College, career, and military readiness: a qualitative study of select programs in Texas

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ABSTRACT

States recognize a workforce skill shortage and have initiated educational programs aimed at preparing students for workforce readiness and postsecondary success. A growing consensus among states identifies the primary objective of the education system as preparing students for career, college, or military pathways by equipping them with experiences to build necessary knowledge and skills for future success. Kreamer et al. (2014) note that over half of U.S. states employ career-focused readiness indicators, one of which involves preparing students through high school college and career readiness programs that offer Industry Recognized Credentials (IRC) and stackable credentials to provide multiple opportunities (Stone, 2017). In response to skills demands, Texas Governor Abbott introduced House Bill 3 (HB3) of the 86th Legislature, supporting the state's mission to prepare every student for success in college, career, or the military. The Texas Education Agency (TEA) has further supported HB3 by incorporating College, Career, and Military Readiness (CCMR) into the Texas A-F Accountability system, where CCMR earnings and State Assessment of Academic Readiness (STAAR) assessments contribute to 40 percent of a school's annual report card. CCMR aims to equip students with critical skills for their future. CCMR administrators in rural schools include roles such as Superintendent, Principal, or CTE administrator.

This qualitative study sought to understand administrators' perceptions of college, career, and military programs in high schools and to identify the characteristics defining a successful CCMR program. Interviews were conducted with CCMR administrators from ten top-ranking Texas schools. Interview transcriptions were sent to the administrators for approval and correction. Emerging themes and sub-themes included dual credit classes, college preparation, certifications, programs of study, college readiness, TSI, CCMR accountability, higher education, industry partnerships, employability skills, student exploration and tracking, scheduling, early start programs, individualized plans, personnel, and finance. The findings reveal best practices and processes that contributed to the district's recognition as a top-ranking CCMR rural school in Texas.

Key Words: TEA college, career, and military readiness (CCMR) accountability standards. College, Career, and Military Readiness (CCMR), industry-based certifications, work-based learner, dual enrollment, and Career Technical Education (CTE).

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INTRODUCTION

The demand for college, career, and military readiness (CCMR) has intensified with Texas' new accountability measure, which evaluates districts based on CCMR success. A 2018 Gallup poll reported that only three to five percent of Americans believe high school graduates are adequately prepared for college or the workplace (Busteed, 2018). CCMR programs are essential for success beyond high school, offering students pathways to earn industry-based certificates, college credits, and military preparation. Multiple states have adopted readiness programs encompassing military, career, and college pathways, with Texas among those implementing College and Career Readiness School Models (CCRSM). CCRSM's objective is to support atrisk and historically underserved students in acquiring high-demand technical skills, earning college credentials, and pursuing in-demand career paths (Texas College and Career Readiness School Models CCRSM, n.d.). The CCMR program aims to provide students with the resources necessary to succeed in their careers, college endeavors, or military pursuits.

LITERATURE REVIEW

A review of the literature provided key areas of exploration to serve as the foundation for this study:

- College, Career, and Military Readiness Gaps
- CTE Helps Students become College and Career Ready
- Alignment
- Accountability
- ACT for College Readiness Reasonable Chance for Success
- Efforts in Texas for College Readiness Assignments (CRA's)
- Economic Impact
- Strengthening Soft Skills
- Experiential and Work-Based Learning
- Pathways and Career Endorsements
- Opportunities through Shared Partnerships

Each provides insight into which best practice strategies help assist top ranking CCMR rural Texas districts to earn a top spot among Texas top 25 CCMR rural school districts.

College, Career, and Military Readiness Gaps

Gaps in college, career, and military readiness (CCMR) reveal significant misalignments between the skills expected from high school graduates and those demanded by higher education and the workforce. While high school graduation rates have improved over the past decade, college readiness has declined, evidenced by the national average ACT score for the class of 2022 reaching 19.8—the lowest in over three decades (ACT Newsroom and Blog, 2022). This decline highlights students' unpreparedness for college-level work. Additional gaps in CCMR efforts include misaligned academic preparation, underdeveloped soft skills, insufficient support systems, and limited engagement with families. High school students often rely on structured support from mentors and college readiness counselors, yet the transition to college requires a shift toward independence, which many find challenging. Soft skills, essential across college,

career, and military paths, remain underemphasized, while family involvement is crucial to bridging readiness gaps (Bountis, 2018). Research is needed to explore effective strategies for family engagement in supporting students' transition from high school to entry-level positions or further education.

CTE Helps Students Become College and Career Ready

Career Technical Education (CTE) programs are designed to equip students with skills aligned to both local and global economic needs, as mandated by federal legislation in the 2018 Strengthening Career and Technical Education Act and the Carl D. Perkins Career and Technical Education Act. These laws require CTE programs to include both academic and career-focused coursework to boost academic and technical performance, expand opportunities, and strengthen secondary and postsecondary education in ways that meet the needs of students, educators, and employers. The Every Student Succeeds Act (ESSA), which replaced No Child Left Behind in 2015, further emphasizes state standards aligned with college and career readiness, allowing states to adopt the Common Core assessments or their own standards-aligned evaluations. In Texas, CTE pathways address high-growth fields such as healthcare and engineering, focusing on high-demand skills that align with local workforce needs. The Texas Education Agency (TEA) and Texas Workforce Commission collaboratively develop CTE programs that lead to industry-recognized certifications, ensuring students gain targeted skills that support both state and local economies. Rigorous, industry-aligned curricula significantly enhance student outcomes, providing a framework for addressing the demands of evolving job markets.

Alignment

House Bill 5 established pathway endorsements to allow students to pursue specialized areas of study aligned with their academic and career interests, fostering focused content knowledge in fields relevant to post-secondary goals. These endorsements offer students significant advantages, providing targeted preparation that bridges high school learning with college, career, and military pathways. By aligning secondary education with students' future aspirations, the endorsement model supports a structured approach to readiness for both academic advancement and workforce entry.

Accountability

Texas's accountability system assesses schools across four domains: student achievement, student progress, closing performance gaps, and postsecondary readiness. Student achievement measures overall knowledge and skills, while student progress evaluates growth in reading and mathematics. Closing performance gaps focuses on bridging outcomes for disadvantaged students, and postsecondary readiness considers attendance, dropout rates, and college, career, and military readiness (CCMR). For high schools, TEA measures CCMR using indicators such as AP/IB scores, TSI benchmarks, dual-credit courses, and certifications. Career readiness includes earning industry-based certifications, while military readiness requires enlistment within six months of graduation. In line with the 60x30 initiative, Texas aims for 60% of students to obtain a degree by 2030, using student achievement scores in reading and math to determine readiness for postsecondary success and to assign campus ratings.

ACT for College Readiness Reasonable Chance for Success

The ACT assessment, developed in the late 1950s to support higher education's expanding needs, provides data to help institutions make informed admissions decisions and to guide students in planning their postsecondary paths (Buros Mental Measurement Yearbook, 1995). In 1989, the Enhanced ACT was introduced with updated content aligned to the evolving school curricula necessary for college success. The test's scoring system ranges from 1 to 36 on main assessments and 1 to 18 on subscores, with ACT Readiness Benchmarks indicating college readiness based on performance in core first-year college courses. These benchmarks cover English, Mathematics, Reading, Science, STEM, and ELA, reflecting skills linked to success in early college coursework.

Efforts in Texas for College Readiness Assignments (CRS's)

Texas established the Texas College and Career Readiness Initiative (TCCRI) to address gaps in student preparedness for college-level work (Texas Association of School Boards, 2009). In collaboration with the Texas Education Agency (TEA) and the Texas Higher Education Coordinating Board (THECB), TCCRI introduced College Readiness Assignments (CRAs) to align K-12 and postsecondary expectations. Developed with support from the Education Policy Improvement Center, CRAs provide open-ended, non-routine tasks that assess mastery in core academic and cross-disciplinary standards. Field-tested through the CRAFT project, CRAs have proven effective in enhancing student completion rates and promoting classroom practices that strengthen college and career readiness across the state.

Economic Impact

Texas has prioritized aligning educational goals with workforce demands to foster economic growth and innovation, primarily through the 60x30TX initiative and the adoption of College and Career Readiness Standards (CCRS). Initiated in 2006, CCRS established foundational skills required for high school graduates to succeed in college or a career, while the 60x30TX plan, set by the Texas Higher Education Coordinating Board, aims for 60% of Texans ages 25-34 to earn a certificate or degree by 2030. This initiative also addresses student debt, program completion rates, and marketable skills for graduates. Federal legislation, like the Workforce Innovation and Opportunity Act (WIOA) of 2014 and Texas's House Bill 1296, further emphasize aligning workforce needs with educational pathways, requiring states to adjust programs and create partnerships that support long-term economic stability.

Strengthening Soft Skills

Soft skills, which include communication, teamwork, problem-solving, and interpersonal skills, are essential for student success across all career pathways (Dean & East, 2019). Studies emphasize that soft skills should be deliberately integrated into high school education rather than left to chance, as they are critical for both professional and personal development (Rotherham & Willingham, 2009; Browne, 2021). Evidence shows that soft skills encompass character traits and behaviors that shape effective workplace interactions, making them indispensable for success across diverse fields, from technical roles to leadership positions (Devedzic et al., 2018).

A report to the U.S. president highlighted the importance of skills like strategic thinking and team-building for economic growth (U.S. Department of Commerce, 2018). Developing these skills prepares students to succeed in the modern workplace and promotes upward career mobility and social change (Meeks, 2017).

Experiential and Work-Based Learning

Experiential and work-based learning, also known as learning beyond the book, directly engages students in real-world tasks within specific career fields. Defined as learning through a work environment while enrolled in an educational program, this approach, sometimes called work-integrated learning (WIL), equips students with practical skills and knowledge through internships, apprenticeships, externships, and practicums (Knepler & Zapata-Gietl, 2019). Research shows that students participating in such experiences report higher levels of success in reaching career goals, with employers valuing the development of adaptable skills beyond jobspecific tasks (Jackson & Meek, 2021; Wheeler & Van Mullem, 2021). High-impact experiential practices, such as those recommended by the National Society for Experiential Education (NSEE), emphasize reflection, authenticity, and continuous improvement, fostering skills like communication, confidence, and innovation essential for professional success (Naidoo et al., 2021).

Career and College Counseling

School counselors and college and career advisors play a crucial role in supporting students' College, Career, and Military Readiness (CCMR), a major component of accountability for student and program success. Starting in eighth grade, counselors foster a culture of career exploration, helping students choose a pathway by ninth grade and aligning course schedules accordingly. Administrators emphasize the importance of early career exploration and consistent tracking, with counselors monitoring individual graduation plans and pathway progress. Regular CCMR reviews—typically twice a semester between counselors and principals—enhance program effectiveness by ensuring students are on track to meet readiness goals.

Pathways and Career Endorsements

Career and Technical Education (CTE) pathways in Texas enable students to gain industry-relevant skills and certifications, preparing them for high-demand careers that support both personal growth and economic development. House Bill 5 established these pathways, allowing students to pursue specific endorsements in STEM, public service, business, arts, and humanities, aligning high school education with labor market demands. Through Texas Workforce Solutions' partnerships and programs like the Jobs & Education for Texans (JET) grant, students can earn industry-recognized certifications linked to labor market value. The Texas Pathways model further supports this alignment by guiding students with structured advising from high school to postsecondary settings, empowering them to achieve measurable academic and career outcomes regardless of their plans for college attendance.

Opportunities through Shared Partnerships

Collaborative partnerships between school districts, colleges, families, communities, and industry are essential for preparing students for college and career pathways. School counselors play a critical role, guiding students in course selection, career exploration, and college readiness. However, they often face large caseloads and additional responsibilities that limit the time available for focused career guidance. Effective support extends beyond counselors to include a broader network of stakeholders—administrators, mentors, teachers, and families—all of whom contribute to students' success. Family involvement and mentoring programs, in particular, have proven to enhance college and career outcomes. Texas emphasizes early career exploration and pathway alignment, beginning in middle school and continuing through high school with dual enrollment options. This aligned approach, supported by partnerships and mentoring, is vital for increasing student retention, career persistence, and success.

PURPOSE OF THE STUDY

The purpose of this basic qualitative study was to examine the role of 10 CCMR administrators' perceptions about processes and procedures. CTE administrators from 10 of the top 25 rural high schools in Texas were interviewed to gain a deeper understanding of the effects of CCMR programs and how to support capacity building among other rural CCMR programs. The study's purpose was twofold: first, to explore the perceptions and experiences of CCMR administrators regarding how rural school CCMR programs prepare students for college, career, and the military; and second, to understand CCMR administrators' perceptions and experiences regarding successful best practices that increase student outcomes for college, career, and military readiness.

The basic qualitative research method was deemed appropriate for providing a deeper understanding of the role of successful CCMR programs within the school system (Merriam & Tisdell, 2016). This approach allowed the researcher to explore and amplify the perspectives of the participants (Creswell, 2007; Merriam & Tisdell, 2016). The study aimed to provide insights into how schools build capacity as one of the top rural CCMR programs, offering valuable takeaways for other rural schools to enhance student success in college, career, and military readiness. Open-ended questions were used in the interviews, employing Russel Bernard's (2002) interviewing strategies to understand processes and reach salience, along with Saldana's (2013) analytic coding process to identify themes. Themes were used to reveal significant insights, with salience offering a better measure of sample size adequacy than saturation (Weller et al., 2018).

RESEARCH QUESTIONS

Research questions were aligned with the study's purpose of how administrators perceive the efficacy of college, career, and military preparation programs in helping them develop a successful program. In-depth interviews provided greater insights into the experiences of CCMR administrators in developing readiness.

RQ #1: What are the perceptions and experiences of CCMR administrators regarding how rural school CCMR programs prepare students for becoming college, career, or military ready?

RQ #2: What are the perceptions and experiences of CCMR administrators regarding best practice strategies to increase student outcomes for college, career, and military readiness?

RESEARCH DESIGN AND APPROACH

A basic qualitative design with a phenomenological approach was utilized, involving interviews with CCMR administrators about their lived experiences and perceptions of CCMR. Merriam and Tisdell (2016) describe the researcher's role in a basic qualitative study as the primary instrument for data collection and analysis, aiming to find meaning and themes in participants' experiences. Six strategies that strengthen internal validity in qualitative design include triangulation, long-term observation, peer examination, participatory or collaborative modes of research, and addressing researcher biases (Merriam & Tisdell, 2016)

The research design included interviews with rural CCMR administrators ranked among the top 25 CCMR programs, as well as teachers, to gather their perceptions and experiences with CCMR. This basic qualitative design aimed to understand the experiences and perceptions of leadership in these top-ranking CCMR programs in Texas rural schools regarding strategies for building effective CCMR programs. Basic qualitative design researchers seek to understand participants' cultural and societal contexts, including values, beliefs, and attitudes (Merriam & Tisdell, 2016). A phenomenological approach was applied, with interviews centered on the lived experiences and perceptions of CCMR administrators. Following Merriam and Tisdell's guidance, the researcher served as the primary instrument for data collection and analysis, focusing on identifying themes and meaning in the participants' experiences.

Setting, Population/Participants

The population for this research study comprised CTE administrators from rural high schools in Texas serving grades nine through twelfth. The research setting for this study was ten rural high schools located in Texas that have a high CCMR accountability rating from TEA. TEA provided a CCMR scoring ranked the top 25 ranking CCMR schools.

Data Collection, Coding, and Analysis

Participants were recruited through an open records request from the Texas Education Agency (TEA) for the top 25 rural CCMR schools. Identified top-ranking CCMR schools received an Invitation to Participate and an Invitation to Request for Data Collection letter via email, followed by a phone call. Once participants consented to interviews, a consent email was sent, including a consent form outlining study details and purposes, the audio recording protocol, privacy measures, and any associated risks. Participants were asked to give consent after reviewing the Institutional Review Board (IRB) consent form. Interview and survey questions were designed to elicit individual experiences and perceptions (Guest et al., 2013).

To ensure accuracy and research rigor, interviews were conducted via Zoom teleconferencing, although Zoom was not used for recording. Audio was recorded using a Voice Recorder application, after which interviews were transcribed verbatim. Each participant then received a transcription of their interview via email for accuracy confirmation. For this study, the entire school CCMR program served as the unit of analysis, aiming to uncover elements contributing to program success. Participants were interviewed online through Zoom, which

provided a secure, password-protected meeting room with real-time captioning, aiding in transcription. Each transcription was labeled with an anonymous identifier assigned to participants (Participant 1–10).

Data analysis involved thematic analysis, following a six-step process: (a) familiarizing with the data, (b) creating initial codes, (c) identifying themes, (d) reviewing themes, (e) defining and naming themes, and (f) reporting findings (Clarke & Braun, 2014). Microsoft Excel was used to create a workbook for documenting codes from the transcriptions. Each sub-question was assigned a separate Excel sheet, participants were assigned distinct colors, and these colors were applied to boxes displaying the codes in a "rainbow spreadsheet" format (Fu, 2019).

RESULTS

The interview results were coded into themes aligned with each research question. Categories were identified using qualitative techniques such as repetition and key words or phrases that appeared frequently. Transcripts were thoroughly reviewed multiple times to uncover main categories that could serve as themes.

The categories in Table 2 included the following:

- 1. Post-Secondary Opportunities
- 2. Close Opportunity Gap
- 3. Community
- 4. College and Career Adaptability Readiness

The categories in Table 3 for research question 2 included the following:

- 1. Career and Counseling
- 2. Advanced Academics
- 3. Resources

Themes
Themes that emerged from Research Question 1

D 10 1				
Research Question				
RQ #1: What are the perceptions and experiences of CCMR administrators regarding how				
rural school CCMR programs prepare students for becoming college, career, or military ready?				
			Code	
Theme	Description	Associated Quotations	Application	
	•		Total	
Post-Secondary	-College/Prep	"It's actually made us double down on	-30	
Outcomes	-Certifications	getting kids prepared for life after high	-28	
		school."		
Opportunity	-Programs of	"It's huge. It really is not dependent on	-23	
Gaps	Study	whether they get the industry-based	-16	
	- College	certification, they go for the dual credit,	-13	
	- College	they go the assessment. Because each		
	Preparation	one of those strands strengthen and		
		broaden and deepen their educational		
		experience. As you know, as a district,		
		you know pursue 100% with CCMR,		
		they are strengthening their whole		
		academic program."		
		deddenne program.		
Community	-Higher Ed	"Find a higher institution that you can	-9	
	-Industry	work with."	-5	
	Partners	Work With.	3	
College and	-Employability	"Really simple, they need to be able to	-39	
Career	skills	show up on time, they need to be able		
Adaptability	-Communication	to shake a hand. They need to be able	-21	
and Readiness		to make good eye contact. They need to		
		be able to communicate. They need to		
		be able to be dependable, be		
		trustworthy, understand how to have a		
		smile and understand how to disagree		
		agreeably."		

Themes That Emerged from the Research Question 2
Themes that emerged from rural college, career, and military readiness: post-secondary

outcomes, opportunity gap, community, and college and career adaptability readiness.

Research Questions				
RQ #2: What are the perceptions and experiences of CCMR administrators regarding successful best practice strategies to increase student outcomes for college, career, and military readiness?				
Theme	Description	Associated Quotations	Code Application Total	
Career and College Counseling	- Track Students Program of Study -Scheduling	"Through their individual graduation plan, we started monitoring or for better use, tracking the students toward the CCMR."	-12 -13	
Advanced Academics	-Student Tailored Individual Plan -Program Opportunities	"TEA has the college bridge program and it's an online program where if they complete the course with 90 or better than they are TSI exempt. That's opened the doorway to more of my students who have test anxieties to help make those bridges to go on to training beyond high school."	-26 -25	
Resources	Personnel Finance	"The staffing side of it, you got to have teachers that care about the kids and want to get them as much as they can."	-19 -11	

CONCLUSIONS AND RECOMMENDATIONS

The purpose and design of this basic qualitative study was to explore the CCMR administrator perception of rural Texas school districts that ranked in the top 25 CCMR ratings.

This research study examined ten CCMR administrator perceptions about processes and procedures. The goal of the research was to uncover the best practice strategies that successful CCMR districts followed to earn a top spot among rural CCMR schools in Texas. My hopes are that lower performing CCMR schools can replicate these practices to improve overall accountability and student achievement.

This research centers around the framework of Conley and his four primary keys of career and college readiness: cognitive abilities, knowledge of core subject matter, the ability to self-monitor, and the capability to apply learning in their progressions (Lile et al., 2018). The first key of cognitive strategies entails identification of sources and research. Content knowledge is the second key that refers to the big picture of life after high school and the matriculation into college and career. The third key is learning skills and techniques that consist of college and

career readiness skills that teach persistence, awareness, self-efficacy, accountability, goal setting and progress. The last key is transition knowledge and skills of self-advocacy, career, and pathway awareness, understanding which course to take in college, and investigation of postsecondary costs and awareness. The result will offer a pathway to academic success and career fulfillment.

This qualitative study aimed to explore the perceptions of CCMR administrators in rural Texas school districts ranked in the top 25 for college, career, and military readiness (CCMR). By examining insights from ten administrators on processes and strategies, this research sought to identify best practices that other districts might replicate to enhance accountability and student success. Grounded in Conley's framework for college and career readiness, the study emphasizes four key areas: cognitive strategies for research and analysis; core content knowledge for postsecondary readiness; learning skills for persistence and self-efficacy; and transition skills for career awareness, self-advocacy, and postsecondary planning. Together, these findings aim to support a pathway toward improved academic outcomes and career readiness.

Based on findings from this study, expanding research to include student perspectives on their readiness for college, career, or military after high school could be valuable, particularly through a qualitative study of post-high school students from the top ten rural Texas CCMR schools. Additionally, a case study of one top-performing rural school could offer insights into the direct impact of CCMR on students' postsecondary lives. Research with counselors in these districts might also provide data that aligns with or justifies administrator perspectives. A longitudinal study tracking outcomes over four years in top rural CCMR schools could yield valuable best practices.

For best practices, establishing a high school mentor program is recommended, where each student is assigned a teacher mentor to meet quarterly for CCMR tracking, college planning, internships, and career exploration. This approach would involve teachers in the CCMR accountability process, fostering a supportive school-wide culture. Another best practice is implementing a two-, four-, six-, and eight-year post-graduation tracking system to measure CCMR outcomes and ensure real-world effectiveness. Incorporating CCMR and accountability education into 6-12 teacher certification and administrator programs would also equip educators with essential knowledge. Finally, embedding CCMR training in district-wide professional development would ensure educators understand and are prepared to meet accountability expectations, supporting students' college and career readiness.

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APPENDIX A

Interview Protocol Questions College, Career, and Military Readiness: A Qualitative Study Of Select Programs in Texas (CCMR administrator)

The questions listed below were the interview questions for the study.

RQ #1: What are the perceptions and experiences of CCMR administrators regarding how rural school CCMR programs prepare students for becoming college, career, or military-ready?

- Q1 What impact do CCMR programs have on the overall academic performance of students from rural schools?
- Q2 Based on your experience with the CCMR program, do you feel that the college, career and military readiness indicators set forth by TEA are accurate measures of student success? If yes, in what ways? If not, why not?
- Q3 Based on your experience, what types of partnerships are valuable to include when preparing students for college, career, and military readiness in Texas rural schools?
- Q4 What non-academic soft skills do you feel students need to be successful for college, career, and military readiness?

RO #2: What are the perceptions and experiences of CCMR administrators regarding successful best practice strategies to increase student outcomes for college, career, and military readiness?

- Q1 Based on your experience with the CCMR program, what do you feel is important when building a CCMR program?
- Q2 Is your district part of a program through TEA (such as P-Tech, Early College High School, T-Stem, Rural CCRM Network, etc.)? If yes, which program? How does this program impact rural CCMR success? What benefits does this program provide (funds, support, training, etc.)?
- Q3 Based on your experience, what makes your CCMR model successful?
- Q4 With the CCMR program, what resources and tools have played a critical role in positively impacting your rural school CCMR program rating?
- Q5 To what extent do financial resources impact your rural school CCMR program for your district (property wealthy or property poor)?
- Q6 What obstacles do rural school districts encounter when implementing or sustaining CCMR programs in their district?