 17 out of 38 statements (44.74%) of statements from PK–12 instructors were related to the alignment of curriculum. PK–12 instructors want to prepare students to be successful in post-secondary education but must be able to align to two-year post-secondary marketing and business programs.

In order to align PK–12 and the two-year post-secondary curriculum, there must be collaboration from both PK -- 12 and two-year post-secondary with an understanding of the pathways at each institution. PK–12 instructors mean for the question "collaborates with PK–12 marketing and business education programs" was a 3.16 out of 5. There is a neutral agreeability based on the Likert Scale. There has been help from various organizations and legislation to

increase collaboration among PK–12 and post-secondary programs. The United States has adopted career clusters and career pathways that start in PK–12 and continue with POS through post-secondary (Advance CTE, n.d.d.). Participant 6 advocated for collaboration among PK–12 and post-secondary when aligning marketing and business curriculum, “I believe the role for two-year post-secondary marketing and business education is to help align PK–12 instructor and course curriculum with post-secondary marketing and business education curriculum.”

These pathways and plans for alignment through POS were developed in collaboration with businesses, industry, and leaders from all levels of the education system to have CTE programs meet local and regional economic needs (Council of Chief State School Officers, 2014). Gordon and Schultz (2020) advocated that through the integration of academics and CTE, all students will be prepared for all post-secondary opportunities. In this study, participants discussed the role that two-year post-secondary marketing and business programs participate with PK–12 marketing and business programs.

For PK–12 and post-secondary to collaborate, post-secondary plays a role in developing a relationship with PK–12 marketing and business instructors. PK–12 marketing and business instructors play just as vital of a role in building and maintaining relationships with two-year post-secondary marketing and business instructors. This can be done through participating on advisory committees and building authentic relationships between PK–12 and post-secondary marketing and business faculty. Participant 5 discusses how PK–12 and post-secondary marketing and business programs collaborate, “Advisory committees which have administrators, teachers and industry workers/owners, and junior college liaisons helps bring together cohesiveness and collaboration of stakeholders to better serve students and our communities.”

There is literature that discusses how PK–12 and post-secondary serve on CTE advisory committees together and other literature discusses how PK–12 and post-secondary do not fully understand one another. Duncheon and Relles (2020) emphasize the gap where PK–12 CTE and post-secondary CTE do not understand each other as PK–12 teachers must teach students in a PK–12 environment but still maintain the requirements of the post-secondary intuition. This is affirmed as the mean score for the statement "attends PK–12 marketing and business education/career and technical education advisory committees" is 3.89 out of 5. PK–12 has a high neutral agreeability rating according to the Likert scale.

Among PK–12 and two-year post-secondary marketing and business faculty, relationship building, and collaboration is happening, specifically related to advisory committees. There is still a gap between PK–12 and post-secondary faculty that can be improved to build stronger relationships and partnerships between PK–12 and post-secondary marketing and business faculty for the benefit of students at both educational levels.

In contrast, there have been struggles or difficulties as PK–12 attempted to collaborate with post-secondary marketing and business faculty. There are many reasons for this such as low responsiveness, perceptions that post-secondary programs do not want to have PK–12 infringe upon their territory, or lack of engagement. The exact reasons are unknown. However, there is a gap that exists between PK–12 and post-secondary marketing and business programs. The gap which exists aligns with the literature, as Plasman et al. (2017) discuss that there is a lack of understanding between PK–12 faculty and post-secondary faculty since each has their own set of learning objectives and program outcomes yet has partnerships with one another to be successful. The gap which is perpetuated is further discussed by participant 7 as they attempted to collaborate with little success with their local community college:

> In my experience as a new Business Teacher and program coordinator. I have not had much experience connecting with post-secondary levels for articulation or tools. I will say, the connection is well needed and the assistance in bridging this gap would be most welcome.

Out of 38 statements, 6 of the statements or 15.79% of statements were related to the lack of participation or difficulty that PK–12 had in collaborating with a community college.

Overwhelmingly, there is alignment between the results and the literature that supports the role two-year post-secondary marketing and business programs serve in collaborating with PK–12 marketing and business programs such as articulation between PK–12 and two-year post-secondary marketing and business programs. However, there is still a gap that exists between PK–12 and two-year post-secondary in the role that post-secondary plays in collaborating with PK–12 marketing and business instructors to prepare students for two-year post-secondary marketing and business programs.

Research Question 1C: How Does PK–12 Align Itself with Post-Secondary Marketing and Business Programs?

PK–12 marketing and business instructors have differing perceptions on whether PK–12 marketing and business programs align themselves with post-secondary marketing and business programs. PK–12 perceives overall alignment, alignment through articulation, and the same curriculum and industry professional skills that align with two-year post-secondary marketing and business education. However, there are barriers to alignment which includes a lack of awareness of alignment with two-year programs, post-secondary programs that do not believe that PK–12 is teaching the depth needed in the subject, and barriers to collaboration.

PK–12 marketing and business instructors perceive that they align to two-year post-secondary programs through articulation, collaboration, and similar curriculum that aligns PK–12 marketing and business programs with two-year post-secondary marketing and business programs. The statement “aligns itself with two-year post-secondary marketing and business programs,” PK–12 instructors had a mean of 3.82 out of 5. This statement was statistically significant as it had a p-value of .013. This is further confirmed as two-year post-secondary marketing and business instructors answered the same statement with a 2.74 out of 5. The difference in perceptions between PK–12 and post-secondary instructors was quite vast. Legislation through the Perkins Acts has pushed PK–12 and post-secondary programs to better collaborate (Perkins V, 2018). PK–12 participant 13 discusses how they align themselves with post-secondary marketing and business programs, “Every course I teach is aligned with a two-year postsecondary program. They are also A-G approved electives should the students want more than a two-year approach after high school. The articulation credits are fought for and hard won.”

The alignment of PK–12 and post-secondary marketing and business programs are aligned with literature and contemporary CTE conversations as Advanced CTE (2020) discussed how the 2020 vision statement focused more heavily on preparing students for their future careers through the quality of programming, equity of CTE, and holistic partnerships with all stakeholders, such as industry, post-secondary partners, and leaders in all levels within the system. The alignment between PK–12 and post-secondary marketing and business programs is further exemplified by the PK–12 data transformation, which found that 9 statements (33.33%) out of 27 statements were related to PK–12 and post-secondary marketing and business programs being in alignment.

PK–12 marketing and business instructor's perception of alignment with post-secondary ranges in other aspects including curriculum, dual credit and articulation, and strategic plans. PK–12 marketing and business instructors have deep roots in collaborating with dual credit and articulated credit and similar curricula. The statement, "collaborates with two-year post-secondary marketing and business education faculty on articulated courses taught at PK–12 sites," PK–12 instructors had a mean score of 3.41 out of 5. The other statement, "prepares students with industry credentials that are taught by two-year post-secondary marketing and business programs," had a mean score of 3.47 out of 5. Both statements were neutral based on the Likert scale. This suggests that PK–12 instructors try to align to post-secondary but could be met with resistance. Participant 9 discusses how they use the same book, "I use the same book and cover everything they cover."

The literature further supports the alignment among PK–12 and two-year post-secondary marketing and business programs. D'Amico (2017) advocated that two-year post-secondary institutions achieve their mission by offering many programs including dual credit and articulated credit with high school partners. The alignment of dual credit and articulated credit is further discussed by Rodriguez and Gao (2021) as 112,000 students in California who participated in dual enrollment in 2019–2020, 20% of dual credit courses were career education focused, and dual credit participants are more likely to enroll in a two-year or four-year college or university.

There is alignment among PK–12 marketing and business programs perceptions as they align to post-secondary marketing and business programs in a multitude of ways including overall alignment, similar curriculum, and dual credit and articulated credit. There is also value in identifying global models and understanding them more to improve our current models in the

United States. Technical Vocational Education and Training (TVET) systems include academic education, vocational education, and worked based models that focus on the smooth transition from school-to-work through formal education and workplace learning through secondary, post-secondary, and tertiary (i.e., university) levels (European Union Commission, 2016). There are legislation, influential organizations, and leaders within marketing and business and CTE who advocate and push for the alignment among PK–12 marketing and business programs and two-year post-secondary marketing and business programs.

In contrast, there are barriers for PK–12 marketing and business instructors to align to two-year post-secondary marketing and business programs. Some barriers include a lack of awareness of alignments with post-secondary programs and barriers to collaboration among PK–12 and post-secondary marketing and business programs. PK–12 marketing and business instructors had a mean score of 3.5 out of 5 for the statement, “has a strategic plan that aligns to two-year post-secondary marketing and business education.” PK–12 does not perceive that they are misaligned but have some barriers that could improve the collaboration. This aligned with the literature as Duncheon and Relles (2020) highlighted a gap where PK–12 CTE and post-secondary CTE do not understand each other as each has its teaching environment but must maintain the requirements of the post-secondary institution. This is supported by participant 11, which expressed frustration that the counseling department from both institutions can be a barrier:

> PK–12 business and marketing programs are buffered by the PK–12 counseling system, which is further buffered by the 2-year counseling system. Coordinating any kind of planning or goals are distorted by going through counseling (on both sides).

Plasman et al. (2017) further asserted that there is a lack of understanding among PK–12 faculty and post-secondary faculty because of different sets of learning objective and program outcomes, yet, have partnership with each other to be successful. Participant 14 expressed misalignment among PK–12 and two-year post-secondary marketing and business programs through community colleges not collaborating with high school business pathways:

> Again, our CC will not collaborate with our high school Business Pathway. Although, we are invited to their advisory they will not attend our high school advisory. I am not aware of the CC Industry Certifications, or I would use them too.

The literature and the results suggest that there is an alignment among PK–12 and two-year post-secondary marketing and business programs. This includes collaboration among PK–12 and post-secondary, similar curriculum, and dual credit and articulated credit between PK–12 and post-secondary marketing and business programs. Yet, despite the alignment that exists there are gaps and barriers to collaboration such as a lack of knowledge in misalignment and communication barriers when relaying messages through departments.

Research Question 2: What Perceptions Do Post-Secondary Marketing and Business CTE Faculty Have of PK–12 Marketing and Business Programs?

Post-secondary marketing and business faculty have differing perceptions of PK–12 marketing and business programs that are unenthusiastic and optimistic. After an analysis of the data, three major themes transpired: (1) students are not prepared for post-secondary coursework in marketing and business, (2) the curriculum is created in siloes and no collaborative effort, and (3) there is a need for marketing and business to expose students to introductory skills and hands-on learning.

Two-year post-secondary marketing and business instructors do not believe that students going through PK–12 marketing and business programs are prepared for post-secondary coursework in marketing and business. A quote from participant 16 denotes how PK–12 marketing and business programs do not prepare students to take the next step after high school, "My overall perception of PK–12 marketing and business education programs is that they are week and do not do enough to advance students towards real careers. My perception is that it is all done in post-secondary."

The experiences expressed by participant 16 are not aligned with the literature as described by Defeo (2015) who asserts CTE trains for specific careers or occupations and prepares students for post-secondary education. This is complemented as Lekes (2007) identified CTE has a rich history of teaching skills needed in everyday life, skills needed in the workplace, and preparing students for post-secondary education. The themes in the qualitative analysis do not align with the literature.

PK–12 curriculum that is created in siloes is challenged by some of the literature. Stone (2017) affirmed that many CTE programs have a CTE advisory board that aligns PK –12, post-secondary, and industry to facilitate a smooth transition from high school to the world of work or post-secondary education. Participant 1 expressed their thoughts regarding marketing and business programs in high school:

> The program is ideal for students in high school, who want to experience what a college class would look like. The program is also very helpful for first-time generation college students, as it is affordable and provides students with credited classes easily transferred to state universities.

PK–12 partners with post-secondary educational institutions to provide a variety of experiences including dual credit, concurrent credit, articulated credit, and other post-secondary course programs depending on community college programming. Post-secondary marketing and business instructors described that there is a need to teach to expose PK–12 marketing and business students to introductory concepts.

Kandalec Holm (2019) identified that high school seniors felt prepared to go into post-secondary education institutions after taking CTE courses. This suggests that CTE hands-on learning combined with teacher-led instruction in the CTE marketing and business classroom could lead to students feeling more prepared to move on to post-secondary education.

The literature and experiences identified by participants are aligned in some ways and challenged in others. The perception that students are not prepared to move on to post-secondary education is challenged by literature. It is unknown if students described by post-secondary marketing and business instructors have taken PK—12 marketing and business classes or completed PK–12 marketing and business pathways before attending post-secondary education in marketing and business. There is a need to expose students to marketing and business students' introductory skills and hands-on learning was supported by the literature. The themes of students are not prepared to take post-secondary education courses and curriculum created in siloes was challenged by literature. Experiences from participants along with the literature suggest as though two-year post-secondary faculty are not fully engaged in PK–12 advisory and strengthening the partnership with PK–12. Two-year post-secondary marketing and business faculty indicate that students are not ready for post-secondary education, yet the literature indicates that PK–12 is preparing students for post-secondary education.

Research Question 2A: What is the Purpose of PK–12 Marketing and Business Programs?

The sub-research question qualitative analysis found five major themes: (1) determine if students want to pursue a career in business, (2) prepare students for post-secondary study, (3) find employment and engage in internships and projects, (4) programs are non-existent, inconsistent, or no basis to answer the question, and (5) introduce students to basic business concepts. The qualitative analysis and quantitative analysis showed some alignment and some misalignment of results, particularly with qualitative and quantitative data.

One of the purposes of PK–12 marketing and business programs should help high school students to determine if students want to pursue a career in business. The qualitative and quantitative analysis identified some misalignment between the quantitative data and qualitative data. For the statement, *receive specific career and education guidance for marketing and business regarding two-year post-secondary opportunities,* post-secondary instructor mean responses were 2.90 out of 5. While this was one of the highest mean scores for the post-secondary instructor responses, it is not high overall. 2.90 in comparison to the Likert Scale is *disagree*. This means that post-secondary instructors do not perceive that there is career and education guidance that is specific to marketing and business regarding post-secondary opportunities.

There seems to be a misalignment between the quantitative results and the qualitative results. Eight qualitative statements or 29.63% of statements were related to determining if students want to pursue a career in business. However, the quantitative results highlighted that PK–12 marketing and business programs do not prepare students for post-secondary study or go to the workforce. This idea is misaligned with the literature as Stone (2017) identified that high school CTE programs equip students with recognized industry credentials as evidence of

preparation for employment for continued occupational development. Participant 3 described the purpose of PK–12 marketing and business programs from their perspective, “Helps to determine if this discipline is something students would want to pursue.”

There is a duality of perspectives from post-secondary marketing and business instructors on their perceptions of PK–12 marketing and business programs. PK–12 marketing and business programs expose students to business for students to explore if they would like to pursue a potential career in business.

Post-secondary marketing and business instructors do not perceive that PK–12 marketing and business programs are preparing students to enter post-secondary marketing and business programs. One of the statements with the highest mean was, “prepares students to enter two-year post-secondary marketing and business programs,” with a mean of 2.89 out of 5. The same statement had a mean score of 4.10 for PK–12 marketing and business instructor’s perception. Participant 16 advocated that PK–12 programs should prepare high school students to enter a two-year program, “Mostly to prepare student to go into a 2-year postsecondary certificate/degree program, or to prepare them for the world of work (somewhat).”

Participant 16’s quote aligns with the literature as seen by Rodriguez and Gao (2021) where they poised that dual credit in California has been on the rise with 112,000 students in California participated in dual credit options in the 2019–2020 school year, which is a rise of 56% from the 2015–2016 school year. In addition, Pearson (2015) attests that CTE prepares students to be college and community ready through contextual learning, applying academic knowledge, and providing occupation and technical experience that bridge the real-world and school.

The literature, quantitative analysis, and qualitative analysis are misaligned from the perceptions of post-secondary marketing and business instructors. Survey research data identified that two-year post-secondary marketing and business instructors' perceptions where that PK–12 programs do not prepare high school students for two-year marketing and business post-secondary education. However, qualitative data, data transformation, and literature attested that PK–12 marketing and business programs prepare students for post-secondary programs in marketing and business.

Post-secondary marketing and business instructors perceive that PK–12 marketing and business programs should prepare students to find employment and engage in internships and projects. Qualitative analysis of post-secondary marketing and business instructors advocated that PK–12 marketing and business programs should prepare students to go directly into the workforce. This is further supported by participant 14, "Programs that engage business and institutions in internships or project opportunities offer the best way to link theory with practice."

This statement is misaligned with the quantitative analysis as post-secondary marketing and business instructors disagreed that PK–12 marketing and business programs prepared students to go directly into the workforce with a mean of 2.15 out of 5 from post-secondary marketing and business instructors. This is misaligned with literature as Altmann-Austin (2021) advocated that high school youth apprenticeship (i.e., internship) students exhibited behaviors including problem-solving, critical thinking, motivation, adaptability, eagerness to learn, reliability/dependability, collaboration, punctuality, and following instructions.

The literature and the qualitative analysis suggest that PK–12 marketing and business programs do support preparing high school students to enter directly into the workforce. The quantitative analysis indicated that the perceptions of post-secondary marketing and business

instructors who believe, despite the qualitative analysis, that PK–12 marketing and business programs do not prepare students to enter directly into the workforce. This is in contrast to PK–12 marketing and business instructor perceptions as they had a mean score of 4.19 out of 5 for the statement, “prepares students to enter two-year post-secondary marketing and business programs.” There is an extremely different perception of PK–12 and post-secondary instructors.

Post-secondary marketing and business instructors perceive that many marketing and business programs vary from school to school. Participant 5 describes their perception of PK–12 marketing and business programs, “My sense is that they are inconsistent. Meaning, programs are strong at some schools, non-existent at others. This seems to be largely driven by leaders/evangelists at give sites.”

The California Department of Education identified that California serves about 90,000 students in marketing and business programs (n.d.a.). It is known that not every school will have every pathway for a variety of different reasons. Reasons may include difficulty finding an instructor, labor market data of the community, budget, and many others. There is very little known as to why schools have certain pathways over others.

The data suggests since there are not marketing and business programs at every school site, there is inconsistent foundational knowledge that students are going to the community college. Not every high school in California has marketing and business programs, despite marketing and business being the highest awarded degrees and certificates at the post-secondary level (Advance CTE, 2021).

Post-secondary marketing and business instructors’ perception is they believe that PK–12 marketing and business instructors should introduce students to basic concepts. Concepts include technology, financial literacy, the language of business, and meeting state CTE standards. PK–12

marketing and business programs are vast around Southern California. Programs include work-based learning opportunities, CTSOs, and a strong curriculum. Post-secondary instructor's mean score for the statement, "collaborates with industry to review and provide feedback on the PK–12 marketing and business education curriculum," was 2.68 out of 5. This is particularly low as that mean score falls into the disagree category on the Likert scale. This is further aligned with Participant 11 as they describe the foundational knowledge students enter post-secondary education with:

> The students I have been getting are not using business applications. They have only used free Google applications and do not understand the business component at all. The students should learn desktop applications in MS Word, Excel, and PowerPoint before they enter college.

To prepare students for their next step after high school, marketing and business programs provide students with hands-on learning opportunities. This includes supporting all students in their career journey by introducing students to business concepts. Preparing students for their next step is aligned with literature as Jacobs (2017) supported that high schools provide hands-on training that translates directly to an attractive career upon graduation for students who are not college or university bound.

The alignment among the quantitative results, qualitative results, and literature are not very strong. There also seems to be a bigger gap between the perceptions of PK–12 and post-secondary marketing and business instructor perceptions. There is some misalignment between quantitative and qualitative data. Most of the data did align with the literature with some exceptions. Overall, data did identify that post-secondary instructors' perception is they believe that PK–12 marketing and business should introduce students to basic business concepts, prepare

students to enter two-year post-secondary business and marketing programs, and prepare students for employment and internships. Post-secondary instructors believe that marketing and business programs vary throughout Southern California such as not every school having a program and there being more support for some programs compared to others.

Research Question 2B: What Role Does PK–12 Marketing and Business Education Serve in Preparing Students for Post-Secondary Marketing and Business?

The qualitative analysis of this sub-research question found three major themes: (1) teaching business curriculum that is aligned to the current workforce, (2) not all students should go to college and should explore careers, and (3) collaboration between PK–12 marketing and business programs and two-year post-secondary marketing and business programs. The qualitative and quantitative analyses are in alignment. However, there is a misalignment between the literature and results.

Two-year post-secondary marketing and business instructors perceive that PK–12 marketing and business instructors should teach content that prepares students for two-year post-secondary marketing and business. Post-secondary instructors have a low perception of the statement, “teach content that prepares students for two-year post-secondary marketing and business,” with a mean score of 2.95 out of 5. The statement is not in alignment with the literature as it has been noted that CTE does prepare students to be workforce ready as CTE serves the purpose of training for specific careers or occupations (Defeo, 2015). This aligns with disagree on the Likert scale. However, it is very close to a neutral rating on the Likert scale.

In addition, two-year post-secondary marketing and business instructors had a mean of 2.50 out of 5 for the following statement, “expose their students to all necessary aspects of the

industry.” The literature from Gauthier (2020a) is misaligned with this statement as he emphasizes that CTE students have a technical skillset.

These statements further attest two-year post-secondary instructors do not believe that PK–12 instructors have the capabilities of preparing students to enter two-year marketing and business programs. This was further supported by participant 7, “My guess is these programs are a joke based on the fact that you have teachers in high school that are not experts in business. Also “business” curriculum is largely outdated with the workforce.”

Post-secondary marketing and business instructors have advocated students entering their programs are lacking foundational skills in marketing and business. However, post-secondary marketing and business instructors do not see a role for PK–12 to prepare students to enter marketing and business post-secondary programs. This is misaligned with the literature on CTE students’ skillset and CTE prepares students for occupations.

Post-secondary marketing and business instructors perceive that the role of PK–12 marketing and business instructors should be to have students explore career options and teach basic skills with an understanding that not all students will attend post-secondary education. This is demonstrated through Defeo (2015) as he highlighted that CTE serves a dual role of career exploration and training for careers and prepares students for post-secondary education. 5 out of 19 or 26.32% statements related to the concept of training for careers and preparing students for post-secondary education. Participant 1 further demonstrates the role of high schools regarding students and their future preparation:

> High Schools should also recognize that not all students should attend college. They should be teaching basic skills in a variety of trades so they can choose which one is a good fit for themselves before attending a bigger post high school program.

Further literature aligns with having students explore different options before entering post-secondary programs. Kelly and Price (2009) advocated that CTE is known for re-engaging disengaged students and providing non-college-bound students with a different option. This aligns with the quantitative data as the post-secondary instructor mean score for the statement, “offer courses that meet the respective local labor marketing demand,” was 2.60 out of 5. While this is not a high mean score, which aligns with disagree on the Likert scale, it can be interpreted as post-secondary instructors thinking that the courses offered in PK–12 programs should align with local labor market data.

Post-secondary marketing and business instructors have a perception and believe that PK–12 marketing and business instructors should be exposing students to more career exploration. This aligns with the literature as high school programs should expose students to a variety of careers. It is also noted that PK–12 programs have a dual role of preparing for career exploration as well as preparing students to enter post-secondary education.

Post-secondary marketing and business instructors believe that PK–12 and post-secondary marketing and business programs should collaborate. There is a misalignment between qualitative and quantitative findings among post-secondary instructors.

Two-year post-secondary marketing and business had a mean of 2.55 out of 5 for the following statement, “collaborate with two-year post-secondary marketing and business instructors in the development of curriculum.” Four statements (21.05%) statements in the qualitative data transformation were aligned to collaboration among PK–12 and post-secondary marketing and business programs. Collaboration among PK–12 and post-secondary marketing and business programs could improve as it is very important for alignment among PK–12, post-secondary, and the workforce. Collaboration among PK–12 and two-year post-secondary was

highlighted by participant 13, “PK–12 marketing and business education should prepare students academically to study business, introduce them to career options, familiarize them with how industry works in the real world, and it should collaborate with higher education.”

Collaboration is important among PK–12 and post-secondary instructors and programs. The importance of PK–12 and post-secondary instructors and programs collaboration aligns with the literature. Gordon & Schultz (2020) emphasize that there is greater accountability and emphasis on stakeholder involvement with CTE programs. The legislation speaks to the need for PK–12 and post-secondary programs to collaborate such as Perkins V. Advance CTE (2020) showcased PK–12, post-secondary, industry, and other organizations which collaborate to improve upon the vision of CTE to support each learner.

The themes were consistent with the literature; yet the quantitative findings were inconsistent. The results suggest that post-secondary marketing and business instructors do not believe that PK–12 marketing and business collaborate with higher education and teach students business concepts used in the workforce. The quantitative results are not aligned with the qualitative statements and data transformation from two-year post-secondary marketing and business instructors. The perception among post-secondary marketing and business instructors that they are collaborating with PK–12 programs is misaligned. Stone (2017) attests that CTE has high-quality programming by having a CTE advisory board that supports industry credentials, dual credit, and other linking elements between PK–12, post-secondary, and industry to facilitate a smooth transition from high school to the workforce or post-secondary education.

The results suggest that there may be a misunderstanding from two-year post-secondary marketing and business instructors of the requirements that high school instructors must have to teach PK–12 marketing and business education. Lastly, there is a need in the literature for PK–12

and post-secondary marketing and business programs to collaborate including the 2020 Advance CTE Vision statement and legislation. Post-secondary marketing and business instructors must be receptive and agreeable to collaborate with PK–12 marketing and business instructors.

Research Question 2C: How Does PK–12 Align Itself with Post-Secondary Marketing and Business Programs?

Post-secondary marketing and business instructors have different perceptions of whether PK–12 aligns itself with post-secondary marketing and business programs. There is also a large difference in how post-secondary views align among PK–12 and post-secondary compared to the views of PK–12 marketing and business instructors. There is data that suggests that post-secondary marketing and business instructors perceive PK–12 marketing and business programs are aligned with post-secondary marketing and business programs and there is data that suggests that post-secondary marketing and business instructors do not believe that PK–12 is aligned with post-secondary marketing and business programs. Post-secondary instructors are very split on whether PK–12 is aligned with post-secondary marketing and business programs. Literature is aligned with qualitative results, but not aligned with quantitative results.

Post-secondary marketing and business instructors believe that PK–12 marketing and business programs are aligned with post-secondary programs. The sub-themes found in the qualitative analysis suggest that there is alignment in three different ways: (1) classes and programs are aligned, (2) alignment exists due to dual credit, and (3) other varied forms of alignment. Across Southern California alignment is different. Participant 15 discussed that there is alignment, just unsure of the details, “Some do. I don’t have specific details to share, but I know that my college works closely with middle schools and high schools to align CTE programs through postsecondary degree/certificate completion.”

There are multiple incidents in the qualitative data and data transformation where community college instructors discuss ways that PK–12 marketing and business programs and post-secondary programs are in alignment. Out of 27 statements of alignment, 13 statements (48.14%) of statements discuss how PK–12 marketing and business programs are aligned with post-secondary. PK–12 marketing and business CTE programs aligned to two-year post-secondary programs are aligned with the literature. Legislation such as Perkins V has put more accountability on PK–12 CTE programs to align with post-secondary programs (Perkins V, 2018). In addition, Kandalec Holm (2019) discussed that high school seniors felt prepared to go into post-secondary education after taking CTE courses in high school.

However, the alignment of PK–12 marketing and business programs and post-secondary marketing and business programs with the support of literature does not align with this study's quantitative results. Post-secondary instructors responded to the statement, "collaborates with two-year post-secondary marketing and business education faculty on articulated courses taught at PK–12 sites," with a mean of 2.84 out of 5. This response aligned with the Likert scale as disagree. Furthermore, post-secondary instructors rated the statement, "aligns itself with two-year post-secondary marketing and business programs," with a mean of 2.74 out of 5. This statement had p =.013, being statistically significant. PK–12 and post-secondary instructors had different opinions on being aligned with the quantitative data. PK–12 instructors' mean for the same statement was 3.82 out of 5. Cohen's d was .889, which shows a high degree of difference in the results of the two groups. The varied results and coordination between the two systems were discussed further by Participant 18, "There is coordination between the local school district and our college. However, little of what is discussed or implemented makes it to the instructors."

PK–12 instructors believe they are aligned with post-secondary programs, whereas post-secondary instructors have a different perspective. Post-secondary instructors' quantitative results indicate they do not believe PK–12 and post-secondary marketing and business programs align. However, qualitative results and the existing literature are in alignment indicating there is alignment among PK–12 and post-secondary marketing and business programs. The alignment between the two programs is especially important as PK–12 schools have identified that not every student will go to a four-year university and going to a community college or technical college is a common pathway (Stevens et al., 2019).

Post-secondary marketing and business instructors are split on the perceptions of alignment among PK–12 and post-secondary marketing and business programs, and the other half of the statements from the qualitative analysis indicated that post-secondary marketing and business instructors do not believe that PK–12 marketing and business programs align with post-secondary programs. The data transformation indicated that 14 statements out of 27 or 51.85% of statements aligned to PK–12 marketing and business programs not aligned with post-secondary marketing and business program.

According to the results, 8 statements out of the 14 statements related to programs not being in alignment identified that two-year post-secondary instructors were not aware of the alignment of PK–12 and post-secondary marketing and business programs. Participant 11 shared their perspective, "It does not. I have no idea what they teach there. It seems that the students who took business/marketing class, do not even know the simplest business concept such as the role of technology in marketing."

This aligns with the research about perceptions among PK–12 and post-secondary CTE. Plasman et al. (2017) asserted that there is a lack of understanding between PK–12 instructors

and post-secondary instructors since each has their own set of learning objectives and program outcomes, yet each has partnerships with the other to be successful. In addition, Relles (2020) emphasized a gap where PK–12 CTE and post-secondary CTE do not understand one another as PK–12 instructors teach in a PK–12 environment, yet still maintain the requirements of the post-secondary institution.

The perception among post-secondary marketing and business instructors is that they are not aware of alignment, the curriculum is made in siloes with no input from post-secondary partners, and students who have taken PK–12 marketing and business courses do not have fundamental knowledge and concepts. However, there are not marketing and business and marketing programs at every school site in Southern California. This suggests that not all students are getting access to marketing and business programs.

However, in all post-secondary programs, marketing and business degrees are the highest awarded. In 2020, there were 368,193 marketing and business-related associate degrees and certificates awarded, which comprises 52.7% of all degrees and certificates awarded statewide in California (Advance CTE, 2021). Business degrees and certificates are the highest awarded among all degrees and certificates awarded at the PK–12 level and two-year post-secondary level in the state of California (NCES, 2021). It is unclear as to whether two-year post-secondary marketing and business instructors identified whether students took marketing and business courses while in high school or before going to their community college program.

Post-secondary marketing and business instructors have a split perception of whether PK–12 programs are aligned with post-secondary programs based on qualitative analysis and literature. The quantitative results suggested that PK–12 marketing and business programs are not aligned with post-secondary programs. Literature aligns with the qualitative analysis and data

transformation which indicates that there is alignment among PK–12 and post-secondary marketing and business programs. However, since there is a split in the results, PK–12 along with post-secondary marketing and business programs could do a much better job at collaborating for the benefit of one common goal, our future generation of students about to enter the workforce.

Conclusions

The two research questions were answered by utilizing quantitative and qualitative analysis. The findings of this study suggest that PK–12 and two-year post-secondary marketing and business instructors in Southern California have a difference in perceptions of the respective program. There is a need for marketing and business pathways to have alignment starting from PK–12 and continuing through post-secondary programs. The research presented a gap in perceptions that PK–12 and two-year post-secondary marketing and business instructors have of the other program, particularly the purpose of PK–12 marketing and business programs.

The findings of this research are that PK–12 marketing and business instructors have overall positive perceptions of two-year post-secondary marketing and business programs concerning positive programming and preparing students with skills that align with the workforce. PK–12 marketing and business instructors perceive two-year post-secondary marketing and business instructors provide feedback to PK–12, is collaborative, and mostly provides opportunities for PK–12 students to attain post-secondary credits. PK–12 marketing and business programs perceive that they align themselves with two-year post-secondary marketing and business programs, prepare students with industry credentials, and collaborate with two-year post-secondary marketing and business programs. Particularly, PK–12 perceives the most

alignment among curriculum, knowledge, skills, and industry professional skills and articulation among courses.

Further findings of this research are that two-year post-secondary marketing and business instructors do not have as positive perceptions of PK–12 programs. Two-year post-secondary marketing instructors perceive that PK–12 programs do not prepare students for post-secondary coursework in marketing and business, the curriculum is created in siloes, and there is a need for marketing and business to expose students to introductory skills. Two-year post-secondary marketing and business instructors do not have as high of a perception that PK–12 marketing and business instructors prepare students to enter two-year post-secondary marketing and business programs, prepare students to enter directly into the workforce, or collaborate with industry to get feedback on curriculum. Two-year post-secondary marketing and business instructors perceive that PK–12 marketing and business is not aligned with two-year post-secondary marketing and business programs as they mostly teach content that exposes students to all necessary aspects of the industry and offer courses that meet local labor market demand.

While there are differences in perceptions among PK–12 and two-year post-secondary marketing and business programs, it provides a platform for PK–12 and two-year post-secondary programs to support one another and collaborate more intentionally. The literature review spotlights that both PK–12 and two-year post-secondary marketing and business programs have a different target audience, but each can collaborate to support one another as each does depend on the other for different aspects of their programs. This includes curriculum, student retention, and workforce alignment.

ACTE 2020 vision statement includes participation from PK–12, post-secondary, public organizations, and industry to advance CTE in the United States (Advance CTE, 2020). This has

also been an ongoing conversation for years as there was a similar vision statement from ACTE in 2010. Both PK–12 and two-year post-secondary marketing and business serve CTE students to prepare them for the workforce through industry-recognized credentials and the next step in their educational and career pathway. Stone (2017) attested to this by aligning to high-quality programming by having a CTE advisory board that supports stackable industry credentials, dual credit, and other linking elements between PK–12, post-secondary, and industry to facilitate a smooth transition from high school to the workforce or post-secondary education. The results of this research study have shown differences and similarities among the perceptions that PK–12 and two-year post-secondary marketing and business programs have of one another and that there is more work to be done to better understand the respective program in Southern California.

Recommendations

Perceptions among PK–12 and two-year post-secondary marketing and business programs have been under-researched. However, perception research has been long researched for decades. Recommendations for further research on PK–12 and two-year post-secondary marketing and business instructor perceptions of the respective program are below. Recommendations include recommendations for future research, recommendations for future dissemination, and recommendations for professional practitioners.

Recommendations for Future Research

The following are recommendations for research that should continue to be investigated on the PK–12 and two-year post-secondary marketing and business instructor perceptions of the respective program specifically across the United States:

- Replicate this study and extend it state-wide and nationwide and compare the findings.

- Conduct a qualitative research study, utilizing a case study approach and interview those that have best practices in relationships with PK–12 and post-secondary alignment.
- Conduct a study of the perceptions of two-year post-secondary marketing and business instructors that are very active with PK–12 collaborations and compare it to those who are not active among PK–12 collaborations.
- Conduct a study that focuses on why PK–12 and post-secondary marketing and business programs have difficulty in collaborating.

Recommendations for Future Dissemination

The following are opportunities to disseminate this research. Sharing the outcomes of this research with educators has the potential to further the collaboration between PK–12 and two-year post-secondary marketing and business and better understand each program's perceptions.

- Present the findings at local, state, national, and international marketing and business education conferences and CTE conferences.
- Present findings at CTE and business education meetings and conferences such as the California Community College Conference, California Business Education Association Conference, California Educating for Careers Conference, and at Southern California regional consortium meetings with PK–12 and post-secondary representatives.

Recommendations for Professional Practitioners

The involvement of each educational system is important as interweaving the two systems will take priority to educate the children in the United States to take their stand in

today's workforce. Recommendations follow that focus on the collaboration among PK–12 and two-year post-secondary marketing and business programs.

- Implement high-quality CTE frameworks and hold local schools and school districts accountable to the elements of the high-quality frameworks.
- Ensure that each school system is represented on CTE advisory boards; many times there is a lack of representation of the respective educational institution on the advisory committee.
- Educate faculty on the work that is being done at the two various educational institutions regarding the findings within this study and ensure that both understand the benefits of collaborating for the future of their programs.
- Evaluate the relationship between the PK–12 and two-year post-secondary program partnerships. This will show gaps and understandings to improve the collaborative effort among each educational institution.
- Partner with PK–12 and two-year post-secondary marketing and business programs that have high-caliber collaboration. This can be a model of collaboration and improve the relationship between PK–12 and post-secondary instructors to be able to educate students to be able to move on to the next level.
- Further advocate and educate all stakeholders including teachers, respective board members, administrators, and students the importance of understanding one another to improve opportunities and education of the most valuable asset that we have, the next generation of students in marketing and business in our nation.

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Appendix A

Invitation to Participate in Study

Dear Marketing & Business Instructor:

As a doctoral student in the Career & Technical Education Leadership program at the University of Wisconsin–Stout, I am conducting a study on PK–12 and two-year post-secondary marketing and business instructor perceptions of PK–12 and two-year post-secondary marketing and business programs as part of my dissertation requirements. I am contacting you because you are a marketing and/or business instructor(s) at your institution.

A marketing and/or business instructor's perceptions of PK–12 and two-year post-secondary marketing and business programs are of great interest to me. This study will examine the purpose of PK–12 marketing and business programs, how PK–12 and two-year post-secondary marketing and business programs collaborate, how PK–12 aligns itself with two-year post-secondary marketing and business programs, and what role PK–12 marketing and business education serve in preparing students for two-year post-secondary marketing and business programs. Each subject will be asked to complete an electronic survey and will take approximately 15 minutes to complete.

The results of this study could be significant in future collaborations between PK–12 and two-year marketing and business instructor collaborations and show the need and reason for PK–12 and two-year post-secondary marketing and business instructors to collaborate on pathways from PK–12 through two-year post-secondary marketing and business education. Both PK–12 marketing and business instructors and two-year post-secondary marketing and business instructors can understand perceptions better in order to effectively collaborate. This study may also help with understandings that PK–12 marketing and business instructors and two-year post-secondary marketing and business programs and instructors have of one another. I will use the results from this study to write a portion of my doctoral dissertation.

Participation in this study is completely voluntary. Should you participate, you may stop at any time without penalty. All responses will be kept confidential throughout the course of the study. If you agree to participate in this study, please click on the link provided in the email. Prior to beginning the survey, consent will be asked again by clicking on a box. Please consider participating in this study, as your contributions are highly valued. If there are any questions, please contact me at 414.793.2770 or vanaackens8050@my.uwstout.edu.

Respectfully,

Sean P. Van Aacken, Doctoral Candidate in Career & Technical Education Leadership
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Menomonie, WI 54751
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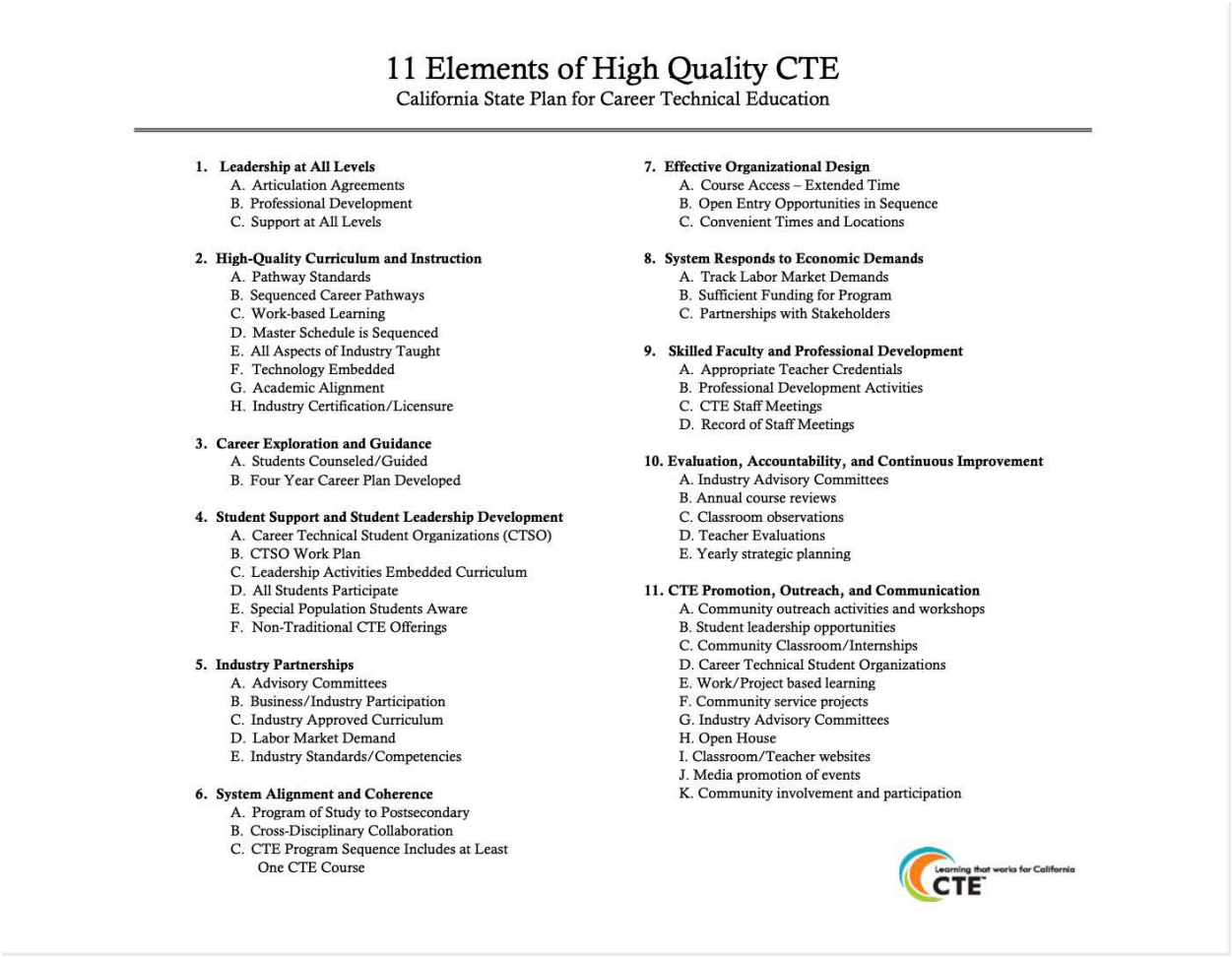
Appendix B

11 Elements of a High-Quality CTE Program Self-Review Tool



11 Elements of High Quality CTE

California State Plan for Career Technical Education

1. **Leadership at All Levels**
   - A. Articulation Agreements
   - B. Professional Development
   - C. Support at All Levels
2. **High-Quality Curriculum and Instruction**
   - A. Pathway Standards
   - B. Sequenced Career Pathways
   - C. Work-based Learning
   - D. Master Schedule is Sequenced
   - E. All Aspects of Industry Taught
   - F. Technology Embedded
   - G. Academic Alignment
   - H. Industry Certification/Licensure
3. **Career Exploration and Guidance**
   - A. Students Counseled/Guided
   - B. Four Year Career Plan Developed
4. **Student Support and Student Leadership Development**
   - A. Career Technical Student Organizations (CTSO)
   - B. CTSO Work Plan
   - C. Leadership Activities Embedded Curriculum
   - D. All Students Participate
   - E. Special Population Students Aware
   - F. Non-Traditional CTE Offerings
5. **Industry Partnerships**
   - A. Advisory Committees
   - B. Business/Industry Participation
   - C. Industry Approved Curriculum
   - D. Labor Market Demand
   - E. Industry Standards/Competencies
6. **System Alignment and Coherence**
   - A. Program of Study to Postsecondary
   - B. Cross-Disciplinary Collaboration
   - C. CTE Program Sequence Includes at Least One CTE Course
7. **Effective Organizational Design**
   - A. Course Access – Extended Time
   - B. Open Entry Opportunities in Sequence
   - C. Convenient Times and Locations
8. **System Responds to Economic Demands**
   - A. Track Labor Market Demands
   - B. Sufficient Funding for Program
   - C. Partnerships with Stakeholders
9. **Skilled Faculty and Professional Development**
   - A. Appropriate Teacher Credentials
   - B. Professional Development Activities
   - C. CTE Staff Meetings
   - D. Record of Staff Meetings
10. **Evaluation, Accountability, and Continuous Improvement**
    - A. Industry Advisory Committees
    - B. Annual course reviews
    - C. Classroom observations
    - D. Teacher Evaluations
    - E. Yearly strategic planning
11. **CTE Promotion, Outreach, and Communication**
    - A. Community outreach activities and workshops
    - B. Student leadership opportunities
    - C. Community Classroom/Internships
    - D. Career Technical Student Organizations
    - E. Work/Project based learning
    - F. Community service projects
    - G. Industry Advisory Committees
    - H. Open House
    - I. Classroom/Teacher websites
    - J. Media promotion of events
    - K. Community involvement and participation

Learning that works for California CTE

1. LEADERSHIP AT ALL LEVELS			
Yes	**No**	**What is being Assessed**	**Evidence**
		1 A. The CTE pathways are articulated with post-secondary and industry through programs of study, formal articulation agreements and dual enrollment.	• Dual Enrollment information

			• Articulation Agreements
		1B. Local district administrators participate in CTE professional development regarding the benefits of CTE and the management of CTE within the larger context of educational improvement to serve all students.	• Dates and Names of Activities
		1C. Investment is made to provide support for CTE leadership at the local level to ensure that CTE administrators, teacher(s), and counseling and instructional leaders have sufficient time and resources to implement system improvements and work with their counterparts in other programs.	• Dates and Names of Activities
Comments:			

2. HIGH-QUALITY CURRICULUM AND INSTRUCTION			
Yes	**No**	**What is being Assessed**	**Evidence**
		2A. The CTE Model Curriculum Standards are the basis for content of courses offered. Curriculum addresses	• Course Outlines

			"Pathway" standards within the program pathway(s) and course sequence.	• Course Catalog • Local CTE Plan • Review Curriculum Document
		2B.	Career paths have been identified and can be found on a chart or diagram in the CTE Plan.	• Local CTE Plan

2. HIGH-QUALITY CURRICULUM AND INSTRUCTION cont.				
Yes	**No**		**What is being Assessed**	**Evidence**
		2C.	The CTE program has classroom-linked work-based learning and work experience education opportunities through strengthened industry partnerships, effective coordination with Regional Occupation Center/Program (ROC/P), adult schools, Work Experience Education, and Cooperative Work Experience Education programs, and a systematic review of policies and practices addressing barriers to access, including insurance, liability, and other issues.	• List of Work Based Learning (WBL) Sites • Percentage of Students Participating

		2 D.	The school master schedule allows students to follow the recommended sequence of CTE courses to complete the selected career path(s).	• Master Schedule • Course Catalog
		2E.	Students are provided with a strong experience in and understanding of all aspects of industry.	• WBL Experiences • Review Curriculum Document • Lesson Plans
		2F.	Technology is incorporated into program instruction.	• Program-Based Software • Program-Related Technology and Advanced Equipment
		2 G.	There is collaboration between academic and CTE teachers.	• Agenda • Minutes • Sign-In Sheets
		2 H.	CTE courses are industry certified, have been submitted to meet high school graduation requirements, University of California a-g (UC a-g) credit, or articulated with a community college.	• Copy of Certification or Licensure • Copy of UC A-G Approval List; Articulation Agreements
Comments:				

3. CAREER EXPLORATION AND GUIDANCE			
Yes	**No**	**What is being Assessed**	**Evidence**
		3A. Students are counseled regarding: • CTE career opportunities. • CTE and academic courses necessary to complete career pathway offerings. • Post-secondary education and training options.	• List of Activities • List of Career Path Information Sent to Parents, Counselors and Students
		3B. All students have a completed a four-year career plan that is updated annually.	• Lesson Plans • Example of Student Four Year Plan
Comments:			

4. STUDENT SUPPORT AND STUDENT LEADERSHIP DEVELOPMENT			
Yes	**No**	**What is being Assessed**	**Evidence**

		4 A.	An official Career Technical Student Organization (CTSO) has been chartered (or in application process) by the State Association.	• CTSO Document • Agenda/Minutes/Sign-In Sheets
		4B.	A local CTSO work plan is developed annually and a copy is furnished to local administration.	• CTSO Work Plan

4. STUDENT SUPPORT AND STUDENT LEADERSHIP DEVELOPMENT cont.				
Yes	**No**		**What is being Assessed**	**Evidence**
		4C.	Leadership activities are embedded in the CTE curriculum.	• List of Leadership Activities o Lesson Plans o Curriculum • Percentage of Students Participating • Evidence of Student Achievement • List of Student Organization Involvement In Community or School Related Activities

		4 D.	All students enrolled in CTSO's are affiliated with the State Association.	• Local CTSO Roster
		4E.	Program meets the needs of special population students (including special education, English learners, non-traditional students, and the general student population).	• Student Completion Rates • Student Placement Results • Catalog of Support Services • Retention Rates • Mentors, Role-Models, Etc
		4F.	Students are made aware of non-traditional CTE offerings and pathways that lead to high skill, high wage, or high demand careers.	• Promotional Materials • Student Placement Results • Counseling Materials
Comments:				

5. INDUSTRY PARTNERSHIPS			
Yes	**No**	**What is being Assessed**	**Evidence**

		5 A. The Local CTE Advisory Committee is operational and reflects the committee membership as outlined in the California *Education Code* §8070 and meets at least once a year.	• List of Advisory o Members o Titles o Industry • List of Educators • Agenda/Minutes/Sign-In • E-mails
		5B. Business/industry is involved in student learning activities.	• List of Activities – o Job Shadowing o Speakers • Percent of Industry Participation
		5C. Business/industry is involved in the development and validation of the curriculum.	• List of Advisory Members and Industries • Agenda/Meeting Minutes/Sign-In Sheets
		5 D. Labor market demand has been documented for the Program.	• Labor Market Projections

		5E.	There are industry certification standards and certificates for students who achieve industry recognized skill and knowledge requirements.	• Copy of Certification Standards • Percentage of Students Receiving Certification
Comments:				
6. SYSTEM ALIGNMENT AND COHERENCE				
Yes	**No**		**What is being Assessed**	**Evidence**
		6A.	A Program of Study, with a post-secondary institution, has been developed.	• Industry Sector/Career Pathway Identified • Articulation, UC A-G, Technical School Sequence Documents
		6B.	Sufficient time is provided for faculty to build cross-segmental and cross-disciplinary collaborations aimed at aligning curricula and programs, as well as models, tools, and professional development to facilitate pathway development.	• Meeting Dates for Collaboration Time with Others in Identified Sequence • Documents Identifying Sequence

		6C.	Each CTE program sequence will include at least one district-funded CTE course in the industry sector.	• Local CTE Plan • Fiscal Records
Comments:				

7. EFFECTIVE ORGANIZATIONAL DESIGN				
Yes	**No**		**What is being Assessed**	**Evidence**
		7A.	Opportunities provide for better use of after-school, extended-day, and out-of-school time for career exploration, projects, and WBL connected to in-class curricula.	• Percentage of Students Who Participate • List of WBL Activities • Signed WBL Agreements
		7B.	There are open-entry/open-exit strategies where feasible, in ways that maintain the integrity of CTE courses and course sequences and comply with industry requirements; structure and sequence curriculum in modules or “chunks” tied to jobs with multiple entry and exit points, and with multiple levels of industry-recognized credentials built into the sequencing of the pathway.	• Program Plans • Counseling Materials • Programs of Study Documents

7. EFFECTIVE ORGANIZATIONAL DESIGN cont.				
Yes	**No**		**What is being Assessed**	**Evidence**
		7C.	Provides education and training for students and incumbent workers at times and locations convenient to students and employers, including non-traditional time or methods.	• Distance Learning Activities • Internet CTE Research Project Completed by Students
Comments:				

8. SYSTEM RESPONSIVNESS TO CHANGING ECONOMIC DEMANDS				
Yes	**No**		**What is being Assessed**	**Evidence**
		8A.	Mechanisms are in place that systematically track labor market demands, maintain the currency of occupational classifications, and ensure that teachers and counselors are informed of new developments in their fields.	• Minutes Showing Business/Industry Input Into Curriculum And Programs

		8B.	There is sufficient funding to cover costs of necessary equipment and facilities.	• Documented Costs Over Last 2 Years • Assessment of Ongoing Costs
		8C.	There is a partnership among local businesses and local workforce development and educational organization to provide consistent and reliable data about the regional economic and labor markets for planning programs.	• Labor Market Reports for both Regional and Global • Advisory Committee Minutes/Agendas
Comments:				

9. SKILLED FACULTY AND PROFESSIONAL DEVELOPMENT				
Yes	**No**		**What is being Assessed**	**Evidence**
		9A.	Every CTE teacher has the appropriate credential for teaching the subject(s) assigned as well as documented employment experience outside of education in the program area taught.	• Approved by Local Credential offices

		9B.	Based on the previous year's records, every CTE teacher, teaching at least half time CTE, attends a minimum of four professional development activities.	• List of Teacher Technical Development Activities Such as Staff Exchange, Technical Conferences, Industry Certification Training, Etc.
		9C.	The CTE staff meets a minimum of twice a month. (This criteria does not apply to single person departments - mark column N/A = Not Applicable.)	• Staff Meeting Minutes
		9D.	A written record of minutes of action taken during CTE staff meetings is kept in Department files.	• Staff Meeting Minutes
Comments:				

10. EVALUATION, ACCOUNTABILITY, AND CONTINUOUS IMPROVEMENT				
Yes	**No**		**What is being Assessed**	**Evidence**
		10A.	A District CTE Plan is on file with the local administration and a copy is retained in the local department files.	• Local Plan Files

		10 B.	Updates of the CTE Plan are sent to the local administrator by February. These updates include: (1) Five Year Equipment Acquisition Schedule; (2) Chart of Staff Responsibilities; (3) CTSO Program of Work; (4) Advisory Committee Roster.	• Meeting Notes • Improvement Plan

10. EVALUATION, ACCOUNTABILITY, AND CONTINUOUS IMPROVEMENT cont.				
Yes	**No**		**What is being Assessed**	**Evidence**
		10 C.	Enrollment report (CDE 101-E1) • All CTE courses are properly identified in data system (including new courses). • Enrollment figures and reports are reviewed by: o Site Staff and district CTE staff o Site and district advisory committees • Completed and submitted by **October 15 to the CDE**.	• CDE Records • Local Data System • Meeting Notes/Minutes
		10 D.	A follow-up system (including membership in California Partnership for Achieving Student Success [CALPASS]) is used which gathers the following information from program completers:	• CDE Records • Meeting Notes/Minutes

		• Student placement status in postsecondary education or advanced training, in military service, or in employment. • Opinion regarding the value and relevance of the CTE program. • Suggestions for improving the CTE program.	
		10 E. Graduate Follow Up/Placement Report (CDE 101-E2) The Graduate Follow Up data collected and presented to the CDE **by March 15**.	• CDE Records
		10 F. The CTE Department analyzes their student retention numbers each year and develops strategies to help increase retention within the program.	• Meeting Notes • Advisory Agenda/Minutes
		10 G. All Core Indicators meet or exceed the State level targets.	• Meeting Dates, Discussion Points
		10 H. The Expenditure Reports (CDE 101-A and VE-5) are received by the CDE by September 30.	• CDE Records • Interview of District Fiscal Representative
Comments:			

11. CTE PROMOTION, OUTREACH, MARKETING, AND COMMUNICATION

Yes	No		What is being Assessed	Evidence
		11 A.	The CTE program has a recruitment brochure or similar document used to promote the program.	• Copy of Plan • Date and Type of Activities such as Web Page, Career Fairs, Open House, Serving on Program Related Committees, etc.
		11 B.	The CTE Department(s) conduct recruitment activities.	• Copy of Plan such as Feeder School Meetings
Comments:				

Appendix C

Survey for PK–12 Marketing and Business Instructors

Study Title: *An Evaluation of PK–12 and Two-year Post-Secondary Marketing and Business Instructors' Perceptions of PK–12 and Two-year Post-secondary Marketing and Business Programs in Southern California*

For the purposes of this study, marketing and business will be viewed as one discipline. It is noted that marketing and business are seen as separate disciplines at many colleges, universities, and for PK–12 credentialing.

Study RQ1: *What perceptions do PK–12 marketing and business CTE faculty have about marketing and business two-year post-secondary programs?*

Instructions: Please rate the following statements to the degree which you agree, (1) strongly disagree; (2) disagree; (3) Neutral; (4) Agree; and (5) Strongly Agree

Question	***(1) Strongly Disagree***	***(2) Disagree***	***(3) Neutral***	***(4) Agree***	***(5) Strongly Agree***

1. PK–12 marketing and business education prepares students to enter two-year post-secondary marketing and business programs.					
2. PK–12 marketing and business education prepares students to go directly into the workforce.					
3. PK–12 marketing and business education provides high quality work-based learning opportunities. E.g., internships or pre-apprenticeship.					
4. PK–12 marketing and business education students receive specific guidance for marketing and business regarding					

two-year post-secondary opportunities.					
5. PK–12 marketing and business education involves industry in the review of the marketing and business education curriculum.					
6. Please explain, what is the purpose of PK–12 marketing and business education programs?					

Question	***(1) Strongly Disagree***	***(2) Disagree***	***(3) Neutral***	***(4) Agree***	***(5) Strongly Agree***
7. Two-year post-secondary marketing and business education and PK–12 marketing and business education collaborate with one another.					
8. Two-year post-secondary marketing					

and business education and PK–12 marketing and business education attend similar professional development.					
9. Two-year post-secondary marketing and business education provides feedback on curriculum to PK–12 marketing and business education instructors.					
10. Two-year post-secondary marketing and business education provides opportunities for PK–12 marketing and business education to offer articulated credit. **Articulated credit meaning high school instructors teach					

two-year post-secondary curriculum for college and high school credit**					
11. Two-year post-secondary marketing and business education faculty attends marketing and business education/career and technical education advisory committees.					
12. Two-year post-secondary marketing and business education informs PK–12 marketing and business education in what ways students can be more prepared upon entering two-year post-secondary marketing and business programs.					

13. Please explain what role does two-year post-secondary marketing and business education serve in collaborating with PK–12 marketing and business education instructors?

Question	***(1) Strongly Disagree***	***(2) Disagree***	***(3) Neutral***	***(4) Agree***	***(5) Strongly Agree***
14. PK–12 marketing and business education aligns itself with two-year post-secondary marketing and business programs.					
15. PK–12 marketing and business education is invited to be a part of two-year post-secondary marketing and business advisory committees.					
16. PK–12 marketing and business education					

and two-year post-secondary marketing and business education collaborate on articulated courses taught at PK–12 sites.					
17. PK–12 marketing and business education prepares students with industry credentials that are taught by two-year post-secondary marketing and business programs.					
18. PK–12 marketing and business education has a strategic plan that aligns to two-year post-secondary					

marketing and business education.					
19. Does PK–12 marketing and business education align itself with two-year post-secondary marketing and business education programs? Please explain how it does or does not.					
20. What perceptions do you have of two-year post-secondary marketing and business education programs? Please explain in detail.					

Demographic

1. Are you a PK–12 marketing and/or business instructor in California?
    A. Yes
    B. No
2. Are you employed full-time or part-time as a marketing and/or business instructor?
    a. Full-time
    b. Part-time
3. Do you teach in a public PK–12 school or public PK–12 charter school with a marketing and/or business program/pathway?
    A. Yes
    B. No
4. Which county in California do you teach?
    A. Los Angeles
    B. Imperial
    C. Riverside

D. Orange

E. San Bernardino

F. Santa Barbara

G. San Diego

H. Ventura

I. San Luis Obispo

J. Kern

K. Other

5. Which of the following pathways in business and marketing best describe what you teach? Select all that apply.

A. Business Administration

B. Management

C. Human Resources Management

D. Supply Chain Management

E. Information Technology

F. Marketing

G. Sales

H. Entrepreneurship

I. Other

6. How many years of experience do you have in teaching and education?

A. 1–5 years

B. 6–10 years

C. 11–15 years

D. 16–20 years

E. 21–25 years

F. More than 25 years

7. How comfortable on a scale of 1–4 with 1 being the lowest and 4 being the highest, are you in teaching dual credit/articulated credit courses?

    a. 1

    b. 2

    c. 3

    d. 4

Appendix D

Survey for Two-year Post-secondary Marketing and Business Instructors

Study Title: *An Evaluation of PK–12 and Two-year Post-secondary Marketing and Business Instructors' Perceptions of PK–12 and Two-year Post-secondary Marketing and Business Programs in Southern California*

For the purposes of this study, marketing and business will be viewed as one discipline. It is noted that marketing and business are seen as separate disciplines at many colleges, universities, and for PK–12 credentialing.

Study RQ2: *What perceptions do two-year post-secondary marketing and business CTE faculty have of PK–12 marketing and business programs?*

Instructions: Please rate the following statements to the degree which you agree, (1) strongly disagree; (2) disagree; (3) Neutral; (4) Agree; and (5) Strongly Agree

Question	***(1) Strongly Disagree***	***(2) Disagree***	***(3) Neutral***	***(4) Agree***	***(5) Strongly Agree***
1. PK–12 marketing and business education					

prepares students to enter two-year post-secondary marketing and business programs.					
2. PK–12 marketing and business education prepares students to go directly into the workforce.					
3. PK–12 marketing and business education provides high quality work-based learning opportunities. E.g., internships or pre-apprenticeship.					
4. PK–12 marketing and business education students receive specific guidance for marketing and business regarding					

two-year post-secondary opportunities.					
5. PK–12 marketing and business education involves industry in the review of the marketing and business education curriculum.					
6. Please explain, what is the purpose of PK–12 marketing and business education programs?					

Question	***(1) Strongly Disagree***	***(2) Disagree***	***(3) Neutral***	***(4) Agree***	***(5) Strongly Agree***
7. PK–12 marketing and business instructors teach content that prepares students for two-year post-secondary marketing and business.					

8. PK–12 instructors expose their students to all necessary aspects of the industry.					
9. PK–12 marketing and business career and technical student organizations (e.g., DECA or FBLA-PBL) prepare students to enter two-year post-secondary marketing and business programs.					
10. PK–12 marketing and business instructors involve two-year post-secondary marketing and business instructors in the					

development of curriculum.					
11. PK–12 marketing and business instructors offer courses that meet the respective local labor market demand.					
12. What role does PK–12 marketing and business education programs serve in preparing students for two-year post-secondary marketing and business? Please explain in detail.					

Question	***(1) Strongly Disagree***	***(2) Disagree***	***(3) Neutral***	***(4) Agree***	***(5) Strongly Agree***
13. PK–12 marketing and business education aligns itself with two-year post-secondary marketing and business programs.					
14. PK–12 marketing and					

business education is invited to be a part of two-year post-secondary marketing and business advisory committees.					
15. PK–12 marketing and business education and two-year post-secondary marketing and business education collaborate on articulated courses taught at PK–12 sites.					
16. PK–12 marketing and business education prepares students with industry credentials that are taught by two-year post-secondary					

marketing and business programs.					
17. PK–12 marketing and business education has a strategic plan that aligns to two-year post-secondary marketing and business education.					
18. Does PK–12 marketing and business education align itself with two-year post-secondary marketing and business education programs? Please explain how it does or does not.					
19. What perceptions do you have of PK–12 marketing and business education programs? Please explain in detail.					

Demographic

1. Are you a marketing and/or business instructor in California?
   C. Yes
   D. No
2. Do you teach in a two-year post-secondary marketing and/or business program?
   C. Yes
   D. No
3. Which county in California do you teach?

L. Los Angeles

M. Imperial

N. Riverside

O. Orange

P. San Bernardino

Q. Santa Barbara

R. San Diego

S. Ventura

T. San Luis Obispo

U. Kern

V. Other

4. Which of the following pathways in business and marketing best describe what you teach? Select all that apply.

   J. Business Administration

   K. Management

   L. Human Resources Management

   M. Supply Chain Management

   N. Information Technology

   O. Marketing

   P. Sales

   Q. Entrepreneurship

   R. Other

5. How many years of experience do you have in teaching and education?

G. 1–5 years

H. 6–10 years

I. 11–15 years

J. 16–20 years

K. 21–25 years

L. More than 25 years

6. Are you employed full-time or part-time as a marketing and/or business instructor?

    c. Full-time

    d. Part-time

    e. Neither

7. How comfortable on a scale of 1–5 with 1 being the lowest and 5 being the highest, are you in administering dual credit/articulated credit courses?

    a. 1

    b. 2

    c. 3

    d. 4

    e. 5

Appendix E

IRB Informed Consent

UNIVERSITY OF WISCONSIN
STOUT
WISCONSIN'S POLYTECHNIC UNIVERSITY

Institutional Review Board
Office of Research and Sponsored Programs
Robert S. Swanson Learning Center, #107

University of Wisconsin-Stout
P.O. Box 790
Menomonie, WI 54751-0790

Phone: 715-232-4042
Email: irb@uwstout.edu

4/8/2022

Sean Van Aacken
Teaching, Learning and Leadership
University of Wisconsin-Stout

RE: **An Evaluation of PK–12 and Two-year Post-secondary Marketing and Business Instructors' Perceptions of PK–12 and Two-year Post-secondary Marketing and Business Programs in Southern California**
IRB PROTOCOL #: **2022-04-131**

Dear Sean,

In accordance with Federal Regulations, your project, "*An Evaluation of PK–12 and Two-year Post-secondary Marketing and Business Instructors' Perceptions of PK–12 and Two-year Post-secondary Marketing and Business Programs in Southern California"* was reviewed on **4/4/2022,** by a member of the Institutional Review Board and was determined to be **Exempt** from full review under **Category #2** in accordance with Federal Policy for the Protection of Human Subjects (45 CFR 46). Your project is hereby approved and deemed exempt from further IRB review for 5 years from **4/8/2022.** If a renewal of this approval is needed, it is to be submitted at least 10 working days prior to the end date.

Responsibilities for Principal Investigators of UW-Stout IRB-approved research:

1. No subjects may be involved in any study procedure prior to the IRB approval date or after the expiration date.
2. All unanticipated or serious adverse events must be reported to the IRB.
3. All protocol modifications must be approved prior to implementation unless they are intended to reduce risk.
4. All protocol deviations must be reported to the IRB.
5. All recruitment materials and methods must be approved by the IRB prior to being used.
6. Research which involves financial compensation to participants must follow appropriate UW-Stout payment procedures.

7. Consent forms must adhere to UW-Stout IRB standards and indicate that the research has been approved by the UW-Stout IRB as required by federal regulations (see UW-Stout IRB consent form templates for more details).
8. Researchers conducting human subjects' research under an approved exempt category are still ethically bound to follow the basic ethical principles of the Belmont Report, as reflected in the practice of obtaining informed consent from participants and adherence to IRB approved methods.

Thank you for your cooperation with the IRB and best wishes with your project. If you have questions, please contact the IRB office at irb@uwstout.edu or by phone 715-232-4042, and your question will be directed to the appropriate person.

Sincerely,

Michael Mensink, Ph.D.
IRB Chair & Human Subjects Protections Administrator
University of Wisconsin-Stout Institutional Review Board

CC: ADVISOR

Appendix F

Qualitative Coding Process

What perceptions do you have of two-year post-secondary marketing and business education programs? Please explain in detail.

Prompt	**Column #1** **Raw Capta** What perceptions do you have of two-year post-secondary marketing and business education programs? Please explain in detail.	**Column #2** **Reduction of Raw Capta** ***Essential Meaning Units***	**Column #3** **Categories of Themes based on Original Capta** ***Rough emergent themes and subthemes roughly yet ethically tied to the authentic capta.***	**Column #4** **Enduring themes (no sub-themes remain)** ***Re-narrate the themes into your own words***
CAPTA 1	~~COC has~~ an excellent program, a devoted staff, and considerate administrators.	• An excellent program, a devoted staff, and considerate administrators	• Positive views of programs • Devoted staff	**Themes** • **Positive program and excellent staff n=6** • **Prepare students for their future with job skills or academics n= 11** • **No opinion or Negative Perception/ community college will not collaborate n= 4** **Themes** • **Two-year postsecondary colleges have excellent programming which meets the needs of the community that are valuable and necessary, taught by faculty with industry experience, and is cost effective. Two-**
CAPTA 2	~~I believe that our local~~ 2-year post-secondary programs are a great place to start to achieve your ultimate business goals.	• 2-year post-secondary programs are a great place to start to achieve your ultimate business goals	• Prepare students for jobs and the future	
CAPTA 3	Business and marketing education program in conjunction with academic study preparing student's for lifelong success.	• Business and marketing education program in conjunction with academic study preparing student's for lifelong success.	• Prepare students for jobs and the future • Prepare students for jobs and the future	
CAPTA 4	Two year post secondary marketing and business education programs help students who have an interest in business finance, marketing, management, accounting, Business	• Two year post secondary marketing and business education programs help students who have an interest in business finance, marketing, management, accounting, Business administration, business law and personal finance.	• Prepare students for jobs and the future	

	administration, business law and personal finance.			**year colleges engage in a lot of "makeup work" which pulls away from skill training.** • **Helps teach students about business and marketing, prepares students for jobs, assists and encourages students to their next educational or career step, and provides educational certificates, industry certifications, and/or AA/AS degrees.** • **Two-year college will not collaborate and articulate with PK–12 system which is a bad** experience **when working with the two-year colleges.**
CAPTA 5	~~I believe these~~ programs are valuable and necessary because the programs are easily accessible, cost effective, and ~~often~~ taught by faculty with relevant industry experience.	• Programs are valuable and necessary because the programs are easily accessible, cost effective • taught by faculty with relevant industry experience	• Positive views of programs • Positive views of programs Accessible and cost effective	
CAPTA 6	~~N/A~~			
CAPTA 7	The wouldn't allow us to articulate with anything of any merit. Not a great experience.	• The wouldn't allow us to articulate with anything of any merit • Not a great experience	• CC would not articulate with PK–12 program o Bad experience	
CAPTA 8	Everyone should take a marketing business education program. ~~It has been proven that most students and all most all parents do not now much about finance. Many American over spend and are in debt, when a bit of education they could set themself up for a grant retirement with they are older. Many high school students don't know or understanding students loans, by taking a class prior to college they will have knowledge and be more award of life as they move forward into adulthood. This class helps students succeed in college and~~	• Everyone should take a marketing business education program	• Prepare students for jobs and the future	

	~~trade school and set them up for success.~~			
CAPTA 9	~~The~~ student in post-secondary are motivated to learn	• Student in post-secondary are motivated to learn	• Prepare students for jobs and the future	
CAPTA 10	~~I think the~~ post-secondary programs try their best to meet the needs of the community ~~and also to~~ encourage the students to transfer to the next level for their bachelor's degree. There are many certificates available at the community college level that help our students get employability skills ~~so they can get a job right away, which help the families in our community. However, it~~ takes a lot of efforts to help students see the connection between these programs and their immediate future.	• Post-secondary programs try their best to meet the needs of the community • Encourage the students to transfer to the next level for their bachelor's degree • There are many certificates available at the community college level that help our students get employability skills • Takes a lot of efforts to help students see the connection between these programs and their immediate future.	• Positive views of programs • Prepare students for jobs and the future • Prepare students for jobs and the future • Prepare students for jobs and the future	
CAPTA 11	~~The~~ 2-year marketing and business programs work well and prepare students for jobs. ~~However,~~ they have to engage in so much makeup work (not being done correctly by the PK–12 system) that less time is available for job-specific skill training.	• 2-year marketing and business programs work well and prepare students for jobs • They have to engage in so much makeup work (not being done correctly by the PK–12 system) that less time is available for job-specific skill training	• Work well • Prepare students for jobs and the future • Engage in makeup work o PK–12 system lacking o Less time spent on skill training	

CAPTA 12	I am fully on board. I have nothing but positive views.	• I am fully on board • I have nothing but positive views	• Positive views of programs	
CAPTA 13	Not much actually. ~~I know~~ they provide industry level certifications and AA/AS degrees as well as certificate programs.	• Not much actually • They provide industry level certifications and AA/AS degrees as well as certificate programs	• I have no idea [perceptions] • Prepare students for jobs and the future	
CAPTA 14	I have no idea ~~and~~ I cannot speak on their behalf. ~~I am a high school business teacher~~, CC will not collaborate with me.	• I have no idea • I cannot speak on their behalf • CC will not collaborate with me	• I have no idea [perceptions] • Community college will not collaborate with PK–12	