

7-2024

CTE Can Be For Me: Middle School Counselors' Perception of Their Knowledge and Abilities to Guide Students in Career and Technical Education in the State of Texas

Justin W. Hooten

Tarleton State University, justinwhooten@gmail.com

Ronald S. Rhone

Tarleton State University

Lesley F. Leach

Tarleton State University

Juanita M. Reyes

Tarleton State University

Follow this and additional works at: <https://digitalcommons.lindenwood.edu/ela>



Part of the [Curriculum and Instruction Commons](#), [Educational Administration and Supervision Commons](#), and the [Educational Assessment, Evaluation, and Research Commons](#)

Recommended Citation

Hooten, Justin W.; Rhone, Ronald S.; Leach, Lesley F.; and Reyes, Juanita M. (2024) "CTE Can Be For Me: Middle School Counselors' Perception of Their Knowledge and Abilities to Guide Students in Career and Technical Education in the State of Texas," *Journal of Educational Leadership in Action*: Vol. 9: Iss. 2, Article 6.

DOI: <https://doi.org/10.62608/2164-1102.1154>

Available at: <https://digitalcommons.lindenwood.edu/ela/vol9/iss2/6>

This Article is brought to you for free and open access by the Journals at Digital Commons@Lindenwood University. It has been accepted for inclusion in *Journal of Educational Leadership in Action* by an authorized editor of Digital Commons@Lindenwood University. For more information, please contact phuffman@lindenwood.edu.

CTE Can Be For Me: Middle School Counselors' Perception of Their Knowledge and Abilities to Guide Students in Career and Technical Education in the State of Texas

Justin W. Hooten, Ronald S. Rhone, Lesley F. Leach, and Juanita M. Reyes

Abstract

A renewed emphasis on career and technical education has guided the transformation of high school education to support alternatives to college achievement. Research shows that career identity development begins in middle school or earlier, though the literature is scarce when discussing career guidance at the middle school level. Through phenomenological interviews, this research attempted to understand the processes and perceptions of middle school counselors when discussing career and technology education with their students. This study revealed recommendations for district officials and those in academia to assist in creating more robust career development programs at the middle school level.

Keywords: CTE, career and technical education, career, middle school, program

Background

One of the most persistent critiques of the United States' educational system is that it does not provide feasible outcomes for all students and maintains a "college for all" mentality (DeSabato, 2022). As it stands, an overemphasis on the "college" part of College, Career, and Military Readiness (CCMR) standards leaves students with the view that they are limited to two choices - collegiate achievement or its absence (Russell & White, 2019). While career and technology education (CTE) has seen a fiscal resurgence in the United States (Center for Public Education, 2016), obstacles still exist toward its full implementation. Additionally, research is scant as to the benefits or drawbacks to starting such programs at the middle school level (Center for American Progress, 2020). This lack of discussion around fostering middle school CTE

programs contrasts with career interests developing as early as sixth grade (Akos et al., 2012). While federal priorities have begun to shift toward greater funding for middle school CTE opportunities (Hyslop & Imperatore, 2017) funding is not always utilized at the middle school level (Dees et al., 2012). While several states have collaborated to create standards, participation is voluntary, and enforcement does not necessarily align between secondary and postsecondary CTE standards (Advance CTE, 2023). Instead, the individual states have been mandated to implement meaningful programs yet left largely to their own devices in creating structures and templates for career and technology education. This independence has led to ineffective and unequal utilization of federal funding (Stone, 2017). For example, Texas follows these trends of over-emphasizing collegiate achievement in regard to the guidance offered to counselors around career counseling (Texas Education Agency, 2018).

Godbey and Gordon (2019) note that where training for educators in CTE exists at all, it is often inadequate. Educators and counselors often do not have sufficient exposure to the fields of student interests and are unaware of the market conditions of those fields to be able to provide students with realistic understandings of their career interests (Reddy et al., 2015). This lack of experience outside of the field of education compounds clear evidence that relational support for career decisions and support in career exploration are more important for career identity development than intrinsic traits alone (Ireland & Lent, 2018). It is within this context of this gap that an opportunity arises to understand how counselors process and perceive their abilities to help students choose CTE career strands. While funding has become available, there still exists room to ascertain the perceptions and efficacy of guidance counselors in how they advocate for and help students. The need for and benefits of high-quality CTE education are evident, as is the

critical role counselors can play in the process of enrolling students in those programs (Verhoeven et al., 2018).

Texas CTE Landscape

While career and technology education have a long history in the United States, at the state level several pieces of legislation have guided Texas' approach to CTE beginning in the mid-2010s. House Bill 5 (TX HB 5, 2013) was passed in 2013, and the bill required that public schools in Texas assign students to career clusters, or groupings of similar classes for their high school graduation plans, that would help prepare them for postsecondary achievement in those areas. These groupings are known throughout the student's high school career as their endorsement, and it is noted on their transcripts upon graduation (TX HB 5, 2013). For example, a student wishing to become a veterinarian might elect an endorsement in health sciences, whereas a student wishing to become a lawyer might choose the law and public service endorsement cluster (Texas CTE, 2017). This realignment of student's courses at the high school level led to the creation of the 60X30 TX initiative by the Texas Higher Education Coordinating Board, THECB, in 2015. This initiative provided a framework to meet industry and education goals statewide of seeing 60% of Texans aged 24-34 earn a degree or industry certificate by 2030 (THECB, 2015).

In 2016, Texas Governor Greg Abbott established the Tri-Agency Workforce Initiative, a board that brought collaboration and resources from the Texas Workforce Commission, the THECB, and the Texas Education Agency (TEA) to further support equipping students for high-wage, in-demand jobs (Tri-Agency Workforce Initiative, 2023). While the THECB implements policy for higher education, the TEA governs primary and secondary education in the state. Further guidance for CTE implementation was provided in 2017, when House Bill 18 was

passed. It required education for seventh and eighth grade students on high school endorsements and included discussions of CCMR standards following high school graduation (TX HB 18, 2017). The endorsements and discussions were developed as a result of collaboration with the Tri-Agency Workforce Initiative.

More recently, systems to reward districts that met certain college and career readiness standards were developed under House Bill 3 in the 2019 legislative session (TX HB 3, 2019). Legislation during the 2019 session resulted in CCMR outcome bonuses that would provide a per-child bonus of several thousand dollars to districts who have a percentage of students graduating meeting either college or career ready *and* enrolling in a degree-granting institution or achieving an industry certification.

In 2022, THECB adjusted its 60X30 TX initiative to expand the age range of its goal from its initial focus on young people to now include achievement of Texans ranging in age from 24-64 years of age. The strategic plan was rebranded as Talent Strong Texas (THECB, 2022) and reconfigured to targeting career and academic readiness achievement gaps of middle and high school students through the aforementioned Tri-Agency apparatus (Tri-Agency Workforce Initiative, 2022).

While the State of Texas has directed considerable attention toward career and college readiness through legislation, to date no specific piece of legislation or initiative operating within the current THECB Talent Strong Texas or previous 60X30 TX frameworks include support or directives for counselors outside of requiring lessons to be delivered to students regarding careers and requiring them to provide cursory CTE resources to students. While mandates now require education in careers at the middle school level that are ostensibly aligned with industry

needs, untapped and undiscussed opportunities in CTE remain at the middle school level. It is within this context that the necessity of the study comes into view.

Rationale for the Study

Several legislative initiatives have precipitated a renaissance in terms of funding and importance for career and technology education, especially within the State of Texas (TX HB 5, 2013; TX HB 18, 2017; TX HB 3, 2019; Texas Education Agency, 2022; THECB, 2022; Tri-Agency Workforce Initiative, 2022). The State has begun pursuing such initiatives as Talent Strong Texas and aligning resources accordingly (THECB, 2022). However, the individuals within the school system most tasked with helping students develop their career interests and exploring career possibilities, school counselors, have largely been confined strictly to advocacy and education related to students' future collegiate enrollment (Texas Education Agency, 2018). Research shows that counselors, and middle school counselors in particular, often miss opportunities to connect students with CTE resources or courses (Advance CTE, 2018). This missed opportunity is despite the fact that counselors, regardless of educational background or personal exposure to CTE courses or careers, generally have a positive view of CTE and believe it can be beneficial for students in career achievement (Coleman, 2018; Thornburg, 2016).

Schools should begin the important task of understanding counselors' knowledge sets and processes in presenting students with the varied paths available to them. These paths include multiple avenues of gainful employment and career trajectories, as counselors are primary sources of career information for their students (Thornburg, 2016).

Postsecondary Avenues of Success

The multitude of career paths and interests available to students makes it difficult to plan for the plethora of options before them. While it may be an imperfect division, for the context of this study career outcomes are divided into three avenues of postsecondary success: (a) collegiate, (b) co-collegiate, and (c) non-collegiate. Figure 1 provides a graphic depiction of the three avenues of postsecondary achievement and the potential paths to each.

First, the avenue that has traditionally attracted the largest amount of funding and attention, especially since the No Child Left Behind era, is collegiate success. While appearing straightforward, there are numerous routes that an individual can take to collegiate success. For example, a student may enroll directly after high school into a two- or four-year college or university. They may also opt for immediate employment and decline to pursue college enrollment, deciding later to use collegiate achievement to pivot their career trajectory. While this tract garners significant attention and funding, only around 40% of 18-24 year-olds nationwide pursue this tract of collegiate achievement (National Center for Education Statistics, 2023).

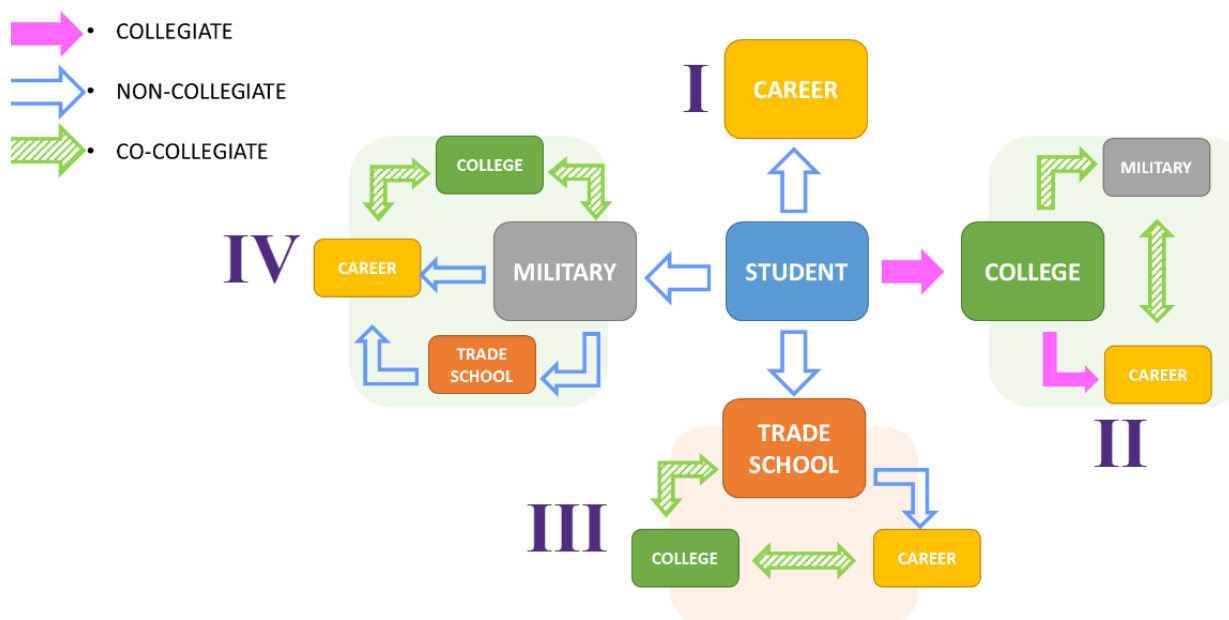
Next, there exists a co-collegiate option. In this option, students pursue college concurrently with the utilization of certifications or registered skill sets, such as being a welder while pursuing college. Or the student utilizes the armed forces to pay for college while serving as an enlisted soldier or training to become a uniformed officer. Co-collegiate options may occur immediately after high school or later in life. Students who pursue military enlistment may not necessarily become co-collegiate if they do not use their veteran benefits to pursue collegiate achievement. They may additionally use the military's career apparatus to transfer skills into industry certifications or skill sets, avoiding collegiate achievement altogether, which would fall into the third category to be discussed below. Data on achievement and enrollment in co-

collegiate options is scarce to nonexistent.

Lastly, a third option exists – non-collegiate achievement. This route is what would have been previously known as vocational educational attainment. In this scenario, students decline to pursue enrollment in a two- or four-year college but instead utilize trade or industry certifications or skill sets to pursue a career that does not require an associate's or bachelor's degree. This route might include an individual who pursues what could be considered more traditional routes of CTE, such as cosmetology or automotive professions, but would also extend to relatively new certifications and industries like cybersecurity or computer coding. In the current study, we consider military enlistment as a form of non-collegiate achievement, unless a student later utilizes their available benefits to pursue college, in which it would become co-collegiate. The percentage of high school students who pursue concentrations in CTE is generally low, at less than 40% (National Center for Education Statistics, 2013).

Figure 1

Postsecondary Avenues of Success



Purpose of the Study

The purpose of this study was to ascertain the thought processes counselors use to guide middle school students toward career opportunities, and how prepared they feel toward supporting students in their pursuit of non-collegiate and/or co-collegiate opportunities. Answers were sought to answer the following research questions:

1. What are the thought processes counselors use to guide middle school students toward postsecondary career opportunities?
2. How knowledgeable or equipped do counselors perceive themselves to be to guide students to career opportunities outside of college?

Within the context of this study, career and technical education outcomes exclude military readiness from the CCMR framework, as Texas does not currently have direct access to military readiness outcomes (Texas Education Agency, 2022).

Review of Literature

History of CTE

The Smith-Hughes Act of 1917 was the first federal initiative that formally recognized vocational training and directed funding toward pre-collegiate vocational training, focusing on agriculture, industrial trades, and home economics (Steffes, 2020). The George-Deen Act of 1936 increased funding from the federal government and provided funds explicitly for training teachers (Advance CTE, 2021). A relative lull in federal guidance remained until the 1960s, with the passage of the Vocational Educational Act in 1963, which for the first time included funding for disadvantaged or disabled students (Advance CTE, 2021). However, vocational education remained clearly geared toward students who were not seen as successful or academically apt enough to pursue collegiate endeavors (Malkus, 2019).

Amendments were made in 1976 to achieve gender equality in availability of resources and programming, but those goals remained largely unfunded mandates for which federal funds had to be matched by state dollars (Stevenson, 1976). The Vocational Education Act of 1984, known as the original Perkins Act, required that vocational programs educate individuals with disabilities and provide reasonable accommodations in doing so; it also required that vocational education be seen as “high quality” for all students served (Guo, 2022). With some modifications in amendments resulting in reauthorizing the act in iterations as Perkins II and Perkins III, the next major iteration of the Perkins Act, Perkins IV, was authorized in 2006. Perkins IV was the first instance in which “vocational” was formally dropped and “career and technical education” or variations of the phrase, became the norm in an effort to destigmatize this traditionally non-collegiate route (Malkus, 2019). Perkins IV also introduced the idea of programs of study and provided funding to coalesce CTE programs around these study areas (Advance CTE, 2021).

Perkins V, formally known as the Strengthening Career and Technical Education for the 21st Century Act, was passed in 2018. For the first time, federal funding became available to assist students beginning as early as fifth grade in pursuing programs of study outside of, or in complement to, collegiate achievement. Additionally, states were required to submit four-year plans for implementation, and those plans required a local needs assessment (Advance CTE, 2021). As of the writing of this dissertation, no further authorizations or iterations of federal legislation have superseded, reauthorized, or replaced the Perkins V iteration of the Strengthening Career and Technical Education for the 21st Century Act.

Necessity of Career and Technical Education in Middle School

With students beginning to develop career interests as early as sixth grade (Rose et al., 2012), engaging students in meaningful discussions of their possible futures and interests needs

to begin as early as possible. One of the perennial challenges of middle school, combating students' disengagement in the educational environment, can be met by increasing student's interest in the learned material and applying it to their real or possible future experiences (Godbey & Gordon, 2017). Akos et al. (2012) argue that "a direct relationship" exists between "the relevance of learned material to student-anticipated future needs and its applicability outside of the classroom environment." Even where vocational outcomes are not the end goal, increased participation in CTE courses can themselves increase student engagement and even lead to higher enrollment in college after high school (Dougherty et al., 2019). Akos et al. (2011) likewise posit that creating hands-on experiences help middle school level students retain information and increase student engagement during a period when student engagement begins to drop precipitously from elementary school highs. A study by Dees et al. (2012) showed benefits of early and often exposure to career education in geosciences – exposing students to career fields, many of which are very lucrative, that students might otherwise be unaware of. For students who are aware of these fields, exposure to experts and experiences can lower the intimidation factor that might otherwise dissuade students from attempting or pursuing those career pathways. This exposure is akin to STEM-oriented mathematics making engineering less daunting of a prospect for students. In creating opportunities for students to develop affinity and familiarity with career fields at an earlier age, students can begin to self-select for career interests and pivot away from fields that they know through their experiences are not their end goal. This is instead of waiting until an endorsement has been chosen in high school that might need to be shifted or changed due to late exposure to these courses. Even if students take courses that do not eventually lead to an endorsement or postsecondary plan, allowing students to encounter those courses earlier helps foster 21st century inquiry-based development skills. This benefit of

exposure through coursework is while also increasing the student's positive perception of the necessity and value of their education (Abbott, 2017).

Current Inadequate Options: Scarcity and Brevity of Middle School CTE

A major obstacle to high-rigor and high-value middle school career and technical education courses is that where the courses do exist, they are rarely aligned. As Godbey and Gordon (2019) discussed, the bridge between CTE and STEM curriculum offered at the elementary level, and the prerequisite skills necessary for CTE success at the high school level, do not exist. Instead, the federal government offers funding for vague mechanisms that each state is left to put together for themselves. In the United States, there is no overarching standard of what constitutes career-ready or certified. Instead, each educational agency is tasked with determining what is relevant to their local environment, developing relationships with companies to provide internship opportunities to their students, and deciding on qualifications to push their students toward in pursuit of whatever list of certificates or programs that agency deems beneficial for postsecondary success. In Texas, this is handled largely through the Tri-Agency Workforce Initiative (Tri-Agency Workforce Initiative, 2022). Due to this lack of cohesion, most states default to exploratory courses at the middle school level.

Additionally, because these exploratory courses cover a wide range of material, many of these courses are taught by individuals who have little to no experience in the material being taught. As Akos et al. (2011) point out, exploratory courses are plagued by two largely unavoidable issues in their current state. First, teaching so much material that it would be impossible to find a teacher who could provide real-life experience to each part of the course. Second, CTE pieces that are embedded in the material are lost on the students because of the educator's lack of expertise in that particular field, coming from a largely education-only

background. These exploratory courses are often intentionally vague, and rarely align with any sort of national standards, where standards even exist (Stone, 2017). Middle school options remain scarce because the barrier to providing genuinely beneficial course offerings is so great that vocational education has been minimized down to a “last resort” for students who struggle academically or behaviorally (Hyslop & Imperatore, 2017). Any nascent attempts at incorporating career and technical skills into the middle school curriculum have, to date, largely relied on vaguely worded and impossibly broad courses that offer little value to students and instead communicate that career-focused education is only for those who struggle with traditional academics.

The Role and Perspectives of Counselors in CTE Pathways

While school counselors have more often been associated with such tasks as schedule creation, social-emotional lessons, and providing resources and counseling to students, another part of their duties includes career counseling. The national and Texas-specific associations for school counselors both incorporate career counseling as a necessary and foundational component of a comprehensive and effective counseling program (College Board, 2010; Texas Education Agency, 2018). However, career counseling continues to focus almost solely on collegiate achievement (National Association for College Admission Counseling [NACAC], 2016). Even here, counselor efficacy in regards to career education and planning (even when those careers are through collegiate achievement) remains low when compared to other counselor tasks in middle school (Sanders et al., 2017).

With counselors in a pivotal position to provide CTE exposure, their importance in helping students shape perspectives of their futures cannot be overstated. In fact, counselor's impact on the self-efficacy of students' careers through providing learning experiences and

decisional support is more positively correlated to student's success than a student's internal characteristics, such as grit (Ireland & Lent, 2018). Studies have shown that students begin to develop an awareness of different types of careers in elementary school, and that by high school begin selecting coursework that directs them to the futures they desire (Gibson, 2005; Pulliam & Bartek, 2018; Welde et al., 2016). Middle school has traditionally been used as an exploratory era in career development, even though students now can begin to take early coursework toward careers they feel aligned to (Curry et al., 2013; Scheel & Gonzalez, 2007). This area of exploration again accentuates the need and opportunity for middle school counselor intervention at this stage of development. Career counseling in middle school can help bridge the gap between what students find interesting, and what students would like to do in defining their postsecondary CCMR (Career, college, and military readiness).

Counselors as Generative Partners

School counselors have the opportunity to play a unique role in helping students chart their future career paths. The considerable overlap in developmental progression, identity construction, and career goal development that students go through during their middle school years offers counselors a unique and generative role in their students' development. Not only are counselors uniquely positioned to serve in a generative capacity, but research shows that by the nature of their level of development, their education, and the career-fulfillment role they chose in becoming counselors they are intrinsically motivated to do so (Doerwald et al., 2021). The current focus on college readiness skills, to the exclusion of other skill sets, leaves students with a significant gap in moving from adolescence toward adulthood (Symonds et al., 2011).

Family involvement in school is one of the best predictors of academic success for students (Hill & Tyson, 2009). However, involvement becomes increasingly difficult as students

move into secondary schooling given the larger number of teachers their student learns from, and the larger load of students their educators teach (Hill & Tyson, 2009). For students whose families lack resources to assist them, counselors are the logical non-familial individuals to help students with college and career preparation and exposure (Cyr et al., 2023; Munson et al., 2010). Counselor assistance in helping students develop individual graduation plans, such as those required by the Texas career cluster model (TX HB 5, 2013; Texas CTE, 2017) provides positive outcomes for students (Stipanovic et al., 2017). These positive outcomes include students putting forth more effort in school, picking more challenging coursework, and being more motivated to complete school (Stipanovic et al., 2017). Therefore, counselors have a unique and important role in helping students through personal identity development using the medium of career exploration and through collegiate, co-collegiate, and non-collegiate goal-setting.

Method

Research Design

A phenomenological study was conducted to seek answers to the research questions posed above. This method of research was chosen to help develop a comprehensive picture of what the participants' perspectives were, working within an already established system.

Interviewing school counselors from districts that already have CTE programs in place allowed for a true practitioner's perspective while also working to minimize the possibility that some interviewees might be unaware of career and technology education programs in their districts specifically or in education at large.

Participation and Procedures

Participants were five middle school counselors working in schools within the state of Texas. Two participants worked in rural districts, and three worked in suburban/urban districts. Two participants had come to middle school from prior elementary school background, and three from middle school teaching. Four were female, and one was male. Three of the counselors had work backgrounds that involved experience outside of the education profession, and two of the counselors worked solely in the field of education becoming counselors.

Instrumentation

The semi-structured interviews were recorded using the online Zoom platform and hand-transcribed by the first author, verbatim. While questions were provided, responses sometimes led to similar, unscripted questions during the course of the interview. A copy of the interview protocol is provided in the Appendix.

Data Analysis

The data spiral approach as described by Cresswell and Poth (2018) was utilized to identify themes as they emerged from the transcripts. This methodology was then paired with descriptive coding as discussed by Saldaña (2021) in order to summarize passages from the transcripts into themes that could then be hand-categorized. Descriptive coding was used as the first round of two rounds of coding. For the second round of coding, pattern coding was utilized.

Results

Several themes emerged from the data, which were organized under the umbrella of the research question the themes most closely answered. Participants' responses were varied in some regards, but generally fell within broad categories under each research question. The open-ended question format of the conducted interviews allowed for trends to become noticeable while still maintaining the individuality of each participants' experiences within the systems they operate

daily. For instance, every counselor spoke of using interest surveys to help their students in career exploration, but some participants spoke fondly of them while others stated they recognized that the surveys were largely used as a substitute for their expertise that they felt they did not have. The participants' thoughts have been given voice below, broken down by each code and theme under the respective research question.

Emergent Themes

First Research Question

The first research question investigated the process by which counselors helped students navigate future planning in regard to the three options discussed in this dissertation: (a) collegiate, (b) co-collegiate, and (c) non-collegiate. In relation to the first research question, four themes emerged - time constraints, interest inventories, root reason discussions, and traditional route planning.

Time Constraints. In terms of time constraints, the interviewed participants consistently stated that they had a genuine desire to help students prepare for their future. Participants also universally acknowledged that it was not happening to the extent they would have liked. The number of tasks assigned to them and the time and resources available to complete those tasks left very little availability for future planning generally, and even less so for CTE-specific discussion and programming. For instance, one participant stated: "I wish that I could spend more time talking to kids about their future. [...] It's academic counseling, or it's social emotional counseling, and we just have a lot of kids with high needs right now."

Even when counselors had access to CTE lessons, the depth of the lessons was less than the counselors deemed sufficient for their student populations, and the tempo and programming of those lessons also found to be less than satisfactory. Another participant described feeling that

the exposure that both students and counselors had to the available CTE curriculum was minimal, saying “I wish I knew more about our [district’s] employability and career class curriculum... and I would love to have more presentations, so to speak, from people in the field.” Two participants both described their sense that even within the same district, expectations could vary widely even from campus to campus depending on the administrators and their expectations. A participant shared, “They can dictate just about any process they want, and that can be quite different than even similar schools or even within the same district. So we have to adapt to whatever we’re thrown.” A different participant stated something similar, saying “A lot of the career opportunities or CTE information is so district-specific.”

What is clear from the interviews is that it is not for a lack of desire that discussions around careers and career skill development are not occurring or are occurring less frequently than desired. Instead, the will to have these conversations and guide students is present but the amount of time necessary to judiciously have such conversations has run into the varied and competing demands on the counselors. This creates a time deficit that the counselors spoke of continually having to battle against.

Interest Surveys. All counselors spoke of immediately utilizing an interest survey to help students discover possible career paths or to deepen their understanding of the breadth of possibilities within a particular career path that the student had chosen. One counselor likened these interest surveys to being a “matchmaker” service, where students were paired with careers they might be interested in based on the questionnaire results the survey software gave them. While the type of software program used for the purpose varied from district to district, each counselor spoke positively of the amount of information available to both students and their guardians regarding their inventory results. However, other than pointing students back to the

inventory program itself, counselors were unsure how to proceed with CTE-specific questions that were borne out of the inventory software.

What the use of these surveys reveals, is that counselors were eager to adapt and implement resources that were easy to use and directly accessible to both the students and their families. This is especially true with resources such as surveys that come within software suites, where the counselor's lack of CTE familiarity can be substituted or complemented by resources within the survey system.

Root Reason Discussions. The participants also all spoke of getting to the root reason behind a student's desire to pursue a specific career or trajectory, regardless of whether that trajectory included collegiate or non-collegiate achievement. One participant in particular said, "I think we need to find out what is a good fit for that student. I want the kid to find what works for them, and then give them the tools for them to make that decision." Participants spoke of using this information to guide both students and their guardians. While emphasizing their strictly advisory role in career planning, participants noted that using this information included advocating for CTE careers even where parents might be adamant about collegiate achievement for their students. One participant shared that when there might be differences between a student's and family's goals, they would still advocate for the student's best interests, asking the family probing questions such as, "Why do you want them to go to college? What is your outlook for them? How can y'all merge those?". That participant made clear that their responsibility at the end lay in aiding the student, saying "Ultimately, I felt like my job is to get the students where they want to be successful."

Even where the guardian and the student disagreed on the student's trajectory, all of the counselors found it helpful to try to discover the student's why. In some cases, the counselors

even went so far as to determine the guardian's why and see if they couldn't marry the student and guardian's visions for the student's future.

Traditional Route Planning. Of the participants interviewed, only one spoke of openly advocating for a co-collegiate option. One discussed co-collegiate options using the example of encouraging students in the band to think of pursuing the military, "playing an instrument so that they have their college paid for by the military." The other counselors had never considered the possibility and expressed a sense of unease or unpreparedness in advocating for co-collegiate future planning. One counselor stated bluntly that "No, I have not, though it's a great idea" in regards to co-collegiate planning. A different counselor discussed a desire for something of a flowchart, showing students "These are your options... here's what the college route looks like, and if you don't go, what options are there."

All of the counselors discussed a sense that CTE still had a stigma attached to it, though all spoke highly of CTE in general and expressed that the stigma seemed to be declining rapidly in their discussions with students and their guardians. While only one counselor discussed co-collegiate options, none of the counselors were opposed to such a planning method and some of the counselors later discussed that they would be interested in learning to incorporate it.

Second Research Question

The second research question focused less on how counselors guided students toward CTE careers and instead on how comfortable they felt in doing so. In this, three general themes emerged - a lack of familiarity with CTE generally and specifically, a desire for more community resources, and the counselor's background and experience with CTE.

Lack of Familiarity. Despite some counselors having a background that included time outside of education, all counselors expressed feeling unprepared to discuss CTE futures. Even

in districts that had a CTE center, counselors expressed frustration that the course offerings, course requirements, and availability of certifications changed at such a pace that they felt there was not an opportunity to ever develop expertise in discussing those options. One counselor discussed that even within an established CTE program, they were aware of instances where the desires of the industry leaders themselves differed greatly from what the CTE certification program had laid out as necessary skills for mastery. This participant shared their frustrations with this situation, saying “There’s some misalignment big time between what schools are required to provide versus what the industry currently needs.” This gap between the program’s expectations and the desired outcomes of industry leaders made the counselor hesitant to confidently discuss even well-established programs within the district. Another counselor noted that while the district they worked in did provide curriculum it came too late in the year, with too many new pieces that had not been previously communicated, to be useful to students, families, and counselors in completing required high school planning.

This lack of familiarity with CTE in general, and with the programs and program requirements within CTE curricula in their specific districts, continually appeared in the survey as a source of frustration for counselors who otherwise felt they were very equipped to fulfill the other roles designated to the school counseling profession.

Community Resources. All of the counselors expressed a desire to see more communication and connection with community resources. Participants stressed that career days, interview opportunities, availability of videos explaining careers in terms that students understood and connected with, and other avenues of exposing students to careers and workers in those career fields would greatly increase their sense that they were effectively advocating for CTE careers in addition to collegiate achievement. One counselor, for example, expressed that

even just having banners in the hallways that alluded to other professions would be helpful in opening conversations about non-collegiate options for students. Two of the participants also discussed a desire for programs that counselors could take to learn about available options - a career day fair for counselors, for instance.

None of the counselors felt so secure in their CTE knowledge that they believed themselves more informed than the community members whose industries relied on the counselor's students having an adequate CTE curriculum. Instead, counselors continually spoke of wanting the students, and themselves, to develop deeper and more personal relationships with local industries and industry leaders, to ensure that their students had fair and accurate information to guide their future-planning processes.

Counselor's CTE Experience. The last theme involved counselors' CTE experience and how that impacted their confidence in discussing CTE options. Of the counselors interviewed, three counselors had previous career experience outside of the field of education. This familiarity with a wider range of careers led these counselors to express a higher degree of confidence in discussing CTE careers than their counterparts whose careers were maintained entirely within the field of education. One participant, whose background did not include experience outside of education, rated themselves at a "four or five" out of 10 on their comfort in discussing CTE options. This counselor noted that they would "not have enough resources to say, okay, let's find out what you need to do", stating "There's this frustration because I'm not up to date on every CTE program, and what they change from year, so I'm hesitant to give advice in depth about that type of thing."

Even the counselors who had experience outside of education acknowledged that that experience had become somewhat dated since pivoting their careers. While the counselors had

previously discussed arranging career and field days for the students, several of the counselors again wondered if those career days might also serve counselors themselves - allowing counselors to see and interact with the industries that their students could work toward careers in, so that they were more familiar with the community and the curriculum offered.

Discussion

While some of the themes that emerged from the data were unexpected, several of the themes were in line with expectations of results based on a review of the literature. Throughout the interviews with participating counselors, participants spoke of the motivation to do what was in their student's best interests, even if that wasn't collegiate achievement. They even spoke of a willingness to speak up against family expectations of the students in their care, in advocating alternatives that the family unit either opposed or had not considered for their student's future planning.

There remains ground to be explored in helping counselors fully embrace their generative role in career planning. With only one counselor openly aware of or advocating for a co-collegiate option, there is room to expand on helping students understand careers as a continually transitioning spectrum of options. Additionally, research has shown that what this particular counselor observed is not uncommon – a hyper-focus on specific collegiate achievement skills over other skill sets bares out the gaps that students express from adolescence into adulthood (Symonds et al., 2011).

Few of the counselors felt comfortable offering students advice for specific CTE career paths. This is of some concern; as previously discussed, counselors are a primary source of career information for their students (Thornburg, 2016) and counselors provide additional career guidance that complements or supersedes that of the student's family (Kolbert et al., 2021).

However, each counselor's desire to help expose their students to as many possibilities as possible was also coupled with a strong perceived proficiency in utilizing career exploration software that could meet those needs, at least on a cursory level. As Suryadi et al. (2020) observed, counselors are critical sources of vocational career guidance and without counselors helping students to fully explore those possibilities, students may fall short of their career development and potential.

As previously discussed, alignment between national and industry CTE standards and secondary CTE standards vary widely (Advance CTE, 2023). This lack of alignment was borne out in the discussion, and appeared through the interview results to be a direct cause of frustration and confusion that the lack of standardization made it difficult to feel confident in their ability to guide students, even in the few cases where resources and guidebooks were readily available.

We know that counselors are largely motivated by a deep sense of purpose to help students become well-rounded individuals (Doerwald et al., 2021), and that this motivation includes a desire to help students develop career goals (Coleman, 2018). Discussion on how counselors might more fully develop their sense of generativity, coupled with utilizing career development curricula to help students progress through the various models of psycho-social development are discussed in future recommendations below.

Recommendations

Based on study results, we provide recommendations below within four categories: (a) CTE professional development for counselors, (b) advocacy for CTE, (c) counselor curriculum, and (d) equipping students with course options.

CTE Professional Development for Counselors

All counselors interviewed discussed the importance of CTE education as a viable option for students. However, a majority of the counselors interviewed for this study stated that they did not feel prepared or equipped to help students navigate CTE pathways, and only one of the counselors had ever considered discussing co-collegiate options with their students. Given this, exposure to current CTE trends, local job needs, and available options for students would be prudent to develop as professional development opportunities for school counselors. Several of those interviewed wondered at the possibility if they could attend CTE career/job fairs, whose information they could then bring back to their campuses a la “train the trainer.”

Advocacy for CTE

Counselors interviewed discussed that while they did not hold negative views toward CTE, they had all had at least one conversation they could remember where a student or family had negative views of CTE as a terminal pathway for the student's career future. Counselors thought that exposing students to more CTE futures, even in simple ways, might help to correct this stigma. When queried, several suggestions were offered. Some of the solutions included more frequently recurring and purposeful career fairs, where all students were given the chance to speak with several different speakers of their choice in local industries. Other solutions included posting banners and posters in the hallways that showcased different careers and having teachers post their licenses and certificates in addition to their college degrees in their classrooms. Another solution was listing possible certifications someone could earn on the way to achieving a career goal, such as listing phlebotomist as a job that could be pursued en route to becoming a surgeon. Regardless of the suggestions that arose from the interviews, every counselor stated that simple awareness of CTE programming in today's classrooms was a worthy goal in advocating for co-collegiate futures.

Counselor Curriculum

The majority of the interviewed counselors agreed that their professional coursework they completed to obtain their licensure was extremely light in regard to the career planning aspect of their official duties. However, each stated it was a topic covered when they pursued their licensure. The development of more in-depth resources to help counselors feel empowered to explicitly become career coaches is a potential topic for further research. This is especially in light of the State of Texas passage of SB 798 in June 2023 that removed the requirement of previous teaching/classroom experience for school counselors (Texas Education Agency, n.d.).

Equipping With Course Options

In regards to the implications of the research presented, there is also room for policymakers and district-level administrators to work toward making counselors conscious of co-collegiate avenues of success. The future of CTE lies not in “college or career”, but instead in a “yes, and” approach that equips students with skills that will help them achieve career success regardless of the avenue(s) they choose. Development of strong CTE programs that not only reach down to middle school students but map out a plethora of possibilities for those students *and* connect them with visible role models within those prospective careers while *also* giving them the ability to begin taking meaningful coursework toward those careers are actionable steps that districts can take to truly make their students “future ready.”

Conclusion

This study illuminated the thought processes that middle school counselors used to guide students toward CTE career pathways, and to see how effective or comfortable those counselors felt in guiding students toward those said pathways. Findings of this study found counselors expressing feeling eager, if poorly equipped, to help students navigate potential interest in non-

collegiate or co-collegiate career futures. This supports prior research that shows counselors are generally motivated to help students navigate career exploration (Coleman, 2018; Doerwald et al., 2021; Verhoeven et al., 2018).

This study revealed that counselors continue to face a plethora of competing interests that often minimize their ability to focus on helping develop students' career identities and proclivities, despite the important role counselors play in that career development and exploration (Dees et al., 2012; Kolbert et al., 2021; Suryadi et al., 2020).

While Texas presents itself as a unique case study for career and technical education, even before the added specificity of looking at middle school in particular, the themes that emerged through this phenomenological study are ripe for further exploration. By continuing to advocate for helping students and families explore all available options, even those that seem niche or new, and helping students adopt an approach to their futures that entertains a co-collegiate option, we can help set a greater number of students on a path to postsecondary success. We can show our students that "CTE Can Be for Me."

References

- Abbott, A. L. (2017). Fostering student interest development: An engagement intervention. *Middle School Journal*, 48(3), 34-35.
- Advance CTE. (2018). The state of career technical education: Career advising and development.
- Advance CTE. (2021). Perkins V opens access to middle grades.
https://cte.careertech.org/sites/default/files/files/resources/PerkinsV_MiddleGrads_Es_2021.pdf
- Advance CTE. (2023). The state of career technical education: An analysis of state

- secondary CTE funding models. https://ctek12funding.careertech.org/wp-content/uploads/2023/09/Advance_CTE_2023_State_of_CTE_Executive_Summary.pdf
- Akos, P. T., Charles, P., Cooley, V., & Orthner, D. (2011). Teacher perspectives on career-relevant curriculum in middle school. *Research in Middle Level Education Online* 34(5), 1-9. DOI: 10.1080/19404476.2011.11462078
- Akos, P. T., Jones-Sanpei, H. A., Orthner, D. K., Rose, R. A., & Woolley, M. E. (2012). Increasing teacher use of career-relevant instruction: A randomized control trial of CareerStart. *Educational Evaluation and Policy Analysis*, 34(3), 295-312. DOI: 10.3102/016237311431733
- Center for American Progress. (2020). Creating strong building blocks for every student: How middle schools can lay the foundation for rigorous high school pathways. <https://www.americanprogress.org/wp-content/uploads/sites/2/2020/07/Strong-Building-Blocks2.pdf>
- Center for Public Education. (2016). Career and technical education: Building new pathways into the labor market. *National School Board Association*.
- Coleman, M. (2018). High school counselors' perceptions of career and technical education. Auburn University. <https://etd.auburn.edu/handle/10415/6275>
- CollegeBoard. (2010). Eight components of college and career readiness counseling. *The College Board National Office for School Counselor Advocacy*.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design choosing among five approaches*. (4th ed). Sage.
- Curry, J. R., Belser, C. T., & Binns, I. C. (2013). Integrating postsecondary college and career options in the middle level curriculum. *Middle School Journal*. DOI:

10.1080/00940771.2013.11461852

Cyr, A., Barclay, S., Couture, V., & Bruick, T. (2023). Increasing college knowledge: The role of school counselors. *Journal of Education and Learning*. doi:

10.5539/jel.v12n3p17

Dees, S., Leung, Y. F., Roberts, G. L., Smith, A. C., Stewart, K., & Ting, S. R. (2012). A preliminary study of career education in middle school. *Journal of Career and Technical Education*, 27(2), 84-97.

DeSabato, A. P. (2022). Another day has passed and I still haven't used pythagoras' theorem: American education may need to trade academic test scores for career and technical education. *Seminar on Equity and Bias Education: Selected Topics*. Temple University School of Law.

Doerwald, F., Zacher, H., Van Yperen, N. W., & Scheibe, S. (2021). Generativity at work: a meta-analysis. *Journal of Vocational Behavior*, 125, Article 103521.

doi: 10.1016/j.jvb.2020.103521

Dougherty, S. M., Gottfried, M. A., & Sublett, C. (2019). Does increasing career and technical education coursework in high school boost educational attainment and labor market outcomes? *Journal of Education Finance*, 44(4), 423-447.

<https://www.jstor.org/stable/45213901>

Gibson, D. M. (2005). The use of genograms in career counseling with elementary, middle, and high school students. *The Career Development Quarterly*, 53(4), 353-362. doi: 10.1002/j.2161.0045.2005.tb00666.x

Godbey, S., & Gordon, H. R. D. (2019). Career explorations at the middle school level: Barriers and opportunities. *Middle Grades Review*, 5(2).

- Guo, Y. (2022). Carl D. Perkins Vocational Education Act and American Vocational Education. *Asian Education Studies*, 7(3), 12-15.
- Hill, N. E., & Tyson, D. F. (2009). Parental involvement in middle school: a meta-analytic assessment of the strategies that promote achievement. *Developmental Psychology*, 45(3), 740-763. doi: 10.1037/a0015362
- Hyslop, A., & Imperatore, C. (2017). CTE policy past, present, and future: Driving forces behind the evolution of federal priorities. *Peabody Journal of Education*, 92(2), 275-289. doi: 10.1080/0161956X.2017/1302221
- Ireland, G. W., & Lent, R. W. (2018). Career exploration and decision-making learning experiences: A test of the career self-management model. *Journal of Vocational Behavior*, 106(1), 37-47. doi: 10.1016/j.jvb.2017.11.004
- Kolbert, J. B., Hilts, D., Crothers, L. M., Nice, & M. L. (2021). School counselors' use of marcia's identity status theory for career advisement and consultation and collaboration. *Journal of School Counseling*, 19(21), 1-27.
- Malkus, N. (2019). The evolution of career and technical education 1982-2013. *American Enterprise Institute*.
- Munson, M. R., Smalling, S. E., Spencer, R., Scott Jr., L. D., & Tracy, E. (2010). A steady presence in the midst of change: Nonkin natural mentors in the lives of older youth exiting foster care. *Child and Youth Services Review*, 32(4), 527-535. doi: 10.1016/j.chilyouth.2009.11.005
- National Association for College Admission Counseling. (2016). *Building college access/admission counseling competencies. Review of the coursework*. <https://www.schoolcounselingcollegeaccess.org/wp->

content/uploads/2016/03/CouncilReport.pdf

National Center for Educational Statistics. (2013). High school longitudinal study of

2009. 2013 update. <https://nces.ed.gov/surveys/hsls09/>

National Center for Education Statistics. (2023). College enrollment rates. *Condition of*

Education. U.S. Department of Education, Institute of Education Sciences.

Pulliam, N., & Bartek, S. (2018). College and career readiness in elementary schools.

International Electronic Journal of Elementary Education. 10(3), 355-360.

DOI: 10.26822/iejee.2018336193

Reddy, L., Rauschenberger, J., Hurt, P., & Bray, J. (2015). Transforming career

counseling: Bridging school to career in the workforce of the future. SME,

Manufacturing Skills Standards Council.

Russell, R., White, M.C.. (2019). Perceptions of career and technical education in Missouri:

Findings from the department of secondary education's CTE survey. Institute of Public

Policy, University of Missouri.

Rose, R. A., Woolley, M. E., Orthner, D. K., Akos, P.T., & Jones-Sanpei, H. A. (2012).

Increasing teacher use of career-relevant instruction: a randomized control trial of

career start. *Educational Evaluation and Policy Analysis*. 34(3), 295-312.

doi: 10.3102/0162373711431733

Saldaña, J. (2021). *The coding manual for qualitative researchers*. (4th ed). Sage.

Sanders, C., Welfare, L. E., & Culver, S. (2017). Career counseling in middle schools: a

study of school counselor self-efficacy. *The Professional Counselor*, 7(3), 238-250.

doi: 10.15241/cs.7.3.238

Scheel, M. J., & Gonzalez, J. (2007). An investigation of a model of academic motivation

- for school counseling. *Professional School Counseling*, 11(1), 49-56.
- Spacek, A., Rayfield, J., Doss, W., Lawver, D., Ritz, R. (2021). Texas high school counselor perceptions of agricultural education. *Career and Technical Education Research*, 46(1), 53-70. DOI: 10.5328/cter46.1.53
- Steffes, T. L. (2020). Smith-Hughes Act. Encyclopedia Britannica.
<https://www.britannica.com/topic/Smith-Hughes-Act>
- Stevenson, W. W. (1976). *The Educational Amendments of 1976 and their implications for vocational education. Information Series No. 122*. ERIC.
<https://eric.ed.gov/?id=ED149191>
- Stipanovic, N., Stringfield, S., & Witherell, E. (2017). The influence of a career pathways model and career counseling on students' career and academic self-efficacy. *Peabody Journal of Education*. 92(2), 209-221. doi: 10.1080/0161956X.2017.1302217
- Stone, J. R. (2017). Introduction to pathways to a productive adulthood: The role of CTE in the American high school. *Peabody Journal of Education*, (92), 2.
doi: 10.1080.0161956X.2017.1302207
- Suryadi, B., Sawitri, D. R., Hayat, B., Putra, & M. D. K. (2020). The influence of adolescent-parent career congruence and counselor roles in vocational guidance on the career orientation of students. *International Journal of Instruction*, 13(2), 45-60.
doi: 10.29333/iji.2020.1324a
- Symonds, W. C., Schwartz, R. B., & Ferguson, R. (2011). Pathways to prosperity: Meeting the challenge of preparing young Americans for the 21st century. *Pathways to Prosperity Project*, Harvard Graduate School of Education.

Texas CTE. (2017). State career cluster pages. Texas Education Agency.

<https://www.txcte.org/binder/state-career-cluster-pages>

Texas Education Agency. (2018). The Texas model for comprehensive school counseling programs. 5th Edition.

Texas Education Agency. (2022). CCMR Credit for enlistment, beginning with 2023 graduates.

<https://tea.texas.gov/about-tea/news-and-multimedia/correspondence/taa-letters/ccmr-credit-for-military-enlistment-beginning-with-2023-graduates>

Texas Education Agency. (n.d.). School counselor, school librarian, educational diagnostician, and reading specialist certificate requirements.

<https://tea.texas.gov/texas-educators/certification/additional-certifications/student-services-certificates>

Texas H.B. 3, 2019 Biennium, 2019 Reg. Sess. (Texas. 2019).

<https://capitol.texas.gov/tlodocs/86R/billtext/pdf/HB00003F.pdf#navpanes=0>

Texas H.B. 5, 2013 Biennium, 2013 Reg. Sess. (Texas. 2013).

<https://capitol.texas.gov/tlodocs/83R/billtext/html/HB00005F.htm>

Texas H.B. 18, 2017 Biennium, 2017 Reg. Sess. (Texas. 2017).

<https://capitol.texas.gov/tlodocs/86R/billtext/html/HB00018I.htm>

Texas Higher Education Coordinating Board. (2015). 60X30 TX: 2015-2030 strategic plan.

Texas Higher Education Coordinating Board. (2022). 2022-2030 strategic plan.

Building a talent strong Texas: Fostering the skills and spurring the innovation vital to the Texas economy.

Thornburg, M. (2016). *Perceptions of career and technical education held by high*

school counselors. ScholarWorks.

Tri-Agency Workforce Initiative. (2022).

<https://triagency.texas.gov/wp-content/uploads/2022/01/Tri-Agency-Executive-Summary-FINAL-Jan-2022.pdf>

Verhoeven, M., Poorthuis, A. M. G., & Volman, M. (2018). The role of school in adolescents' identity development. A literature review. *Educational Psychology Review*, 31(2019), 35-63. DOI: 10.1007/s10648-018-9457-3

Welde, A. M. J., Bernes, K. B., Gunn, T. M., & Ross, S. A. (2016). Career education at the elementary school level: Student and intern teacher perspectives. *Journal of Career Development*, 43(5), 426-446. DOI: 10.1177/0894845316633524

Appendix

Interview Questions for School Counselors

Screening Questions:

1. Are you a certified school counselor in the State of Texas, as noted on your State Board of Certification (SBEC) certificate?
2. Do you work in a district that has a CTE campus or program? If not, has your district voted to approve such a program at a board meeting?
3. Are you a school counselor who primarily works with middle school (sixth through eighth grade) students in a public school in Texas?

Interview Questions:

1. How long have you been a school counselor?

2. Prior to becoming a school counselor, please describe your educational background and your work experience.
 - a. Do you have personal or professional experience with CTE coursework or job experience?
3. What can you tell me about the career counseling requirements and guidelines of the Texas School Counselor's comprehensive counseling program model?
 - a. Are there pieces of the model you wish were elaborated on, or given more attention? Why?
4. What can you tell me about the National School Counselor's comprehensive counseling program model?
 - a. Are there pieces of the model you wish were elaborated on, or given more attention? Why?
5. A student walks into your office and states that they do not believe that college is for them.
 - a. What would be your response?
 - b. What do you believe is the response the school would like you to give?
 - c. How would you handle a parent who was supportive of not going to college?
 - d. How would you handle a parent who was not supportive of not going to college?
6. A student comes into your office and asks what options are available that aren't college. How would that conversation proceed?
7. You are meeting with a student to discuss their career paths as required. The student states they have no idea of what they want to do.
 - a. What process do you follow?

- b. What resources do you use to navigate this scenario?
 - c. What resources or processes would you like to have in this scenario that are not always available?
 - d. What does communication with the student's guardian or family unit look like following this scenario?
8. How confident are you in your ability to describe non-collegiate options with students in depth?
9. How often are you able to incorporate CTE-specific lessons into the scope of the curriculum you provide your students?
10. What resources do you utilize when discussing non-collegiate options with students or parents?
11. What type of resources would you want to have when discussing non-collegiate options with students or parents?
12. What barrier(s) exist to implementing more CTE-specific lessons and discussions into the scope of your current role as a school counselor?
13. Is there anything we haven't talked about that you would want to add?
14. Are there any individuals you could and would refer to be similarly interviewed regarding these questions and this study?