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Teaching Them to Fish: Using a Districtwide System of Supports To Improve College and Career Readiness in a Rural School District

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TEACHING THEM TO FISH: USING A DISTRICTWIDE SYSTEM OF SUPPORTS TO IMPROVE COLLEGE AND CAREER READINESS IN A RURAL SCHOOL DISTRICT

A Dissertation
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education
Education Systems Improvement Science

by
Lavonia Nekita Johnson-Davis
August 2023

Accepted by:
Daniella Hall Sutherland, Committee Chair
Noelle A. Paufler, Committee Member
Barbara Nesbitt, Committee Member
Sherry Hoyle, Committee Member
ABSTRACT

This dissertation served as a case study that examined the impact of a districtwide system of support drawn from existing literature and organizational structure and management. The identified framework, the Limelight County College and Career Readiness Intervention (LCRI) Framework, utilized the Plan, Do, Study, Act (PDSA) cycle of improvement science. Three reoccurring themes or focus areas were identified as significant: curriculum instructional framework redesign, comprehensive guidance, and professional development.

While the study's findings are constrained by the density of the data gathered within a limited time frame, the findings provide many opportunities for longitudinal studies and confirm the integrity of the intervention framework. The findings also indicate that the framework must be implemented with fidelity to sustain these gains. Since the research on structured supports from a district perspective is limited, it would be beneficial for educational institutions and practitioners to continue to seek understanding on providing pathways that will ensure student success and cultivate communities of change. Doing so will ensure that students continue growing and communities continue to thrive. Thriving children will continue to fish for the rest of their lives.
DEDICATION

This dissertation is dedicated to my family. To my niece and nephew, you were my motivation. Each time I thought about giving up, the two of you would pop into my mind, and I know that I wanted to persevere mostly because in the future I wanted to be able to look both of you in the eye and say you can do anything! I genuinely believe that you two will change the world. You are the most brilliant people that I know. Auntie loves you!

To my sisters, thank you for the encouragement, the push I needed, and the shoulders to cry on when it was essential. I am because you are! Know that I am so proud of you both for the women you have become, the mothers you continue to be, and the heart of the families you have created. Continue to be monumental!

And finally, to my parents, Mom and Dad, I did it! I could NOT have done this without you! You are my rock. Thank you for your belief, your patience, and your unwavering support. I hope I made you proud.
ACKNOWLEDGMENTS

I want to acknowledge my “village” people. To my Lord and Savior, Jesus Christ, ALL THINGS ARE POSSIBLE through you! Thank you for seeing me through!

To my outstanding chair, Dr. Danilla Hall Sutherland, THANK YOU for everything. Sometimes I was tired, frustrated, and down but I never thought I could NOT do this! You always told me I could. You are the best mentor, counselor, and “brain trainer” I could hope for! You taught me so much, and I am forever grateful.

To my fantastic committee, Dr. Noelle Paufler, Dr. Sherry Hoyle, and Dr. Barbara Nesbitt, I greatly admire you ladies. Thank you for EVERYTHING! Thank you for your patience and belief in me. Honestly, you saw things I did not see in myself. You women have a calling on you to lead people on this journey. Continue to walk in your calling; you will never understand your impact on our lives.

To my coworkers and friends, especially the “fabulous five,” you know who you are and what you did. I finally “got it wrote”! Special shout out to our guy! Thank you for the notes and text and for checking on me, to my friends who remained friends even when I only wanted to discuss this study. To my CTE and CTSO families, thank you for your support. I promise I will do better about staying in touch.

Finally, to the students in my district, my niece and nephew, who I believe this work will impact, and the millions of students in schools everywhere, this work is about you and for you.
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CHAPTER ONE
INTRODUCTION AND OVERVIEW

Determining the effectiveness of the U.S. career preparation system—namely, deciding whether individuals have been adequately prepared for the workplace—is complex at best (Lefebvre & Mattern, 2018). Since educational attainment is also associated with economic outcomes (Irwin et al., 2022), most industrialized countries invest significantly in their educational systems. A highly educated population confers wide-ranging benefits, including lower unemployment rates and higher wages, even for workers without college degrees (Greenstone & Looney, 2011; Moretti, 2004). Additionally, success in post-high school education has become a requirement for entering high-skill, high-wage careers in dynamically changing workplaces across the United States (Lapan & Poynton, 2020).

Despite these rising demands, there is a national crisis of high school students who need to prepare to meet the challenges of college and careers (Corey, 2021; Rothman, 2012; Young et al., 2017). As many as 60 percent of high school graduates would need more time to be ready for the academic rigors of higher education, even if their performance in high school were above average (ACT, Inc., 2019; Corey, 2021; Rothman, 2012). Approximately one in every three high school graduates requires some remediation before beginning college work, and four out of every ten new college students take remedial courses due to their inadequate preparation for the academic demands of higher education (Hanover Research, 2014; U.S. Department of Education, 2022). Only one of every four remedial course students will obtain a college degree.
(National Center for Education Statistics, 2016; Sanabria et al., 2020). Hence, only a few students receive the help they need to pursue college coursework, and of those who do receive help, only some graduate with a degree.

Educators and policymakers also agree that students should leave high school as lifelong learners with the skills and drive to pursue areas of interest related to future careers (Carroll, 2018). The demand for a skilled, specialized workforce is increasing every year. Three-quarters of the fastest-growing occupations require education beyond a high school diploma, with science, technology, and engineering careers prominent on the list (U.S. Bureau of Labor Statistics, 2022). However, the U.S. Department of Education (US DOE) indicates that our K-12 schools need to prepare more students for this reality (U.S. Department of Education, 2015). More than merely graduating and obtaining a high school diploma is required. Many employers view the diploma as more of a measure of social compliance than academic skills (Conley, 2012). Hence, even students going straight into the workforce are at a disadvantage. However, if we address these issues with considerable urgency, we can avoid creating an even more significant problem that could take generations to fix (Conley, 2012).

Most states have chosen to address student college and career readiness (CCR) attainment through various reform efforts. However, these efforts primarily focus on programs and initiatives at the school level (Durand et al., 2021). This is an understandable approach because this type of innovation and transformation often occurs at the school level by the administrators and teachers who are seen as the “implementing agents” of these policies and initiatives (Durand et al., 2021; Spillane et al., 2002, p. 392).
However, the policy and program shifts must be implemented systematically to be impactful and sustainable (Peurach & Yurkofsky, 2018).

Systemic frameworks allow districts to move toward functioning as a coherent, instructional-focused education system that supports all teachers and students (Peurach & Yurkofsky, 2018). Since accountability mandates force districts to closely manage instructional practice as an incentive to ensure the legitimacy of school systems (Cohen et al., 2017), such programming from a district level could provide a more centralized point of research for the efficacy of CCR programs. This information is especially critical for research on CCR because districts can then discern if their CCR programs are impactful and sustainable and how to implement them with fidelity at the district or systemic level. Information that is integral to program success, particularly since most accountability systems require actions concerning instruction to focus on the system level rather than be delegated to schools and teachers (Cohen et al., 2017).

**PROBLEM OF PRACTICE**

**Statement of the Problem**

High school students are “underprepared for college, the workplace, and adulthood, which has motivated school leaders, educators, researchers, and policymakers to define the necessary competencies and skills for making a successful transition from high school” (Young et al., 2017). Several researchers propose that if pedagogical approaches were aligned with the workforce needs of communities and a career focus was implemented on a curricular level, and students would graduate with a more evident
identity, postsecondary goals, and specific skills needed to thrive after high school (Battaglino, 2022; Conley, 2012; DiBenedetto et al., 2016; Fleming, 2016).

Additionally, several CCR studies discuss the impact of geographic delineation on student college and career readiness (Gee et al., 2021; Lindstrom et al., 2022; Roberts & Grant, 2021; Showalter et al., p. 1, 2019; Swisher, 2016). Rural people and places are often overlooked in national conversations about educational policy (Nelson, 2016; Sowl & Crain, 2021; Tieken & San Antonio, 2016). The educational attainment of people living in rural (nonmetropolitan) areas has increased markedly over time. However, it has yet to keep pace with urban (metropolitan) gains, especially in college and postgraduate education (Farrigan, 2022). More students in the U.S. attend rural schools than in the nation’s 85 largest school districts combined (Showalter et al., 2019). Nevertheless, rural students are roughly ten percent less likely than their non-rural peers to attend college and are less likely to enroll in four-year colleges (Roberts & Grant, 2021). However, rural students significantly benefit more than any other subgroup when provided opportunities for postsecondary attainment (Hein & Smerdon, 2013).

South Carolina and my local district, Limelight County School District (pseudonym), have significant rural populations. The poverty rate in rural South Carolina is 18.1 percent, compared with 13.1 percent in urban areas of the state (U.S. Census, 2020). According to 2016-2020 data from the United States Department of Agriculture-Economic Research Statistics (USDA-ERS), 16.6 percent of the rural population still needs to complete high school, compared to 10.8 percent of the urban (USDA-ERS, 2022). The unemployment rate in rural South Carolina is 5.1 percent, while in urban
South Carolina, it is 3.8 (USDA-ERS, 2022). This data indicates that rural communities are more likely to have populations needing more preparation for their postsecondary goals, leading to unemployment and poverty cycles. These communities need structures and systems to provide robust CCR programming. As a response, South Carolina created a task force to strengthen the CCR programming within the state.

In 2018, the South Carolina Department of Education (SCDE), the South Carolina Education Oversight Committee (SC EOC), TransformSC, and community stakeholders collaborated to develop the *Profile of the South Carolina Graduate* (South Carolina Education Oversight Committee, 2018; TransformSC, 2018). One of the critical components of the Profile is to graduate students that are “College and Career Ready” (TransformSC, 2018). The Profile asserts that the South Carolina Graduate has attained three essential attributes: world-class knowledge, skills, and life and career characteristics. Within each attribute are related elements that render the state’s workforce competitive in the global marketplace (South Carolina Department of Education et al., 2022). A copy of the Profile can be found in Appendix A and Figure 1.1.
The SC EOC also developed criteria to determine if graduating students are prepared for college or careers. These criteria became the South Carolina College and Career Readiness Standards. There are ten College and Career Readiness Indicators within the standards. Each district must report student progress and achievement on the College and Career Readiness Indicators (CCRIs) as part of the state accountability process. The South Carolina CCRIs are listed in Table 1.1.
### Table 1.1

*South Carolina College and Career Readiness Indicators*

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<th>Career Readiness Indicators</th>
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<td>1. A Career and Technology (CATE) Work-Based Certification or Credential</td>
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<tr>
<td>2. Score of 4 or higher on an International Baccalaureate (IB) test</td>
<td>2. A Silver, Gold, or Platinum National Career Readiness Certificate</td>
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<tr>
<td>3. A composite score of 1020 or higher on the Scholastic Aptitude Test (SAT)</td>
<td>3. A score of 31 or higher on the Armed Services Vocational Aptitude Battery Test (ASVAB)</td>
</tr>
<tr>
<td>4. A composite score of 20 or higher on the American College Test (ACT)</td>
<td>4. A registered apprenticeship</td>
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<tr>
<td>5. At least six credit hours in dual-credit courses with a grade of C or higher</td>
<td>5. A high school graduation credential (specifically for students with disabilities)</td>
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South Carolina Education Oversight Committee, 2022

The South Carolina Department of Education began reporting graduate cohort CCR in 2018. At that time, the SC DOE also began dividing CCR into four categories: College Readiness, Career Readiness, College and Career Readiness, and College or Career Readiness. As part of their goal to prepare all students to graduate with the knowledge and skills necessary to "compete successfully in the global economy, participate in a democratic society, and contribute positively as members of families and communities," the South Carolina Education Oversight Committee has mandated that by the year 2025, at least 60 percent of South Carolina graduates will have to qualify as both college AND career ready (South Carolina Education Oversight Committee, 2022). Students must meet at least one of the indicators in both categories. The South Carolina Report Cards indicate that only 29 percent of the class in 2022 met this benchmark (South Carolina Department
of Education Report Card, 2022). Thus, meeting the expectation of increasing this number by 31 percentage points within three years will take much work for all districts.

States continue to issue policy mandates; however, much more of the standards implementation work is left to local districts (Desimone et al., 2019). Limelight County School District (LCSD) has multiple barriers to CCR success. The district's high poverty rate, significant underserved populations, rural classification, and historical performance on the South Carolina CCRIs, causes a challenge in meeting the 2025 state mandate.

Historically, Limelight County School District (LCSD) performs well below the state and national average on all the college and career readiness indicators. The South Carolina State Report Cards show that the college and career-ready numbers for LCSD were 38 percent in 2020 and 22 percent in 2021 (South Carolina Department of Education, 2020; South Carolina Department of Education, 2021. While 2022 brought a slight improvement, with a growth of 24.9 percent (South Carolina Department of Education, 2022), the number of our graduates seeking postsecondary degrees, military, or careers declined. As a district, we are failing our students, and we need to impact changing this narrative immediately.

LCSD's strategic plan identifies graduating 60 percent of our students as college and career ready by 2025 as an instructional priority. We also recognize that this priority must be implemented and maintained systemically to ensure continuous improvement. Districts provide interventions and develop robust systems of support to assist schools in achieving mandated state benchmarks (Fleisch, 2011; Marciniak et al., 2020). As such, we have developed a system of supports with targeted college and career-ready
interventions. This system, the Limelight County College and Career Readiness Intervention (LCRI) framework, is vertically aligned to the CCRIs and uses targeted interventions based on current CCR research. This framework focuses on interventions because research indicates that CCR interventions before graduation effectively guide students toward success after high school (Balfanz et al., 2007; Davis, 2022). While our system is still in the early stages of implementation, the urgency of trying to meet the state benchmark makes determining the impact of this intervention framework essential to assist in making fiscal, curriculum, and instructional decisions.

As schools pivot away from the linear focus on graduation rates as the only indicator of successful college and career readiness preparation, districts must examine how much they provide all students with the necessary skills and abilities to be prepared for postsecondary success. A fishbone diagram of the factors surrounding this problem of practice is included in Appendix C of this paper. This study will examine how one rural school district uses a system of support to address this problem. Specifically, I seek to answer the question: Can districtwide support systems improve students’ college and career readiness in rural school districts?

**Review of Literature**

The focus of the current research on college and career readiness skews heavily toward looking at how schools can provide well-rounded programs that prepare all students to make a successful transition from school to the world of work (Malin et al., 2017). However, there is currently little empirical evidence about the impact of CCR standards on student achievement (Song, 2018). Additionally, little research addresses
how district leadership can advocate and support the CCR needs of the schools within their districts.

Public school districts have been under a decade-long press to move beyond functioning as engines of access-oriented mass public schooling to instructionally focused education systems pursuing educational excellence and equity (Peurach et al., 2020). Since the onset of the systemic reform movement in the early 1990s, districts and schools have been pressed to assume responsibility for improving students' educational experiences and outcomes on average and reducing disparities among them (Peurach & Yurkofsky, 2018). Otherwise known as systemic reform, this concept explicitly addresses the impact of any reform on multiple levels of the education system (Leithwood & Jantzi, 2006). Systemic reform is "about continuous, critical inquiry into current practices, identifying innovations that might improve education, removing organizational barriers to that improvement, and providing a system structure that supports change" (Duttweiler, 2004, p. 56). This challenges small, under-resourced, rural districts needing help to undertake these efforts (Desimone et al., 2019).

Current research does focus on how districts use organizational structures to improve instruction and drive systemic improvement or change. Peurach et al. (2020) examined how "coupling" or "systemic" frameworks in two districts improved educational quality and reduced disparities. The researchers argue that organizational scholars must broaden their perspectives on organizational management to create instructionally focused systems emphasizing excellence and equity. Peurach & Yurkofsky (2018) also identify four instructional systems' approaches to guide improvement: Managerial, Market-
Driven, Federated, and Networked. Figure 1.2 provides a representation of these approaches.

**Figure 1.2**

*Distribution of Responsibilities for Instructional Organization and Management*

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<th>Market-driven System</th>
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<td></td>
<td>Building Infrastructure</td>
<td><img src="image" alt="Image" /></td>
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<td>Supporting Use</td>
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<td>Managing Performance</td>
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<td>Distributing Instructional Leadership</td>
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</tbody>
</table>

(Peurach & Yurkofsky, 2018, p. 17).

LCSD utilizes a managerial education system approach districtwide, where our schools are held accountable for the fidelity of implementing the LCRI framework. Consistent and targeted intervention strategies will improve our students' educational opportunities and outcomes of our students while also reducing the natural disparities between our schools and classrooms. Unlike the other three approaches, the managerial
education system recognizes that the primary responsibility for building the infrastructure lies within the central office.

**Purpose Statement**

My study aims to expand upon current college and career readiness attainment research. Specifically, I propose to examine the impact of a districtwide system of supports on the CCR attainment of students in a rural school district. Using an Improvement Science research design, I plan to use a case study approach to determine the effectiveness of our districtwide system of support on the stainability of our College and Career Readiness (CCR) Intervention framework and identify areas for further research.

**Research Question(s)**

The purpose of this dissertation in practice is to study the following research question: To what extent does a districtwide system of support of a targeted intervention program impact college and career readiness for students in rural school districts?

**Key Terminology**

The use of acronyms and other educational terminology is prevalent throughout this paper. While most of the terminology may be familiar to other scholars and readers seeking to continue this research, several key terminology and concepts may not be widely known outside the educational sphere. Table 1.2 contains the list of key terms and definitions that may be useful.
### Table 1.2

**Key Terminology and Acronyms**

<table>
<thead>
<tr>
<th>Term</th>
<th>Acronym or Common Use</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT, Inc. (formally American College Test)</td>
<td>ACT</td>
<td>Formally known as the American College Test, the ACT is one of two standardized assessments most colleges and universities use for admissions.</td>
</tr>
<tr>
<td>Armed Services Vocational Aptitude Battery</td>
<td>ASVAB</td>
<td>The ASVAB, or Armed Services Vocational Aptitude Battery (ASVAB), is a timed multi-aptitude test developed by the U.S. Department of Defense that helps students determine their fit for military service, the branch of service best suited for their talents and the type of job or career most suitable for them. South Carolina uses ASVAB results to help determine student career readiness.</td>
</tr>
<tr>
<td>ACT WorkKeys</td>
<td>WorkKeys</td>
<td>WorkKeys is the Career Assessment Component of the ACT. Students can earn bronze, silver, gold, or platinum certifications. To be considered “career ready) a student must earn a minimum of silver on all three subtests.</td>
</tr>
<tr>
<td>Career and Technology Education</td>
<td>CATE or CTE</td>
<td>Either acronym is correct. CATE or CTE describes a series of programs or courses students take to prepare them for careers. In South Carolina, a student is considered “career-ready” when completing three or more classes in a CATE/CTE program of study.</td>
</tr>
<tr>
<td>College and Career Readiness</td>
<td>CCR</td>
<td>There is no definition of CCR; however, most states have common attributes. The standard definition would be a student who is ready for college and career can qualify for and succeed in entry-level, credit-bearing college courses leading to a baccalaureate or certificate, or career pathway-oriented training programs without needing remedial or developmental coursework.</td>
</tr>
<tr>
<td>College and Career Readiness Indicator</td>
<td>CCRI</td>
<td>Each state determines multiple data points to help measure a student’s college and career readiness potential. In South Carolina, one CCRI is a student's composite score on the SAT or ACT.</td>
</tr>
<tr>
<td>Scholastic Aptitude Test</td>
<td>SAT</td>
<td>Developed by the College Board, the SAT (or Scholastic Aptitude Test) is one of the two most common standardized assessments most colleges and universities use for admissions.</td>
</tr>
</tbody>
</table>
Teacher and Employee Retention Incentive Program (TERI)

The TERI program allows South Carolina Retirement System members to work for five years as a retiree while drawing their salaries as full-time employees. The retirement benefits are placed into an escrow account until they complete their years of service.

WIN Ready to Work (WIN R2W)

WIN Learning (WIN) helps school districts, community colleges, adult education programs, corrections, workforce development, and business and industry organizations ensure all learners and job seekers have the skills to be successful in their path to career readiness. In South Carolina, all students must take this assessment regardless of race, ethnicity, socioeconomic status, or disability from 2019-2021. In the fall of 2022, WIN Ready 2 Work again became the mandated South Carolina Career Assessment. Students can earn bronze, silver, gold, or platinum certifications. To be considered “career ready” a student must earn a minimum of silver on all three subtests.

**Note:** This table represents general terms, acronyms, and definitions commonly used when discussing college and career readiness programs.

**OVERVIEW OF THE PROGRAM/INITIATIVE**

Scholar-practitioners use improvement science to make an immediate and sustainable impact within their current school communities. Those engaging in improvement science want to find fundamental systematic ways to tackle the most significant problems in the educational system, including those centered around equity and injustice (Hinnant-Crawford, 2020). My focus on implementing and analyzing the impact of our college and career readiness intervention program to improve student performance is the very definition of improvement science. The Limelight County College and Career Readiness Intervention (LCRI) Framework has four components: Limelight County College and Career Practicums; Limelight County Work-Based Learning Program; Limelight County
Comprehensive Guidance Program; and Limelight County College and Career Readiness Assessment Preparation Program.

Framework of the Program

The components of the LCRI Framework were developed by the Office of Curriculum and Instruction (C & I) based on the Conley college and career readiness model (Conley, 2014). As a significant contributor to college and career readiness research, Conley (2014) states that CCR programs must contain the following criteria: key cognitive strategies, key content knowledge, academic behaviors, and contextual skills and knowledge.

In developing the LCRI framework, our district strategically designed it to align the initiatives with the new leverage points developed by the district Superintendent. Ensuring all students are prepared for postsecondary goals directly ties into the LCSD Leverage Point 1: High-Quality Teaching & Learning. After multiple discussions, we combined our most effective programs into one intervention framework directly supported through the C & I office. The following section will outline each program component, the alignment to Conley’s CCR model, and the specific support or intervention strategy provided.

Limelight County College and Career Practicums

Specifically, this intervention targets students enrolled in dual credit, Advancement Via Individual Determination (AVID), Scholar’s Academy, and the Limelight Early College programs. Instructors receive targeted professional development, resources, and support designed to enhance the work within each building. Students participating in this
initiative meet the South Carolina College and Career Readiness Indicator of obtaining six dual credit/enrollment hours with a grade of C or higher. This intervention strategy also meets all four of Conley’s key components.

LCSD AVID was initially started in our high schools in 2016 and transitioned to our middle schools during the 2019-2020 school year. AVID cultivates the mindset that college and career aspirations are achievable goals (AVID, 2022). The graduating class of 2022 contained the first AVID high school students. All twenty-one students enrolled in the program indicated they would pursue postsecondary education. In the fall of 2020, LCSD officially became an AVID district. The program serves all students within the district grades K-12. However, the COVID-19 pandemic has made districtwide implementation a challenge, and internal survey data has shown that additional AVID training and support will be necessary to implement this program with fidelity.

The Scholar’s Academy and the Limelight Early College programs are held on local private and community college campuses. They provide opportunities for high school students to experience the rigor and expectations of the college experience while still receiving support from high school instructors. Students enrolled in these programs take coursework that will allow them to earn both a high school diploma and an associate degree upon graduation. Scholar’s Academy students can also remain with the private college and earn a bachelor’s degree within two years.

As the Coordinator of Federal and State programs, I conduct an annual needs assessment and analysis of the effectiveness of this program and provide suggestions for improvement. I also conduct or coordinate professional development sessions for
instructors and administrators. A copy of the district’s professional development calendar can be found in Appendix C.

**Limelight County Work-Based Learning (WBL) Program**

This initiative identifies activities that collaboratively engage South Carolina schools and employers in structured learning experiences. Students participate in documented hands-on activities that can be paid for or unpaid. Students enroll in career and technology courses, participate in job shadowing, or utilize virtual platforms to immerse them in the career experience. Students participating in this initiative meet the South Carolina College and Career Readiness Indicator of industry credential/completer status in CATE (Career and Technology Education) courses or completion of registered apprenticeship. This initiative also meets the Conley CCR model component of contextual skills and knowledge (Conley, 2014).

Before the 2022 school year, Limelight County had yet to record our work-based learning or job shadowing experiences. Several new WBL and job shadowing opportunities are now available through initiatives developed by our Coordinator of Secondary Schools. Initial data analysis also indicated that our school data coordinators needed to learn to record the necessary data accurately or had never been trained to do so. Additionally, several of our school data personnel have less than three years of experience. Consequently, they need to gain experience in data recording and will require additional assistance as we prepare to collect data for state reporting.

As Coordinator of Testing & Accountability for the school district, I use the train-the-trainer model with the District PowerSchool Coordinator to support this intervention.
Together we have scheduled professional development sessions on coding and reporting for our School PowerSchool Coordinators and Testing Coordinators (STC). These sessions are held throughout the school year bi-weekly every Wednesday. Adapted copies of the district’s professional development calendar and the state data collection table can be found in Appendices D and E.

**Limelight County Comprehensive Guidance Program**

The Limelight County Comprehensive Guidance Program is based on the South Carolina Guidance and Program Model. The purpose of the Comprehensive Guidance Program is to assist school districts in developing and implementing guidance programs that support the personal, social, educational, and career development of all students, pre-kindergarten through grade twelve (Counseling Writing Team, 2008). Activities within this initiative include conducting and developing student individual graduation plans (IGP), postsecondary guidance, and course selection. All students are served through this initiative, and all indicators can be addressed through activities within this initiative.

Data analysis found that our district’s comprehensive guidance plan has not been updated since 2006. This was a significant area of concern for the district. We began with updating the district guidelines, guidance handbook, and course selection manual for secondary schools to reflect the mandated laws for the State of South Carolina. Currently, I am working with the Coordinator of Secondary Schools to provide the middle and high school counselors with the new guidelines and expectations for conducting IGPs and Course Selections. Finally, all district counselors are required to attend professional development sessions conducted by the South Carolina State Department of Education.
These sessions, conducted at the district’s request, provide explicit instruction on all students’ social, emotional, academic, and career development needs.

We have also introduced two new district accountability measures. We have updated school policies about course selections and secondary school student privileges. As part of this update, students can only request late arrival or early dismissal in their schedules after qualifying as college or career ready. Finally, beginning in Fall 2022, the district hired two career counselors embedded at both high schools. Their presence will help increase student interest and participation in career and technology education (CTE) courses and help them establish their postsecondary goals.

To support this intervention, I have continually assisted with collecting, analyzing, and reporting the data. Additionally, I have assisted in the research, development, and implementation of the new district comprehensive guidance program. This intervention directly correlates with the Conley key components by ensuring that students enroll in courses of study that will enhance all of the noted components: key cognitive strategies, key content knowledge, academic behaviors, and contextual skills and knowledge.

**Limelight County College and Career Readiness Assessment Preparation Program**

In the United States, students are tested far more frequently than in any other industrialized country, and test scores are used for more decisions about students, teachers, and schools (Darling-Hammond & Adamson, 2013). LCSD also utilizes formative and summative assessments to make curriculum decisions. The Limelight County College and Career Readiness Assessment Preparation program emulates CCR assessments. These assessments require students to design and conduct investigations,
analyze data, draw valid conclusions, and report findings. All of these evaluate the 21st-century skills identified as increasingly essential in a knowledge economy (Darling-Hammond & Adamson, 2013). Students can access digital resources for all CCR assessments, including ACT, SAT, WIN Ready to Work, and ASVAB. Additionally, students with availability within their course schedules can register for the college preparation courses at their high schools. The South Carolina College and Career Readiness Indicators met through this initiative include:

- SAT (Scholastic Aptitude Test) Score of 1020 or higher.
- An ACT (American College Test) Score of 20 or higher.
- A score of 3 or higher on an A.P. (Advanced Placement) exam.
- A score of 4 or higher on an I.B. (International Baccalaureate) exam.
- A silver, gold, or platinum certificate on the WIN Ready to Work Assessment.
- A score of 31 or higher on the ASVAB (Armed Services Vocational Aptitude Battery) assessment.

As the Coordinator of Assessment for the District, I am directly responsible for the coordination, delivery, and reporting for all state and national testing. Several support structures are in place to support this intervention. I am responsible for ensuring that each school has the necessary training and assessment tools to conduct the assessment with validity and integrity. All schools have a test coordinator (STC) conducting campus assessment activities. The STCs meet with me biweekly for training and technical assistance. They also receive a newsletter with reminders during the weeks we do not meet. I developed a CANVAS and SharePoint online site for all STCs with resources
such as videos, PowerPoints, and training guides for testing. Finally, I maintain the Curriculum and Instruction website assessment links to assist the STCs with testing activities.

Each component of the LCRI works interchangeably and has been strategically developed to address an identified CCR need of the district. Our schools, administrators, and counselors support the scope of this work and are working to establish teacher, student, and community buy-in (Peurach & Yurkofsky, 2018). The Office of Curriculum and Instruction, of which I am a part, works to assist schools in delivering and monitoring each of these components. However, I am directly responsible for assessing this initiative’s impact, viability, and sustainability.

**RESEARCH RATIONALE**

**Educational Priorities**

College and career readiness (CCR) is not just an educational trend or jargon but a national education priority (Roberts & Grant, 2021). CCR programming is pivotal in providing future generations with the preparation, tools for perseverance, and educational equity for postsecondary success. Therefore, states, districts, and schools must develop sustainable structures and systems for CCR programming.

*College and Career Readiness as a Priority of Educational Preparation*

College and career readiness (CCR) is a priority for providing adequate educational preparation. Preparing students to be college and career-ready benefits local, state, and national educational agencies. (Ma et al., 2019). Evidence shows that students can and should develop core skills and knowledge that will transfer across various postsecondary
and workforce settings (Conley, 2012). The problem is that many organizations have different interpretations of what constitutes college and career readiness (Battaglino, 2022; Clark et al., 2010). These varying interpretations make setting CCR goals and objectives difficult for districts and schools.

Adequate preparation has impacted graduates’ ability to complete postsecondary goals, develop into productive citizens, and provide for upward mobility (Williams, 2022). For example, adequate preparation significantly impacts a student’s future earning potential (Jimenez, 2020). Hardy (2022) reports that students with postsecondary education or training out-earn high school graduates by an average of $22,000 annually. Additionally, students who obtain some postsecondary degree often have skills and abilities that qualify them for a broad range of employment fields that offer mobility (Mountjoy, 2021) upward.

Concerns about graduates’ postsecondary readiness—whether college-bound or not—are also reflected in employers’ ongoing reports of difficulties finding workers who possess employability skills, such as critical thinking, collaboration, and digital literacy (American Institutes for Research, 2021; Lippman et al., 2015). The U.S. Department of Labor reports that there are 10.7 million jobs available right now that employers need to fill. However, applicants lack the degrees, certifications, and skills necessary to fill them (U.S. Bureau of Labor Statistics, 2022).

**College and Career Readiness as a Priority of Educational Perseverance**

College and career readiness is a priority of educational perseverance. Atwell et al. report that one-third of the students are earning high school diplomas without the
necessary tools and abilities to succeed post-graduation (Atwell et al., 2019, p. 8), and mounting evidence indicates that schools are not ensuring that all students graduate ready for postsecondary success (American Institutes for Research, 2021). As many as two in five (thirty-nine percent) high school graduates say there are gaps between their high school education and the overall skills, abilities, and work habits expected of them today in college and the workforce (ACT, Inc., 2019).

The National Student Clearinghouse surveyed recent high school graduates and found that many respondents are not pursuing postgraduate degrees (National Student Clearinghouse Research Center, 2021). According to the survey, 62 percent of students surveyed did not pursue a college degree due to joining the workforce (39 percent) or the military (23 percent). Many participants (29 percent) indicated that they did not pursue college because they did not know what to study. Additionally, of the remaining 38 percent seeking a college degree, an alarming 49 percent became college dropouts (National Student Clearinghouse Research Center, 2021). Thus, students either choose not to enroll in two- and four-year institutions or need more stamina to persevere until graduation.

Not all students need a college degree, yet many high school graduates have no postsecondary goals. Opportunity Nation, a coalition of different organizations helping communities ensure equitable access to opportunity, economic mobility, and success at all stages of life, provides additional insight into why postsecondary planning is essential for young people. In their annual report, Opportunity Nation cites that one in seven young adults ages 16-24 are not in school or working—totaling 5.5 million disconnected youth
(Opportunity Nation, 2022). This is a concerning statistic because there are correlations between disconnected youth and other opportunity gaps, such as higher incarceration rates, a greater likelihood of single motherhood, and greater dependence on public resources; these students can also suffer the loss of future income (Western & Orrell, 2020). This often leads to continuous cycles of social and economic disparities and poverty. College and career readiness programs can break the cycle of poverty by linking youth to college and jobs that give them a purpose and a pathway (Ruben, 2020). This link helps to alleviate high school and postsecondary dropout rates and ensures more significant opportunities for success. If school systems do not develop the systemic structures to shrink the opportunity gap in America, it will make it harder for young people to get ahead.

**College and Career Readiness as a Priority of Educational Equity**

Finally, promoting college and career readiness for all students is a priority of educational equity. Several studies show that traditionally marginalized populations, specifically students of color, lower socioeconomic status, and students with disabilities, are far less likely to leave high school with the requisite skills in college or the workforce (Bragg & Taylor, 2014; Lombardi et al., 2013; Monahan et al., 2020; Roberts & Grant, 2021). First-generation, low-income, and minority students face more college and career readiness challenges due to limited access to financial resources and social capital (Lippman et al., 2007). These groups also have limited access to high-speed broadband internet, academically rigorous courses, extracurricular opportunities, and entirely staffed high school counseling offices (Lopez & Schwarz, 2019). These disadvantages often
translate into fewer opportunities to build wealth or pass accumulated wealth down to future generations (Hanks et al., 2018).

Additionally, the college and career readiness of rural students is a warranted priority, as rural youth have assets and experience barriers to college and career readiness that differ significantly from their non-rural peers (Agger et al., 2018; Hutchins et al., 2012; Johnson, 2008; Roberts & Grant, 2021; Slocum et al., 2020). This topic is so essential that the National Rural Education Association (NREA) identified “college and career readiness/preparation for postsecondary experiences” as one of its ten rural education research priorities in its 2016-2021 Research Agenda (Roberts & Grant, 2021; Hill & Turney, 2016).

One of the biggest challenges that must be addressed through college and career readiness reform is the grave disparity in preparation for specific racial and ethnic subgroups and low-income and first-generation college students (Bryant & Center for Law and Social Policy (CLASP), 2015). As the demographics of the United States continue to shift, the failure of schools to adequately prepare students of color and low economic status for postsecondary opportunities has significant implications for the American labor market and economy (CLASP, 2015). These students also need more support due to limited access to financial resources and social capital (Lippman et al., 2007).

Systematic policies, practices, and stereotypes work against children and youth of color to affect their opportunity to achieve educational success (The Annie E. Casey Foundation, 2019a). Barriers to adequate funding, educational programming, and quality
educators are embedded within the educational system. For all students to succeed beyond high school, it is paramount that school systems develop programs to ensure they reach their postsecondary goals. The consequences of failing to ensure educational success are far-reaching. The long-term adverse impact is reflected in future employment prospects, poverty, and incarceration rates” (The Annie E. Casey Foundation, 2019a).

An estimated 3.6 million students graduated high school in 2020 (Bauman & Cranney, 2020). However, only seventy-nine percent of Black, eighty-one percent of Hispanic, and eighty-nine percent of Caucasian students graduated on time. While the national graduation rate is at an all-time high of 85.3 percent, the graduation rate for Black students is 6.3 points below, and Latinx students is 4.3 below the national average (Bauman & Cranney, 2020). The focus on college and career readiness has also highlighted the inequities still experienced by students of color in this country. Research has shown that exposure to advanced coursework and support is essential in preparing students of color for college and the professional world (Davis & Chan, 2021).

Nationally, rural students are roughly ten percent less likely than non-rural peers to attend college, are less likely to enroll in four-year colleges, and are more likely to undermatch (Swisher, 2016). In their biennial report, Why Rural Matters, Showalter et al. (2019) reported the following College Readiness Gauge data for Rural School Districts:
### Table 1.3

*College Readiness Gauge*

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The estimated graduation rate in rural districts</td>
<td>88.7%</td>
</tr>
<tr>
<td>Percent rural juniors and seniors in dual enrollment (males)</td>
<td>20.1%</td>
</tr>
<tr>
<td>Percent rural juniors and seniors in dual enrollment (females)</td>
<td>26.1%</td>
</tr>
<tr>
<td>Percent rural juniors and seniors passing at least one AP exam</td>
<td>9.5%</td>
</tr>
<tr>
<td>Percent rural juniors and seniors taking the ACT or SAT</td>
<td>46.5%</td>
</tr>
</tbody>
</table>

(Showalter et al., 2019, p. 15).

Several college readiness gauge categories coincide directly with the South Carolina College and Career Readiness Indicators. For example, in dual credit courses, there was a strong correlation between overall participation rate \((r = .96)\) and with participation rates by gender \((r = -.42\) for males, \(r = -.35\) for females). The report also states that for Advanced Placement courses, the poverty level in the rural school community was the strongest predictor \((r = .76)\) in determining whether a student would pass the exam. Interestingly, the report found an extremely weak correlation between ACT/SAT preparation courses and the test passage rate \((r = .00)\). In the nine states which administer a college and career-ready assessment aligned with their state standards, fewer than 80 percent of students are meeting state benchmarks (Webster, 2022). This data supports the argument that student performance on college and career readiness measures is not an issue of economics, race, or rurality but instead of opportunity and equity. Thus, districts
must create instructional frameworks that will continue to support student achievement on these measures.

Essentially college and career readiness programs are educational priorities that address how and why we prepare students for future careers; how we give students the necessary skills and abilities to persevere and achieve their goals; and how we ensure that all students have an equal opportunity regardless of race, ethnicity, disability, or socioeconomic status. If CCR is not recognized as essential for all students, the nation risks perpetuating inequities among student groups that may negatively impact society (Malin et al., 2017).

**Why Study College and Career Readiness from A District Perspective?**

College and career readiness studies are vital as America continues to fall behind other industrialized countries in preparing our students to compete globally (WIN Learning, 2022). The U.S. Department of Education (2022) states that the purpose of education is “to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access.” Simply put, the responsibility of any educational institution is to provide opportunities for students to develop the skills and abilities that will enable them to be successful and contributing members of society.

Layer four of Pern and Thomas’ (2006) model of college choice explores the social, economic, and policy contexts which influence postsecondary enrollment. The purpose is to acknowledge the implicit and explicit connections between policies and college choice outcomes (Perna & Thomas, 2006). Studying college and career readiness from a district
perspective is vital because schools rely on districts to translate federal and state policies into the local context (Duffy & Darwin, 2013). The district interprets these policies and develops frameworks, structures, and systems around which schools build their programs and initiatives. Finally, districts provide systems of support to schools upon implementing these initiatives and offer areas of improvement.

In conclusion, the focus of any college and career readiness initiative is addressing these educational priorities: preparation, perseverance, and equity. Understanding the importance of these priorities allows educational agencies to create programs to meet them. These priorities are also the foundation of the state’s college and career readiness policies. Within the context of this study, these policies define the mandates and initiatives that all districts, including LCSD, must meet. Most efforts to develop college and career readiness focus on secondary students, primarily high school students (Hanover Research, 2014). However, it is crucial to go beyond that paradigm. Shifts in the CRR mindset have led education agencies and researchers to expand readiness programming beyond high school (Hanover Research, 2014). In the following sections, I will discuss college and career readiness within an educational policy context at the state and local level and define their importance to this study. I will conclude this chapter by providing the next steps for this study and implications for future research.

State Context

In 2020, South Carolina ranked 44th for the quality of education of kindergarten through grade twelve students and 43rd for students enrolled in two- or four-year colleges (Ziegler, 2022). While 79 percent of current jobs require postsecondary education, only
29 percent of college-aged individuals have an associate degree or higher (U.S. Census Bureau, 2020). Additionally, only 56 percent of college students in South Carolina earn their degrees.

South Carolina workplace data is also concerning. Only 29 percent of all jobs in the state require a high school diploma or less (U.S. Bureau of Labor Statistics, 2022). Seventy percent of the growth in occupations in South Carolina between 2014 and 2024 will require up to a high school diploma or GED (South Carolina Department of Employment and Workforce, 2016). In the 2022 Achieve, Inc. Survey of South Carolina Employers, 34 percent deemed new employees with just high school diplomas “deficient.” Survey participants also indicate that only 16 percent would define their employees’ high school career preparation as “excellent” (Achieve, Inc., 2022).

Additionally, the 2020 unemployment rate for South Carolina was six percent, with approximately 14 percent of adults living at or below the poverty level in the state (U.S. Bureau of Labor Statistics, 2021).

South Carolina has room for improvement when examining the data for our current college and career readiness preparation programs. The Condition of College Readiness Report by ACT, Inc. shows that South Carolina graduates still need to progress in meeting college and career readiness benchmarks. Some notable longitudinal data trends from 2016 to 2019 are compiled in Table 1.4.
Table 1.4

*Condition of College Readiness based on the ACT*

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Percent Met 2016</th>
<th>Percent Met 2017</th>
<th>Percent Met 2018</th>
<th>Percent Met 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>25%</td>
<td>25%</td>
<td>24%</td>
<td>27%</td>
</tr>
<tr>
<td>Reading</td>
<td>30%</td>
<td>33%</td>
<td>30%</td>
<td>33%</td>
</tr>
<tr>
<td>Science</td>
<td>21%</td>
<td>23%</td>
<td>20%</td>
<td>25%</td>
</tr>
<tr>
<td>College Ready</td>
<td>14%</td>
<td>15%</td>
<td>14%</td>
<td>25%</td>
</tr>
<tr>
<td>African American Students College Ready</td>
<td>5%</td>
<td>6%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Hispanic/Latinx</td>
<td>16%</td>
<td>17%</td>
<td>16%</td>
<td>20%</td>
</tr>
<tr>
<td>Average Composite Score</td>
<td>18.5</td>
<td>18.7</td>
<td>18.3</td>
<td>18.8</td>
</tr>
</tbody>
</table>

(ACT, Inc., 2019).

The data in Table 1.4 indicates that student performance on this assessment has remained relatively stagnant for the last five years. The most significant growth can be attributed to students within the Hispanic/Latinx demographic, with a gain of four percentage points from 2018 to 2019. Due to the 2020 pandemic, ACT, Inc. did not release a Condition of College Readiness Report for that year. Reports for 2021 are set to be released in the Spring of 2023.

The 2016 *Report on the State of College and Career Readiness in South Carolina* also found that college completion rates were well below the national average at 36.8 percent (Petcu et al., 2016). Rural counties often have fewer residents with postsecondary degrees than metropolitan areas. For example, in more rural counties, like Marlboro County, only 13.7 percent of residents have an associate degree or higher. This statistic contrasts with more metropolitan counties like Charleston County, where up to 49.5 percent of the county residents have an associate degree or higher (Lumina...
Nevertheless, the unemployment rate in rural South Carolina is 5.1 percent, while in urban South Carolina, it is 3.8 percent (USDA-ERS, 2021).

Student performance on the state accountability measures, including nationalized normative assessments, is also an urgent issue for South Carolina. For the College Readiness Indicator, South Carolina scored a nineteen or critical (Showalter et al., 2019). South Carolina still ranks 35th (54.6 percent) in the number of Juniors and Seniors who took the American College Test (ACT) or the Scholastic Aptitude Test (SAT). Only 15 percent of male juniors and seniors and 20.3 percent of female juniors and seniors in the state enrolled in dual credit courses (Showalter et al., 2019).

The SCDE allows all students to take the ACT or SAT to identify college readiness. In April 2016, the state partnered with ACT, Inc, to allow all third-year high school students to take both the ACT and the ACT WorkKeys assessments. Students could choose between either ACT or SAT to demonstrate college readiness, while WorkKeys was the mandated career assessment. However, in 2018, the state moved to the WIN, Learning Ready to Work assessment. In 2019 ACT filed a lawsuit against WIN, Learning.

In 2021, WorkKeys successfully litigated and won the state contract for South Carolina. However, WIN, Learning filed a countersuit protesting the award. South Carolina was obligated to send the contract out on rebid in Spring 2022. This litigation and protest have continually caused South Carolina and many other states to fluctuate between the two assessments. It has also made establishing one statewide career assessment for accountability complex. Currently, the career readiness assessments
within the state have included: ACT WorkKeys from 2018-2019 and 2022 and WIN, Learning Ready to Work assessment from 2019-2021, and Spring of 2023. In the winter of 2022, WIN, Learning was again awarded the state contract. For the next five-year cycle, WIN, Learning Ready to Work, will remain South Carolina schools' official college readiness assessment.

Students must make at least level three on this assessment to qualify as Career Ready on this Indicator. This level indicates to any future employer that the student is adequately prepared for 85 percent of the jobs available in the workplace. Student performance on this Indicator is particularly relevant to meeting the state benchmark because the career readiness assessment is the only assessment provided to ALL students regardless of race, ethnicity, socioeconomic status, or disability. In other words, this assessment validates the student's ability to perform necessary employment skills. The validity of this Indicator and its focus on multiple student groups makes tracking student performance on this Indicator a priority of all districts within the state. However, the continuous interruptions of the testing instruments and the non-compatibility between the two instruments make doing longitudinal data analysis difficult.

Local Context

Limelight County is in the northwestern part (or Upstate) of South Carolina. It is the third-smallest county in South Carolina by land area and the fourth smallest by total area (U.S. Census Bureau, 2021). The county's poverty rate is approximately 64 percent (U.S. Census Bureau, 2021). The LCSD currently serves eighteen schools, including two high schools, one technology center, and one alternative school. All elementary and middle
schools in the district qualify as Title I schools. The three-year graduation rate average is approximately 85 percent, slightly above the state average of 81 percent. The South Carolina Department of Employment & Workforce (2021) Community Profile provides the following education information:

**Table 1.5**

*Limelight County Community Profile*

<table>
<thead>
<tr>
<th>Percent of Population</th>
<th>Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>15%</td>
<td>No High School Diploma</td>
</tr>
<tr>
<td>35%</td>
<td>High School Diploma</td>
</tr>
<tr>
<td>18%</td>
<td>College Experience (non-graduate)</td>
</tr>
<tr>
<td>9%</td>
<td>Less than a 9th-grade education</td>
</tr>
</tbody>
</table>

*Note:* Adopted from the 2021 South Carolina Department of Employment and Workforce Community Profile.

The data in Table 1.4 indicates that student performance on this assessment has remained relatively stagnant for the last five years. The most significant growth can be attributed to students within the Hispanic/Latinx demographic, with a gain of four percentage points from 2018 to 2019. Due to the 2020 pandemic, ACT, Inc. did not release a Condition of College Readiness Report for that year. Reports for 2021 are set to be released in the Spring of 2023.

The 2016 *Report on the State of College and Career Readiness in South Carolina* also found that college completion rates were well below the national average at 36.8 percent (Petcu et al., 2016). Rural counties often have fewer residents with
postsecondary degrees than metropolitan areas. For example, in more rural counties, like Marlboro County, only 13.7 percent of residents have an associate degree or higher. This statistic contrasts with more metropolitan counties like Charleston County, where up to 49.5 percent of the county residents have an associate degree or higher (Lumina Foundation, 2015). Nevertheless, the unemployment rate in rural South Carolina is 5.1 percent, while in urban South Carolina, it is 3.8 percent (USDA-ERS, 2021).

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Carolina was obligated to send the contract out on rebid in Spring 2022. This litigation and protest have continually caused South Carolina and many other states to fluctuate between the two assessments. It has also made establishing one statewide career assessment for accountability complex. Currently, the career readiness assessments within the state have included: ACT WorkKeys from 2018-2019 and 2022 and WIN, Learning Ready to Work assessment from 2019-2021, and Spring of 2023. In the winter of 2022, WIN, Learning was again awarded the state contract. For the next five-year cycle, WIN, Learning Ready to Work, will remain South Carolina schools' official college readiness assessment.

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Count (2022), approximately twenty percent live at or below the poverty line. Both reports indicate that the poorest members of our community are the students we serve throughout the district. The median household income is $55,000 (U.S. Census, 2021), and seventeen percent of high school graduates and thirty-eight percent of non-high school graduates live in poverty (U.S. Census, 2021).

Education in the county remains a significant indicator of upward mobility for residents. LCSD boasts a graduation rate at or above the state average since 2015; however, the number of graduates enrolling or obtaining postsecondary degrees is significantly low. According to the National Student Clearinghouse, only 31 percent of Tribal High School Graduates (pseudonym) and 40 percent of Wildcat High School Graduates (pseudonym) earned either a two- or four-year degree (National Student Clearinghouse Research Center, 2021). Additionally, of the 50 percent of LCSD students pursuing college degrees, only 20 percent graduate within six years. Eighteen percent of high school graduates and 39 percent of non-high school graduates live in poverty in the district (National Center for Education Statistics, 2021). The students returning home do so to seek employment in minimum-wage jobs that help perpetuate the cycle of poverty.

Since 2018, LCSD graduates have consistently been below the state when examining college readiness, career readiness, and college and career readiness. For this reason, improving student performance on this measure is part of the district's strategic plan. Table 1.6 displays the LCSD student performance on this measure since 2018, the first year this measure was calculated. However, no data was collected in 2020 due to the
COVID-19 pandemic, and college and career readiness was calculated in the 2020-2021 school year.

**Table 1.6**

*LCSD Historical Performance on the college-ready, career-ready, and college and career ready measure*

<table>
<thead>
<tr>
<th>Year</th>
<th>State or District</th>
<th>Total in Cohort</th>
<th>Grad Rate</th>
<th>(College or Career)</th>
<th>College AND Career</th>
<th>Neither College or Career</th>
<th>College Ready</th>
<th>Career Ready</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017-2018</td>
<td>District</td>
<td>599</td>
<td>83%</td>
<td>65%</td>
<td>32%</td>
<td>46%</td>
<td>36%</td>
<td>65%</td>
</tr>
<tr>
<td></td>
<td>State</td>
<td>59464</td>
<td>81%</td>
<td>70%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td></td>
<td>1%</td>
<td>-1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018-2019</td>
<td>District</td>
<td>508</td>
<td>83%</td>
<td>66%</td>
<td>34%</td>
<td>N/A</td>
<td>35%</td>
<td>68%</td>
</tr>
<tr>
<td></td>
<td>State</td>
<td>49166</td>
<td>81%</td>
<td>75%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td></td>
<td>1%</td>
<td>-0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019-2020</td>
<td>District</td>
<td>657</td>
<td>82%</td>
<td>54%</td>
<td>38%</td>
<td>N/A</td>
<td>N/A</td>
<td>54%</td>
</tr>
<tr>
<td></td>
<td>State</td>
<td>59019</td>
<td>82%</td>
<td>61%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>61%</td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td></td>
<td>0%</td>
<td>-7%</td>
<td></td>
<td></td>
<td></td>
<td>-7%</td>
</tr>
<tr>
<td>2020-2021</td>
<td>District</td>
<td>604</td>
<td>85%</td>
<td>54%</td>
<td>22%</td>
<td>46%</td>
<td>14%</td>
<td>53%</td>
</tr>
<tr>
<td></td>
<td>State</td>
<td>57040</td>
<td>83%</td>
<td>61%</td>
<td>29%</td>
<td>39%</td>
<td>24%</td>
<td>56%</td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td></td>
<td>1%</td>
<td>-5%</td>
<td>-7%</td>
<td>7%</td>
<td>-9%</td>
<td>-2%</td>
</tr>
<tr>
<td>2021-2022</td>
<td>District</td>
<td>567</td>
<td>83%</td>
<td>63%</td>
<td>15%</td>
<td>39%</td>
<td>27%</td>
<td>58%</td>
</tr>
<tr>
<td></td>
<td>State</td>
<td>58486</td>
<td>84%</td>
<td>66%</td>
<td>29%</td>
<td>34%</td>
<td>32%</td>
<td>63%</td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td></td>
<td>-1%</td>
<td>-5%</td>
<td>-14%</td>
<td>5%</td>
<td>-5%</td>
<td>-5%</td>
</tr>
</tbody>
</table>

*Note: Adapted from South Carolina Department of Education, 2022. The state did not expand reporting beyond college or career readiness until 2020.*

*Some college measurement data was not collected in 2020 due to pandemic testing restrictions.*
Table 1.6 shows a 3 percent growth in the college and career-ready measure before 2020. That number fell from thirty-eight percent in 2020 to twenty-two percent in 2021 (South Carolina Department of Education, 2021). Should this trend continue, it would take the district approximately thirteen years to reach the sixteen percent benchmark. A timeframe that exceeds the 2025 mandate.

The spring of 2020 brought unprecedented changes in the field of education and significant changes to Limelight County. The coronavirus (COVID-19) pandemic adversely affected education, including learning disruptions, decreased access to education and research facilities, job losses, and high student debts (Onyema et al., 2020).

These challenges were also consequential in LCSD. Resources were reallocated to meet modality and digital instructional needs, and adjustments were made to methods and delivery. New employment policies were implemented to address staffing and funding needs. In January 2020, the Board of Trustees approved a new district policy stating that no employee classified as a working retiree or on the Teacher and Employment Retention Incentive Program (TERI) could hold an administrative position.

Following this mandate, thirteen administrative positions across the district, including five in the Office of Curriculum and Instruction (C & I), were left vacant. Therefore, LCSD completely restructured its instructional practices and priorities at the height of a global pandemic. As the newly hired Coordinator of Testing and Accountability & State/Federal Programs, one of the first tasks was to modify and adjust the district’s instructional program for almost eight thousand students while supporting the transition to online instruction because of mandated school closings.
Throughout the 2020-2021 academic year, I conducted a curriculum audit with other Limelight County School District Office of Curriculum and Instruction (C&I) members. The curriculum audit was the foundation of our district needs assessment and strategic plan. We completed our audit in the spring of 2021 with several recommendations outlined in Figure 1.3.

**Figure 1.3**

*2021 Limelight County School District Curriculum Audit Findings and Recommendations*

<table>
<thead>
<tr>
<th>Findings</th>
<th>Recommendation</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>New district assessment program that supports remote learning</td>
<td>After company presentations and stakeholder input move to the iReady Platform</td>
<td>Coordinator of Testing and Accountability Office of Curriculum and Instruction</td>
</tr>
<tr>
<td>Curriculum Writing-additional attention for remote learning</td>
<td>Bring teachers from across the district to participate in the process during the 21-22 and 22-23 school years</td>
<td>Coordinators of Early Childhood/Elementary and Secondary Programs Office of Curriculum and Instruction</td>
</tr>
<tr>
<td>Provide ongoing professional development with an emphasis on technology to support one-to-one effort</td>
<td>Monthly Professional Development utilizing Frontline and Technology Tuesday webinars</td>
<td>Coordinator of Teacher Quality and Professional Development Office of Curriculum and Instruction</td>
</tr>
<tr>
<td>New program to grow administrative capacity</td>
<td>Assistant Principals Academy</td>
<td>Coordinator of Secondary Programs Coordinator of Testing and Accountability Office of Curriculum and Instruction</td>
</tr>
<tr>
<td>Address student performance on standardized testing; especially college and career readiness indicators</td>
<td>Limelight College and Career Readiness Intervention Program</td>
<td>Coordinator of Secondary Programs Coordinator of Testing and Accountability</td>
</tr>
</tbody>
</table>

*Note:* Adapted from Final audit findings from the 2021 Limelight County School District Internal Audit.

The audit provided multiple data points to support areas of improvement. The audit also found several contributing factors to poor student performance on the South Carolina CCR measures. Factors included lack of awareness, knowledge, and training of school
personnel; the need for more emphasis on a college and career readiness culture; and poor performance on South Carolina CCR assessment measures (SAT, ACT, and Career Assessment).

Historically the district college and career readiness programs were specific, self-contained, and small serving. Students are hand-selected for specific programs that often limit their college and career exploration options. For example, Scholar's Academy students cannot take courses at our career center. LCSD is an AVID District; however, before the audit, students had to enroll in the AVID Class to receive support or learn AVID strategies. High school students must be enrolled in "ACT or SAT" preparation classes to learn the strategies for taking those assessments. Even more concerning, these classes can only accommodate up to 35 students per grade span (elementary, middle, or high). Which severely limits the number of students these programs could help.

For our middle and high school, we found that the reported longitudinal data for Individual Graduation Plans (IGPs) and Work-based Learning (WBL) experiences needed to be corrected. This is likely due to the need for ongoing training for our guidance and school PowerSchool personnel. The conclusion was that we could substantially impact our CCR rating by creating a program specifically targeted to correct these issues and many others we found.

I utilized the Plan-Do-Study-Act (PDSA) inquiry cycle as my primary improvement cycle tool. "The PDSA model advocates the formation of a hypothesis for improvement (Plan), study protocol with the collection of data (Do), analysis and interpretation of the results (Study), and the iteration for what to do next (ACT)" (Hinnant-Crawford, p. 161,
This cycle is an essential learning tool for practitioners to test changes, document results, and revise theories about achieving the stated goals (Schneider, 2017).

A significant part of our planning process was redefining and restructuring the college and career readiness programs for LCSD. During the spring of 2022, we began implementing several LCRI framework initiatives. These initial professional development activities included updating the comprehensive guidance plan, training all school testing coordinators on delivering, analyzing, and interpreting college and career readiness data, and training all administrative and guidance staff on inputting college and career readiness data into our data collection systems. I led these professional development sessions directly or brought in the consultants that did the training (for example, the South Carolina Department of Education).

During the Do stage, we also modified and expanded some existing programs. These systemic changes were only in place after this initiative. Examples include expanding AVID throughout the district and adequately documenting all work-based learning and job shadowing opportunities at high schools and our career and technology center. As we transitioned into the 22-23 school year, we continued with the professional training and provided the guidance and administrative staff with resources and tools to assist with these documentation requirements. I also collected and stored all necessary CCR agency data. I was directly responsible for designing the collection tools that were used. I also prepared the CCR report for our secondary school administrators so that we know which students within the cohort need to be targeted for our interventions.
LCRI is transitioning from the STUDY stage of the Plan-Do-Study-Act (PDSA) Model to the ACT stage. During the PLAN stage, we extensively examined the CCR results of our graduating students over five years. As part of my roles and responsibilities, I led the district team in helping to determine emerging patterns. Data analysis showed that low student performance directly correlates to a poorly designed college and career readiness district structure for the district. Contributing factors identified include low participation of students in college and career readiness assessments, unreliable and missing CCR data, and out-of-date policies. For example, before this study, our district Comprehensive Guidance Plan had not been updated since 2006.

**Conclusion**

A combination of the effects of the global pandemic, systemic personnel changes, and curriculum redesign prompted the selection of the research approach for this study. My research examined the impact a districtwide system of support will have on improving the performance of our students on the state college and career readiness indicators. I focused on determining if this systemic approach of targeted interventions results in students meeting or exceeding the state performance on each indicator. I used the rapid improvement cycles through Improvement Science to conduct this study. I incorporated two complete improvement cycles for this study.
CHAPTER TWO

METHODS

This dissertation in practice sought to examine how utilizing a districtwide system of supports through a targeted intervention program can impact students' college and career readiness in a rural school district. I used a mixed methods convergent parallel case study approach for this research (Greene, 2007). Creswell & Poth (2018) state that mixed methods research allows for the simultaneous collection of quantitative and qualitative data. This approach worked well with convergent parallel design and allowed me to comprehensively combine quantitative and qualitative data to analyze the research problem (Creswell, 2015). In the following sections, I outline the conceptual framework, methodology, methods of data collection, and data analysis procedures used in this research study.

Conceptual Framework

Improvement science was the conceptual framework for this study. Improvement science is a methodology used in many fields to identify, understand, and solve problems. Scholar-practitioners use improvement science to make an immediate and sustainable impact within their current school communities (Pape et al., 2022). Those engaging in improvement science want to find fundamental systematic ways to tackle the most significant problems in the educational system, including those centered around equity and injustice (Hinnant-Crawford, 2020). Additionally, improvement science helps organizations understand how their systems work, where breakdowns occur, and what
actions can improve overall performance (Schneider, 2017). When practiced with attention to the historical and present-day sources of inequity embedded in our schools, it can be a powerful method for closing gaps in educational experiences and outcomes (Meyer, 2021).

There are numerous definitions of *improvement science* as a theoretical concept. Lemire et al. (2017) indicate that the phrase *improvement science* is often utilized interchangeably with terms such as "continuous improvement" or "scientific quality improvement." LeMahieu et al. (2017) define *improvement science* as a juxtaposition of several parts that produce quality outcomes more reliably, day in and day out, for every child and across the diverse contexts in which they are educated. I prefer the definition provided by Brandi Hinnant-Crawford in her 2020 book *Improvement Science in Education: A Primer*. In the text, Hinnant-Crawford defines *improvement science* as a systematic approach to continuous improvement in complex organizations (Hinnant-Crawford, 2020). Further, Hinnant-Crawford (2020, page 42) advises the researcher to examine three foundational questions that guide improvement science:

1. What is the exact problem I am trying to solve? Or What am I trying to accomplish?

2. What change might I introduce to solve it (and why)?

3. How will I know that change is an improvement?

By using these guiding questions, the scholar-practitioners can make a substantial and sustainable impact on their organizations. Thus, improvement science becomes how organizations identify, decipher, calibrate, and design potential solutions and policies to
actionable educational problems (Pape et al., 2022). These questions make improvement science the ideal framework for this study. I used Hinnant-Crawford's (2019) questions to organize the following subsections.

**What is the Exact Problem?**

One in five of our nation's students attend schools in rural areas (Irwin et al., 2022). Thus, examining rural students' college and career readiness is a warranted priority for rural education researchers. Rural youth experience college and career readiness barriers that differ significantly from their nonrural peers (Agger et al., 2018; Hutchins et al., 2012; Johnson, 2008; Slocum et al., 2020). To build a strong, competitive, and well-educated workforce, districts and schools must develop comprehensive approaches to implementing college-and career-ready expectations (Duffy & Darwin, 2013).

Nevertheless, most of the research around college and career readiness only examines implementation at the school level. This study uses an improvement science intervention framework to examine how a districtwide system of support impacts students' college and career readiness achievement in a rural school district.

As job markets shift, local districts must reevaluate what it means to prepare students for postsecondary opportunities (Showalter et al., 2019). Support from school personnel [i.e., teachers, counselors, career coaches] play an integral role in increasing students’ academic motivation and postsecondary aspirations but is often inadequate for helping students enact the necessary steps for achieving their postsecondary goals (Demi et al., 2010; Doyle et al., 2018; Means et al., 2016; Roberts, 2019; Roberts & Grant, 2021). Over the last decade, research has shown that districts must support college and career
readiness reforms and school improvement efforts (Duffy & Darwin, 2013; Honig et al., 2009; Sykes et al., 2012). The role of the district or central office has shifted from just an entity through which improvement efforts are passed to that of the initiators, interpreters, and enactors of policies intended to improve learning outcomes for students (Sykes et al., 2012). Applying a districtwide perspective to college and career-ready initiatives forms a foundation for a more coherent and systematic approach to implementation (Duffy & Darwin, 2013), especially in rural school districts like Limelight County.

Approximately 57,000 people live in Limelight County. The median household income is $33,500, and the median age of the citizens is 39 (U.S. Census Bureau, 2021). The largest industries in Limelight are manufacturing, retail trade, and health care & social assistance. According to the U.S. Census Bureau (2021), 24.2 percent of the population lives below the poverty line, above the national average of 12.8 percent. This demographic comprises females between the ages of twenty-five and thirty-four. The 2021 Census identifies eight ethnic groups. The three largest ethnic groups living in poverty identify as white (fifty-seven percent), black (twenty-eight percent), and Hispanic or Latino (eight percent). Eighty percent of the persons aged twenty-five or older are high school graduates; however, only seventeen percent have a bachelor's degree (U.S. Census Bureau, 2021). The data also shows that most of the employment in Limelight County centers around the manufacturing and retail industries. Most of the population are females living at or below the poverty line with holding a least a high school diploma. The Limelight County School District (LCSD) has an eighty-six percent graduation rate at or above the state average (South Carolina Department of Education, 2022).
Nevertheless, the district's college and career readiness rate was thirteen percent in 2022. Hence, the district is graduating students who need assistance in pursuing or persevering to obtain a postsecondary degree or career goal.

Limelight County School District has a student poverty index of seventy-five percent. All the elementary and middle schools in the district receive Title I, Part A funds. The high schools also qualify for Title I, Part A funding. Title I, Part A of the Elementary and Secondary Education Act (ESA), as amended by the Every Student Succeeds Act (ESSA), provides financial assistance to local educational agencies (LEAs) and schools with high numbers or high percentages of children from low-income families to help ensure that all children meet challenging state academic standards (U.S. Department of Education, 2022). Seven elementary, two middle schools, and one of our high schools receive Title I Additional Targeted Student Improvement (ATSI) funding. The Title I, Part A Targeted/Additional Targeted Support & Improvement component of ESSA requires state educational agencies to determine school eligibility for targeted support and improvement (TSI) and additional targeted support and improvement (ATSI) for identified student subgroups. These subgroups are determined by student performance on state and national assessments, including those used to determine college and career readiness. State and federal funds provide a significant amount of the LCSD’s operating budget. As such, the district must meet specified state and federal benchmarking mandates or risk losing vital funding resources.

The state benchmark mandate influencing this study is the South Carolina benchmark for college-ready, career-ready, or college AND career ready. The state expects that by
the school year 2025, 60 percent of graduates will be college AND career ready. Currently, the state of South Carolina is at twenty-eight percent, and LCSD is at thirteen percent (South Carolina Department of Education, 2022) of students as college and career ready. These numbers are represented below in Figure 2.1.

Figure 2.1

*South Carolina College and Career Readiness Goal*

![Graph showing college and career readiness goal for Goal, State, and LCSD](image)

*Note: Taken from the Report Cards from South Carolina Department of Education, 2022*

The high school graduates of Limelight County have the same postsecondary options available to most South Carolina students. They can enroll in college, enlist in the military, or enter the workforce. However, Limelight County's student performance on South Carolina CCR indicators has declined over the past three years. In 2019, 34 percent of LCSD graduating seniors were college- and career-ready (SD DOE, 2021). No data were reported or recorded in 2020 due to the COVID-19 pandemic and the statewide moratorium on testing. In 2021, only 22 percent of LCSD graduating seniors met the college and career-ready benchmark (SC DOE, 2022). The number of LCSD graduates
seeking postsecondary degrees, enlisting in the military, or pursuing careers also declined (National Student Clearinghouse, 2021). Predictably, the unemployment numbers in Limelight County, specifically among adults under 25, have increased (U.S. Census Bureau, 2021). Again, this data shows the importance of addressing postsecondary attainments for students within the district.

Since 2018, less than half of the graduating students of Limelight County have pursued a postsecondary degree (National Student Clearinghouse, 2021). Following the 2020 pandemic, the number of enrollments in higher education has remained relatively stagnant at 46 percent, with an even split between two- and four-year colleges. Approximately 90 percent of the students enrolled do so at an in-state institution. Table 2.1 shows the postsecondary enrollment trends of the district since 2014 by number.

Table 2.1

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total in the Class</td>
<td>509</td>
<td>548</td>
<td>500</td>
<td>555</td>
<td>597</td>
<td>541</td>
<td>557</td>
<td>519</td>
</tr>
<tr>
<td>Total Enrolled</td>
<td>57%</td>
<td>58%</td>
<td>54%</td>
<td>51%</td>
<td>55%</td>
<td>49%</td>
<td>47%</td>
<td>47%</td>
</tr>
<tr>
<td>Total in 4-Year</td>
<td>42%</td>
<td>49%</td>
<td>52%</td>
<td>57%</td>
<td>53%</td>
<td>50%</td>
<td>51%</td>
<td>47%</td>
</tr>
<tr>
<td>Total in 2-Year</td>
<td>58%</td>
<td>51%</td>
<td>48%</td>
<td>43%</td>
<td>47%</td>
<td>50%</td>
<td>49%</td>
<td>53%</td>
</tr>
<tr>
<td>Total in State</td>
<td>94%</td>
<td>60%</td>
<td>89%</td>
<td>88%</td>
<td>91%</td>
<td>90%</td>
<td>92%</td>
<td>90%</td>
</tr>
<tr>
<td>Total Out-of-State</td>
<td>6%</td>
<td>9%</td>
<td>11%</td>
<td>12%</td>
<td>9%</td>
<td>10%</td>
<td>8%</td>
<td>10%</td>
</tr>
</tbody>
</table>

(National Student Clearinghouse, 2021). Adapted from the Current term enrollment.
The National Student Clearinghouse (2022) reported that the top five top college choices for Limelight County Graduates lay within a fifty-mile radius of the county. This data suggests that, like most students from rural communities (Parsons, 2022), Limelight County students chose to attend higher learning institutions close to their communities. Once LCSD graduates enroll in college, fewer than 30 percent graduate within six years (National Student Clearinghouse, 2022).

Another measure of successful postsecondary CCR implantation is the ability of students to persevere or persist in obtaining a college degree. The National Student Clearinghouse also records these numbers for high schools. Perseverance numbers include high school graduates that enroll and attend two- or four-year universities, stop out or stop attending and then re-enroll and students not in the database meaning their data was not recorded or collected. As displayed in Table 2.2, the data is alarming and suggests that LCSD needs to do a better job of providing graduates with the necessary tools to complete their chosen courses of study in higher education.
Table 2.2

Postsecondary Progress by Year of LCSD Graduates

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total in the Class</td>
<td>509</td>
<td>548</td>
<td>500</td>
<td>555</td>
<td>597</td>
<td>541</td>
<td>557</td>
<td>519</td>
</tr>
<tr>
<td>Total Enrolled</td>
<td>56.60%</td>
<td>58.20%</td>
<td>54.20%</td>
<td>51.00%</td>
<td>55.00%</td>
<td>49.00%</td>
<td>47.00%</td>
<td>46.80%</td>
</tr>
<tr>
<td>New to College</td>
<td>0.50%</td>
<td>0.90%</td>
<td>2.40%</td>
<td>1.00%</td>
<td>1.80%</td>
<td>3.50%</td>
<td>48.50%</td>
<td>-</td>
</tr>
<tr>
<td>Persisted</td>
<td>0.50%</td>
<td>4.30%</td>
<td>4.30%</td>
<td>9.10%</td>
<td>27.00%</td>
<td>30.90%</td>
<td>18.00%</td>
<td>-</td>
</tr>
<tr>
<td>Returned After Stop Out</td>
<td>1.50%</td>
<td>2.70%</td>
<td>1.20%</td>
<td>3.20%</td>
<td>3.70%</td>
<td>0.00%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Graduated</td>
<td>23.00%</td>
<td>32.20%</td>
<td>26.00%</td>
<td>18.50%</td>
<td>6.80%</td>
<td>5.20%</td>
<td>1.00%</td>
<td>-</td>
</tr>
<tr>
<td>No Longer Enrolled &amp; Not Graduated</td>
<td>37.00%</td>
<td>31.90%</td>
<td>27.90%</td>
<td>25.40%</td>
<td>20.80%</td>
<td>16.30%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Not on database</td>
<td>34.40%</td>
<td>27.90%</td>
<td>38.20%</td>
<td>42.90%</td>
<td>40%</td>
<td>44.30%</td>
<td>51.40%</td>
<td>-</td>
</tr>
<tr>
<td>Total Not Enrolled/Not Graduated or not in Database</td>
<td>71.40%</td>
<td>59.80%</td>
<td>66.10%</td>
<td>68.30%</td>
<td>60.80%</td>
<td>60.60%</td>
<td>51.40%</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: (National Student Clearinghouse, 2021.) Adapted from the Current term enrollments.

In summary, not only are LCSD students not meeting benchmarks on the state college and career readiness indicators, but graduates are not enrolling in two- or four-year universities, or if they are enrolling, they are not persevering and obtaining their degrees. Finally, fewer graduates are entering the workforce or the military. However, young adults’ unemployment and poverty rates are increasing throughout the district. This is developing into a crisis that could significantly impact the local economy.
LCSD recognizes that urgent intervention is needed to address this crisis. Primarily because although CCR programs are implemented at the school level, it is the district's responsibility to ensure that CCR measures and mandates are met and that any interventions are implemented with fidelity. Since this data results from school based CCR interventions, utilizing a districtwide systematic approach may yield better results and noticeable improvements.

**What Change Am I Introducing?**

As the LCSD Coordinator of Testing and Accountability and State/Federal Programs, I have introduced a system of support and interventions based on historical and current agency data analysis. Specific changes include targeted professional development, curriculum revisions, and course updates. Throughout 2022, I conducted professional development sessions, workshops, training, and other activities with key stakeholders, such as school administrators, testing coordinators, counselors, and college and career readiness coaches. These activities aimed to generate buy-in and support for the district intervention program, the Limelight County College and Career Readiness Intervention (LCRI). My current position allows me to be an active creator and contributor to these intervention activities (i.e., professional development sessions, Individual Graduation Plan conferences, CCR workshops, etc.).

My part in this intervention began with developing the updated district course registration guide. In collaboration with the school counselors and the District Secondary Schools Coordinator, we redesigned and updated the course registration guide for the district. Previously, each school developed this guide, which kept the document from
being cohesive or systemic. Students transferring from within or without the district high or middle schools could not be assured of the same educational opportunities. This became an issue of equity and access, especially for students at Wildcat High (our smaller high school), who did not get the same opportunities as Tribal High (our larger campus). Throughout the Spring semester of 2022, we examined the registration guides of several high schools and developed a guide that will be used this year throughout the district. We also made a continuous effort to ensure that all courses of study were developed around career clusters to ensure a focus on college and career readiness as students, even in middle school, began to think about their postsecondary goals.

Updating the district curriculum is an initiative involving everyone in the Office of Curriculum and Instruction. Although the Elementary and Secondary school coordinators lead this initiative, I serve in a support role and assist with providing professional development training and technical support. As the district Coordinator of Accountability, I also helped to ensure equity and consistency within the new curriculum and horizontal and vertical alignment across the district. Developing this new curriculum also helped us make informed fiscal and employment decisions. The curriculum writing process is complete in all subject areas except for Science.

The curriculum guide and new course registration guide also allowed us to see where the interest of our students lies and in which programs, we should invest our resources. I created the new district IGP conference guidance checklist with input from the guidance staff. A similar guide was developed for our middle school staff to use with the new student-led conferencing protocols. Guidance staff has also undergone extensive training
with the South Carolina State Department on developing the new comprehensive
guidance plan. The new comprehensive guidance document was given to the district
Board of Trustees for review this spring. As the district's accountability coordinator, I
continued to ensure that the document followed state and federal mandates.

As the district testing coordinator, I played a significant role in the implementation of
the district testing policies and procedures. I created and maintained all training,
workshops, and resources related to testing, including the college and career readiness
assessments. Our school administrators, counselors, and testing coordinators indicated
that communication and additional resources were prioritized in preparing for CCR
assessments. As part of the LCRI interventions, I developed new resources to assist our
school test coordinators, counselors, and students with the state assessment program.
These resources included a district CANVAS testing resource page, a SharePoint website
for easy access, biweekly professional development webinars recorded and posted, and a
newsletter with testing tips and reminders. School Test Coordinators also met with me
before any significant testing event. I revised the Spring semester's district testing and
training calendar to reflect new changes from the state department. I also hosted biweekly
meetings and in-person professional development sessions throughout the second
semester. Table 2.3 shows the tentative assessment professional development calendar for
the Spring semester:
As part of my responsibilities for managing state and federal assessments, the District PowerSchool Coordinator and I have had multiple sessions with the school PowerSchool Coordinators to report and record data consistently. Three professional development sessions occurred in Fall 2022, and we held two more before the state spring testing window. Using virtual and in-person meetings, we trained the clerks and guidance personnel on accurately reporting pre- and post-college and career readiness data into PowerSchool, the state student information and management system. We also emphasized the importance of this data as it is used for accountability. We continue to develop a district data sandbox as another resource. This sandbox contains all the video and training sessions and houses all the agency data per school that I have collected and analyzed for this study.

My role allows unrestricted access to significant agency data for my district. One of my responsibilities is to analyze this data (at the district level) and submit it to the state for accountability. Due to the multiple data points, the spring required a clear focus on collecting the CCR data. Examples of data collected include student course enrollment,

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**Table 2.3**

*Tentative Professional Development Calendar*

<table>
<thead>
<tr>
<th>Date</th>
<th>Session</th>
<th>Modality</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>WIDA Access for MLLs</td>
<td>In-person</td>
</tr>
<tr>
<td>February</td>
<td>ALT Testing</td>
<td>In-person</td>
</tr>
<tr>
<td>February</td>
<td>Spring SC READY Testing</td>
<td>In-person</td>
</tr>
<tr>
<td>March</td>
<td>ACT/SAT Testing</td>
<td>In-person</td>
</tr>
<tr>
<td>March</td>
<td>Spring SC READY High School</td>
<td>In-person</td>
</tr>
</tbody>
</table>

---

56
student performance on college and career assessments, grades, GPA, and graduation rate. This data collection serves two purposes, district and state testing reporting and data for state and federal programs. As the Coordinator of State and Federal Programs, My responsibilities included maintaining a current record of student performance on these indicators to create the narratives that go into our funding applications—my day consisted of collecting, analyzing, and synthesizing the data. Since the district leadership is interested in the impact of the LCRI framework, I presented the preliminary results of this initiative to our Director of Academics and Superintendent.

This study is improvement science. Characterized by short cycles of intervention and examination, termed "Plan, Do, Study Act" (Bryk et al., 2017), this study will examine the impact of these interventions within a short cycle. As discussed earlier, the district is currently in the DO stage of the PDSA cycle. The short-term focus is on those initiatives that could have an immediate initial impact. For example, we provide professional development training to the PowerSchool coordinators on correctly entering work-based learning data. Traditionally our middle and high schools received no credit (points) for this CCR measure. Just correctly entering the data will allow the schools to collect one point, which becomes significant in determining overall report card ratings.

My study aims to determine the effectiveness of these interventions from a district level. As part of my professional role, I have analyzed and implemented significant changes. We are now ready to move from the STUDY stage of the intervention to the ACT stage. The interviews with district leadership, counselors, and faculty members helped to determine current attitudes about CCR, collect data on the effects of these
improvements on students' performance, and assess if the programs have had any intended impacts. I then used this data as a baseline for my data analysis. Figure 2.1 provides a visual representation of the current PDSA cycle for LCSD.

Figure 2.1

*Plan-Do-Study-Act Cycle-Limelight County*

**How Will I Know That the Change Is an Improvement?**

I determined if the short-term interventions implemented were improvements through several evidence markers. These included student enrollment and registration numbers, which became available in mid-March. Increased student enrollment in Advance Placement, Career and Technology, and Academic Enrichment classes like Dual Credit and Scholars indicated the impact of our new comprehensive guidance plan and activities. I also ran validation reports on PowerSchool data, which provided preliminary data on the impact of our focused professional development sessions. Most CCR Assessments (AP, SAT, ACT, Inc., and WIN R2W) are also delivered electronically, which allows for immediate collection and analysis of the results. I used this data to make
preliminary longitudinal comparisons and predictions of students' performance on the state report card.

College and Career Readiness Data are regularly collected, calculated, and verified by the district and the South Carolina Department of Education through the Office of Data and Research. This information is then disseminated through the annual school report cards. I can predict the impact of the long-term interventions and activities of the LCRI framework when the college and career readiness ratings are released. Such interventions include student coursework, preparation programs, and college and career practicums. I then used that data to determine whether the activity's effectiveness significantly improved.

I predicted that the 2023 report card ratings for all secondary schools, our career, technology center, and the district to show marked improvements. I presented the findings from this report to all constituents, including the Superintendent and Executive Director of Academics. This report's information helped generate our actions for the ACT stage of the PDSA cycle. Following the Spring semester, we used the disaggregated data to determine our programmatic goals for the next school year. I also presented the information from this report to the Office of Curriculum and Instruction members. The 2023-2024 professional development calendar was based on the required training needs that resulted from the deficiencies found in the report.
RESEARCH DESIGN

Overview of Research Design and Question

This study examined the impact of a districtwide support system through targeted intervention. The study utilized a mixed-method convergent parallel design of qualitative data such as semi-focused interviews and quantitative historical agency data. The structure of my process will closely resemble the "data analysis spiral" identified by Creswell & Poth (2018, p. 186). The processes of data collection, data analysis, and report writing are not distinct steps in the process—they are interrelated and often go on simultaneously in a research project (Creswell & Poth, 2018, p. 185). This process was the foundation of the coding method and rationale for the coding used within this study. Figure 2.1 illustrates Creswell & Poth's Data Analysis Spiral.

Figure 2.2

The Data Analysis Spiral, page 186

(Creswell & Poth, 2018)

The qualitative structure of the report focused on discussing the problem, methodology, findings, conclusions, and possible methods for improvement (Yin, 2014). The primary data collection method was semi-structured interviews with local
educational leaders. These interviews also provided insight into the district's current perception of CCR programming. Finally, the interview findings provided feedback to guide program revision and design.

The quantitative structure of my study will utilize agency data collection and analysis. Examples of data collection include student Individual Graduation Plans (IGP), transcripts, and test scores. Students must communicate their chosen post-secondary goal on the IGP, accessed through PowerSchool. Other College and Career Readiness Indicator (CCRI) criteria, such as assessment scores, final grades for dual credit courses, college entrance exams, and career assessment scores, are stored in Enrich. I merged all data into one Excel workbook. I also included an LCRI designation for each student as I developed this document.

Students were identified as participating in one or more of the programs. I included demographic data such as gender, ethnicity, or race. With this data, I converged the qualitative and quantitative data to produce parallel themes that helped determine the impact of interventions on student achievement on the CCR indicators. The qualitative and quantitative research measurements will be based on the following research question: to what extent does a districtwide system of support of a targeted intervention program impact college and career readiness for students in rural school districts?

Site Selection

The agency data for this study will be collected from secondary students in both attendance areas. The study will include students, administrators, and counselors serving or attending Wildcat High School (WCHS), Tribal High School (THS), and the Limelight
County Career Center (LC3). Although most data are collected and maintained within the Office of Curriculum and Instruction, the district and participating schools will be informed of the research questions and intent to collect and utilize the data before starting the collection process. The Mixed Methods diagram in Figure 2.3 illustrates the procedures for collecting and analyzing the information collected. The Qualitative Analysis section will report the qualitative and quantitative results and converge to the Findings section. The findings section will analyze and compare the results for supportive and non-supportive findings (Creswell & Creswell, 2018).

**Figure 2.3**

*Mixed Methods Diagram*
METHODS OF DATA COLLECTION

Data Collection Instruments

*Semi-structured Interviews*

I used the semi-structured interview protocol in the Appendix to interview five people. The semi-structured interview consisted of ten questions asked of each participant. Participants included the executive director of academics, the coordinator of secondary schools, the secondary building-level administrators, the district PowerSchool coordinator, and the school counselors. These interviews focused on the impact of college and career readiness preparation in the Limelight County School District. Participants in the semi-structured interview were chosen based on the criteria like the protocols discussed within the text by Creswell & Poth (2018, p. 163-165).

Before each interview, I provided each participant with a study summary. Participants were asked to review this information before agreeing to participate in the study. Five semi-structured interviews were conducted using the Microsoft Teams platform. Interviews ranged from forty-five (45) minutes to one hour and utilized the approved interview protocol in Appendix I. Each interview was recorded and immediately transcribed for data analysis. Notes were then loaded into the NVIVO qualitative data analysis program. Participants included district and school-certified staff whose work directly impacts the development of college and career readiness intervention programming for students. Throughout the interview, I made notes concerning body language, tone, and comments regarding the questions to define further the thoughts and feelings toward the factors that impact college and career readiness. The intention was to
determine common themes and patterns within the collected data. The Interview Question Rationale and Protocols are listed in Appendices B and C.

The participants were asked the same seven open-ended questions using Claxton and Michael's (2021) qualitative data collection methodology. Data was collected and analyzed using the NVivo software package for qualitative data analysis. The interview was designed to help answer the central research question: To what extent does a districtwide system of support of targeted intervention impact college and career readiness for students in rural school districts? As suggested by Claxton and Michael (2021), I searched for keywords (s) or terms and recorded the frequency of the occurrences to develop the key themes or findings for this research.

Table 2.4

Curriculum and Instruction Redesign Coding

<table>
<thead>
<tr>
<th>Participant</th>
<th>Curriculum and Instruction (Number Occurrence)</th>
<th>Example of Participant’s Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Green</td>
<td>75 out of 85 occurrences</td>
<td>We have expanded CTE, Dual Enrollment, and AP class enrollments. Additionally, we have revisited the pathways we offer within the district to address the needs of all students. During my first year here, an early college program was implemented. Although I was hired in January, that was the first year the schools implemented an early college program and the Scholars Academy program at Limestone University. So, more students are exposed to more vigorous content and instruction. When we look at being an AVID district, there has been a shift in the number of college and career-ready students because of the consistent exposure to those strategies.</td>
</tr>
<tr>
<td>Mrs. White</td>
<td>34 out of 89 occurrences</td>
<td>There should be no isolated conversation about college and career readiness or student expectations; that conversation must become a part of the school’s culture. It must happen to move students forward. Because the more you talk about things and keep things at the forefront, the more proactive you will be in moving in that direction.</td>
</tr>
<tr>
<td>Dr. Red</td>
<td>44 out of 51 occurrences</td>
<td>It’s my goal and always will be that whatever our graduation rate is, our CCR rate is the same. So, if we have 85% of our kids graduating high school, then 85% of them should be college or career ready. Because if we are not graduating kids who are either college or career ready, then I feel like we have failed that child along the way. So, to reach that goal, we must know where they are.</td>
</tr>
<tr>
<td>Mrs. Blue</td>
<td>15 out of 32 occurrences</td>
<td>Our seniors here in our school district have always looked forward to senior year when they come to school late or leave early. We changed that rule this year so that if you were not college and career ready, you didn’t get to leave early or come to school late. We are going to ensure that you are. Initially, we encountered a lot of resistance, but after we educated our community, no one seemed to have a problem with it.</td>
</tr>
<tr>
<td>Mrs. Pink</td>
<td>37 out of 72 occurrences</td>
<td>Ultimately, it all circles back to one thing... is the data correct? That data follows students from kindergarten to graduation and forever on their transcripts. So, we’ve got to make sure that the data is correct. I initially started with quarterly meetings/training, which I admit was a struggle. My big part was getting together with my team here (Curriculum and instruction) and the guidance departments at each school.</td>
</tr>
</tbody>
</table>

|                                                                 |                                                                 |
| Total 205 out of 327 (62%)                                      |                                                                 |
### Table 2.5

**Comprehensive Guidance Coding**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Comprehensive Guidance (Number of occurrences)</th>
<th>Example of Participant’s Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Green</td>
<td>48 out of 82 occurrences</td>
<td>The role of the school counselor in this district has shifted. When I entered the district, they were doing testing, ICPs, and scheduling, and they never were able to get into the classrooms and things of that nature, so we have, as a district, rewritten the comprehensive guidance plan. They can look at their local needs assessment for Cherokee County, not just the one through CTE for Perkins, but from the standpoint of a school counselor. And they’re looking at the areas that they need to address.</td>
</tr>
<tr>
<td>Mrs. White</td>
<td>38 out of 59 occurrences</td>
<td>There isn’t a procedure or process for implementing college and career readiness. Of course, counselors, they do, IEP conferences, and you know those types of things.</td>
</tr>
<tr>
<td>Dr. Red</td>
<td>43 out of 51 occurrences</td>
<td>It’s been a significant shift for some of the counselors because of their previous roles, and the shift over the years has caused them to reflect more on their abilities and responsibilities. They have been attending conferences and learning more about their roles and responsibilities. They have become more accepting of it, but there still needs to be a focus on specifics in the ICP process to help move students forward.</td>
</tr>
<tr>
<td>Mrs. Blue</td>
<td>30 out of 52 occurrences</td>
<td>There is a lot of social Emotional Learning (SEL) stuff for our guidance counselors for what they’re doing with their students. Still, the guidance program also has a lot of career development because we know that at that level, our kids need lots of exposure to different careers and avenues, especially our students of high poverty.</td>
</tr>
<tr>
<td>Mrs. Pink</td>
<td>53 out of 72 occurrences</td>
<td>School districts like ours have students who don’t know about different careers because either their parents have always worked in the same industry, doing the same job, or has no job, so they don’t even know what exists there. The other piece is ensuring we use the resources to create those opportunities.</td>
</tr>
</tbody>
</table>

We have been working throughout the district throughout the year with our guidance department, trying to pull together and do some things. We may have talked about it, but I noticed those things in previous places. Not always in the past, when it came to transcripts and the things that they put the ICPs, and they put into PowerSchool, sometimes not all the information was correct, or we needed to put in things that needed to be there, right? So that has been part of our overall and audit piece of our comprehensive guidance departments and plans throughout K-12 throughout the system.

I could sell Lindelighth County to anybody based on college and career readiness. That is our pride and joy that we offer so many different pathways. There is not just my opinion; there is something for every student. So, we don’t have to worry about losing students to boarding schools or private schools because they feel like they can get better. We are seeing more students return to the district from private schools because we can offer such things. So that rigor and that exposure from, you know, AVID courses, early college and scholars, and our career center, is important. There hasn’t been a year that I have given to prospective students where they haven’t decided to enroll.

Total 212 out of 327 (69%)
Table 2.6

Professional Development Coding

<table>
<thead>
<tr>
<th>Participant</th>
<th>Professional Development Occurrences</th>
<th>Example of Participant’s Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Green</td>
<td>49 out of 83 occurrences</td>
<td>We have intensive training for our teachers with the standards. We have ongoing professional development every other month with our teachers at the district and school levels. They must submit their professional development plans.</td>
</tr>
<tr>
<td>Mrs. White</td>
<td>31 out of 89 occurrences</td>
<td>In previous years, there was a push or initiative to use the career readiness platform in the classrooms for practice in the 9th and 10th grades in preparation for the 11th grade.</td>
</tr>
<tr>
<td>Dr. Red</td>
<td>40 out of 51 occurrences</td>
<td>But with the inconsistency with the test, there has been some disconnection. One of the things that I find super valuable is that we need to be doing ELL, not just in our secondary schools’ student-led conferencing. The earlier that we help students know how to set a goal, how to strive for those goals, and to be completely honest with students about where they are and how they articulate that to others. It gives them ownership of their learning. Now that requires training. CTE teachers are also crucial; they have not been given the keys to the kingdom. I don’t think they understand that they have content that no other teachers have, and they’re teaching children a skill. Still, at the same time, I don’t know if many of them understand the essential role that they share in making sure their students are career ready and how they can fit into that puzzle.</td>
</tr>
<tr>
<td>Mrs. Blue</td>
<td>28 out of 32 occurrences</td>
<td>There were many things within PowerSchool that our district needed to utilize. Things that I didn’t even understand. But I just knew that things were missing as far as coding for our students, as far as making sure that those things that students needed to have on file and ready when they went on to the next level. Some students fell by the wayside because the coding wasn’t in the system correctly. I want to ensure that we’re doing all we can in Limelight County to ensure students are successful. I like professional development, where you meet with others. Because you know, our district is heavy on people born and raised here. I wasn’t. So those of us that have been outside the walls, as I like to say, we know better, but those of us that have just always been here, there’s a stigma. That’s just how we’ve always done it. And I’m like, but all of you know there’s a better way. Exactly. There are people out there who like innovative things. Yeah. And we can try. And often, it’s about the numbers, like you want kids to have these experiences.</td>
</tr>
<tr>
<td>Mrs. Pink</td>
<td>34 out of 72 occurrences</td>
<td></td>
</tr>
</tbody>
</table>

Total 182 out of 327 occurrences (56%)

Agency Data

Agency data collection for this research consisted of targeted document analysis identifying aspects of the case through a historical and chronological lens (Creswell & Poth, 2018, p. 100). Not only did this approach help me identify the historical deficiencies of CCR for Limelight County, but it also helped to identify any emerging patterns or themes. Several data points will be retrieved utilizing the Enrich Database from the Frontline Education System. All school districts in South Carolina use Enrich as
the collective database storehouse for all students in grades K-12. Available data from Enrich includes summative and formative assessments, Individual Education Plans (IEPs), 504 Plans, and grades transcripts for the time students were enrolled in South Carolina schools. Specifically, test scores from all college-ready (PSAT, PreACT, SAT, ACT, etc.) and career-ready (WIN Ready to Work, ASVAB, ACT Work Keys) data are also stored. The scores on each assessment would indicate success in meeting college and career readiness (Hackmann et al., 2018).

South Carolina archival data is stored in PowerSchool. *PowerSchool* is the student information system that stores student transcripts, grade point averages, historical courses and teachers, and Individual Graduation Plans (IGP). I used the PowerSchool system to find all courses in which the students have participated and the student's IGP Career Cluster and Career Goal. Data retrieved helped to reveal whether the students were on target to meet college and career readiness indicators. I also collected agency data from the South Carolina Department of Education website (South Carolina Department of Education, 2022). This site provided the percentage of students identified as college and career ready as determined by the South Carolina College and Career Readiness Indicators. The site also records district and school yearly progress on each indicator. Available data was recorded from 2018 to 2021 and was used for longitudinal comparisons.

All data were collected and analyzed within a Microsoft Excel workbook. A copy of the collection form that was used to document the percentage of students meeting state expectations for college and career readiness can be found in Appendix E. I also collected
data documenting the percentage of students failing to meet state expectations for college and career readiness (see Appendix F for the protocol).

Methods of Approach

I utilized simultaneous deductive coding (Creswell & Poth, 2018). Specifically, I incorporated both patterns and evaluation coding approaches. Deductive coding allowed me to "assign judgments about the program's merit, work, or significance" (Miles et al., 2019, p. 75) by applying nonquantitative codes and patterns to the qualitative data. I then collected and annotated the data utilizing the Microsoft Excel software program. This data also integrated the interview and field notes data into the workbook to assist with analyzing and developing my data codebook.

I was able to identify three categories of codes or themes. All data was kept in one workbook consisting of multiple worksheets. The cumulative data is also stored within the workbook to identify the patterns or themes and for analysis. After reading through the data collected, I memoed or annotated emergent ideas. As Croswell & Poth (2018, p. 187) suggested, I made notations on all transcripts and field notes and placed them within the analysis worksheet. The notations assisted in the development of my themes and code classifications. I then finalized the research by developing written and visual matrixes and models to represent my findings.

First Cycle of Coding

I will examine the first coding cycle's semi-structured interview transcripts and journal notes. I began by grouping or chunking the data using descriptive coding to summarize my data in a word or short phrase (Miles et al., 2019, p. 74). This coding
method was beneficial due to the large amount of data I collected and the variety of topics within the data set. From this descriptive data, I noted the distinctive themes or patterns. I also noted any codes that "emerged from repeatedly observed behaviors, actions, norms, routines, and relationships; local meanings and explanations; commonsense explanations and more conceptual ones; inferential clusters and "metaphorical" ones; and single-case and cross-case observations" (Miles et al., 2019, p. 74). I then conceptualized or mapped the emerging patterns within the Microsoft Office Excel database program. The data was then qualified based on the emerging themes to define the coding parameters. To ensure the validity of the data, I utilized member checking through the semi-structured interview participants and my dissertation in practice partner(s). Their collective insight and interpretation assisted in ensuring consistency with data interpretation.

**Second Cycle of Coding**

The second coding round also helped validate the data collected and ensured that my analysis was systematic and transparent. I relied upon descriptive deductive coding during both cycles. Notations and data collected within the second coding round were highlighted in different colors. I then drew meanings and produced a narrative to form the data analysis. A copy of the codebook, coding sheet, and data collection table can be found in the appendices.

**Trustworthiness**

The quality of qualitative research rests on how the data are gathered and analyzed (Tracy, 2010). "Trustworthiness" is a common term in qualitative research and is closely
related to the term "validity" in quantitative research (Marshall & Rossman, 2006). This term refers to the research's credibility, transferability, dependability, and objectivity (Marshall & Rossman, 2006; Schwandt et al., 2007). I utilized a codebook, triangulation, and member checks to ensure the reliability and trustworthiness of my data analysis process. The codebook also ensured that I maintained the integrity of the data by maintaining the language, defining my coding parameters, and eliminating redundancy.

**Codebook**

A codebook for qualitative research contains a list of the codes and descriptions that comprise the foundation of qualitative data analysis research. The codebook articulates the distinctive boundaries for each code and plays a vital role in assessing the inter-rater reliability among multiple coders (Creswell & Poth, 2018, p. 190). Utilizing the codebook ensured the integrity of the data, defined my coding parameters, and eliminated redundancy.

**Triangulation**

Triangulation can be done through data collection and cross-checking (Schwandt, 2007). Triangulation reduces the potential systematic bias by using only one data source, method, or procedure (Maxwell, 2009). I triangulated my data using multiple data collection points and sources.

**Member Checking**

Member checking, also known as participant or respondent validation, is a technique for exploring the credibility of results. Data or results are returned to participants to check for accuracy and resonance with their experiences (Britt et al., 2016). I allowed the
participants to review and validate this study's transcription data and coding information. This process also allowed the participants to check the accuracy of my data and interpretations (Creswell, 2007; Tracy, 2010). Data partners included the Curriculum and Instruction Department of Limelight County School District members.

**Positionality**

I am a black, heterosexual female. I speak English fluently and understand some Spanish, German, and French. I grew up in a military family, which allowed me to experience various cultures and perspectives. I have lived or traveled all over the continental United States and Europe. My maternal family is originally from South Carolina, and several of my aunts, uncles, and cousins hold prominent positions in the clergy.

I identify as Christian by faith but "fluid" denominationally. Being a "military brat" taught me many lessons that translated into establishing professional and personal relationships. These experiences also taught me to accept people for who they are, do my best to be non-judgmental, and continuously examine situations from different points of view. After all, when you move every three years for most of your life, you become great at adapting to any situation and establishing relationships.

I am an educator. In my heart, I will always be a teacher. Both of my parents have postgraduate degrees. My sisters are also college graduates. My parents instilled in all of us the importance of education. They always taught us that nothing would hinder us from achieving our goals in life and that education would be our cornerstone. That belief followed me into the classroom. I am passionate about providing students with every
opportunity to be successful. As a former career and technology education (CATE) instructor, I always talked to my students about their futures. As a tradition, I would read "Oh, the Places You Will Go" by Dr. Suess to my seniors every year because I genuinely believed they would move mountains. Many of them have. Therefore, college and career readiness is not just a buzzword or trend to me. I am adamant about preparing students. As I conduct this research, I must tamper my passion with understanding.

I am an administrator. As the district coordinator for testing, accountability, and state/federal programs, I can access all the data and resources I need to conduct this research. More importantly, providing the tools to help our students' college and career readiness is an urgent need that is pivotal to the success of our district instructional program. Participant recruitment will be good because all students must participate in at least one of the intervention programs. Our teachers, administrators, and parents have all indicated their desire to prepare our students for postsecondary success.

However, some were concerned that participants might have been nervous about speaking with a "district administrator." To address this concern, I called upon my ability to establish relationships and make people comfortable when conducting interviews. The Semi-Structured Interview (SSI) focused on providing the participants with a comfortable and supportive informal setting to feel empowered to share individual and candid opinions on college and career preparation in Limelight County. Initial questions were designed to engage the participant and judge their comfort level with the setting and recording.
Areas of concern with data analysis included miscoding and incomplete data. Due to the changes in the testing instruments and the COVID pandemic, data often needs to be compatible longitudinally or may need to be added to the data set. That is the purpose of using multiple collection tools for this study. This approach helped to ensure that the intervention measures introduced were consistent and accurate in helping prepare the students of Limelight County for postsecondary success.

**Potential Impact**

As the United States economy struggles to recover from a global pandemic, high school students nationwide seek to make decisions about their postsecondary goals and ambitions. The nation has transitioned from manufacturing to service, and it is no longer possible to teach students specific technical skills that prepare them for a wide range of jobs (Conely, p. 4, 2014). More than half of the occupations available for students are brand new, and 65 percent will require postsecondary education or training beyond high school (Carnevale et al., p. 22, 2013). Schools need help to meet the demands of future employers while preparing students to graduate as college and career ready. The new reality is that students need programs that integrate high academic challenges with exploring various career options and opportunities (Conely, p. 6, 2012).

The focus of this research examined the efficiency and effectiveness of a districtwide support system through the LCRI framework. This system was established to provide students and teachers with the support, strategies, and encouragement to build capacity and provide student CCR success. Due to the urgency of the intervention, it is critical to know whether a program works, and which program elements are essential in making the
program successful (Fixsen et al., 2013). This research assisted in determining whether this program positively transformed our student's performance on the CCR indicators.

The system has an impact at both the district and state levels. As a district, we increase our CCR rating by implementing several intervention components. These components included accurate reporting, targeted college and career guidance, focused assessment workshops, and professional development. Through targeted implementation, this system could serve as a model for other districts at the state level as we all try to meet the 2025 mandate.

Such a system creates the type of graduate championed by the Profile of the South Carolina graduate. In other words, college-ready students are academically ready to qualify for and succeed in entry-level, credit-bearing college coursework without needing remediation, and career-ready students with the knowledge and skills necessary to succeed in the postsecondary occupation of their choosing. Working collaboratively, this model program will provide ALL students within South Carolina with the skills and abilities they need to succeed in a global society.
CHAPTER THREE

FINDINGS

In this section, I compare the results from convergent parallel analysis (Creswell & Plano Clark, 2011) to answer my research question: To what extent does a districtwide system of support of a targeted intervention program impact college and career readiness for students in rural school districts? Specifically, I sought to determine if a targeted CCR intervention program could help students from rural South Carolina meet the state indicators to be college and career ready. Three significant findings or themes developed from my analysis: curriculum instructional framework redesign, comprehensive guidance, and professional development.

The curriculum instructional framework helped to increase student enrollment and participation in CCR programming at the school level. Nevertheless, the system must continue to remove barriers and restrictions to give students equitable access to resources. The district's comprehensive guidance program is the foundation of the district's CCR framework. To meet the district's CCR goals, counselors must be afforded the time, training, and opportunities to implement CCR components. Professional development increased the implementation of CCR on the building level. However, once teachers are included in PD, this intervention only partially supports CCR goals.

I will discuss each of these findings in detail in the following sections. The remainder of this chapter provides an overview of the intervention framework, a description of the interview participants, and a discussion of the findings. Each finding or theme is
presented separately within this chapter and includes the relevant supporting quantitative data.

**Description of Intervention Framework**

To provide overall context for the findings within this chapter, I begin by reintroducing the intervention model used for this study. It is important to note that these interventions were developed to be implemented systematically from a district level. The framework serves as the support system for each school’s targeted interventions. This study seeks to determine whether implementing this type of systemic support will result in student success as defined by the South Carolina College and Career Readiness Indicators (CCRIs).

In response to poor student performance on the South Carolina CCRIs, Limelight County School District (LCSD) initiated the Limelight County College and Career Intervention (LCRI) framework. The LCRI framework consists of four CCR interventions: College and Career Practicums; Work-Based Learning (WBL) Program; Comprehensive Guidance Program; and the Assessment Preparation Program. Chapter one of this study provides a thorough description of each intervention.

The LCRI framework is designed to support students and teachers that would directly impact their performance on one or more of the ten indicators. Each component of the LCRI framework contains intervention activities specifically developed to improve college and career readiness. One example is the Assessment Preparation Program. This intervention is designed to increase student participation in CCR assessment and provide students with research-based strategies to help them to achieve the best scores possible.
To support this process, school test coordinators and counselors completed approximately four hours of virtual training with me on using the tools and programs available to assist students with preparing to take these assessments. Using a "train the trainer model," the coordinators and counselors were responsible for training the instructors and students on their campus. Students were allowed to take assessment preparation courses or participate in one of three workshops the school counseling departments offered. The results of this intervention were also mixed yet primarily positive. While the student participation rate for CCR Assessments decreased by eleven percent in 2023, the data indicates student performance gains on each assessment. The only outlier is the American College Test (ACT), where there was a .4 percent decline.

It is important to note that no district initiative or program can be implemented with fidelity by a single individual. From its early conception to application, this framework has been the project of a dedicated group of educators. While I am charged with developing, managing, and evaluating this project, the actual implementations were only possible with their expertise and input. As such, when determining the participants for the semi-structured interviews for this study, it was necessary to include participants that helped develop this intervention framework. This initiative may have only existed with their participation. To ensure confidentiality, pseudonyms were used for the school sites, administrators, and faculty participants.

**Description of Participants**

Limelight County is considered a mid-sized school district serving between seven and eight thousand students annually. Due to the district's high poverty rate and limited
resources, school personnel are asked to do much with very little. District and school administrators are often called upon to wear multiple hats and serve in various roles. These participants provide multiple examples of the effectiveness of the interventions from the perspective of their work responsibilities. The perspectives of these educators are vital to this research because they all provide robust insight into the research question and how effective the intervention initiatives have been. The participants bring various viewpoints to the table: the educator, the administrator, the district leader, the curriculum designer, the parent, the community stakeholder, the data manager, the professional development consultant, and the counselor. Three of them have served in their current roles for three years or less; one has served for eight years. However, combined, they have a total of seventy-eight years in education in some capacity. One participant has two children within the school system, and another is a parent of a graduate in the identified cohort. The participants' roles and responsibilities are represented in Table 3.1 and described in the following paragraphs.

Table 3.1

*Participant Information Table*

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Role</th>
<th>Years in Role</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Green</td>
<td>Coordinator of Secondary Schools</td>
<td>3</td>
<td>District Office</td>
</tr>
<tr>
<td>Mrs. White</td>
<td>Assistant Principal of Curriculum and Instruction</td>
<td>3</td>
<td>Tribal High School</td>
</tr>
<tr>
<td>Dr. Red</td>
<td>Executive Director of Curriculum and Instruction</td>
<td>3</td>
<td>District Office</td>
</tr>
<tr>
<td>Dr. Blue</td>
<td>Coordinator of PowerSchool</td>
<td>3</td>
<td>District Office</td>
</tr>
<tr>
<td>Mrs. Pink</td>
<td>School Counselor</td>
<td>8</td>
<td>Tribal High School</td>
</tr>
</tbody>
</table>
The first interview was held with Dr. Green (pseudonym). Dr. Green serves as the Director of Secondary Education for Limelight County Schools. Dr. Green is finishing her third year in this role, previously serving as a classroom instructor, administrative assistant, assistant principal, and district coordinator of career and technology education. Dr. Green brings a unique perspective as a native of Limelight County. She is a Wildcat High School (WCHS) Graduate that returned to WCHS to begin her teaching career. A career which notability resulted in her being named 2018 District Teacher of the Year. Her responsibilities include developing the curriculum for the district's three middle schools, two high schools, and career and technology center. She also assists the leadership team and teachers with ensuring they understand and can meet the college and career readiness indicators defined by the South Carolina Department of Education. Most notably, Dr. Green's eldest child is a 2023 WCHS graduate, so she can also discuss the CCR initiatives from a parent's viewpoint.

Mrs. White (pseudonym) serves as the Assistant Principal of Curriculum and Instruction and School Test Coordinator at Tribal High School (THS). Mrs. White is in her third year as an administrator but the first year in her current role. She works with all grades 9-10 students to ensure that state, district, and national testing securely occurs. Additional responsibilities include district and state reporting, data analysis, and meeting with students to let them know whether they have met CCR requirements while, at the same time, providing options so that they can be successful.

Dr. Red (pseudonym) is the Executive Director of Academics for Limelight County School District (LCSD). Completing her third year, she oversees the instruction program
of eighteen schools, pre-K through twelfth-grade curriculums, the alternative school, three specialty programs, and one adult education program. Dr. Red has served as a classroom teacher, assistant principal, school testing and special program coordinator, and principal. She describes herself as a transformative leader who tries to ensure that LCSD uses the resources to provide a diverse curriculum that focuses on exposing students in grades pre-K-5 to diverse cultures, careers, and experiences. At the middle and high school levels, she ensures that the district utilizes its resources to implement innovative career development classes, programs, and opportunities.

Mrs. Blue (pseudonym) is the District Coordinator of PowerSchool. She is entering her second year in this role. This is also her first year as a Curriculum and Instruction Department member. Previously, PowerSchool directly reported to the Technology Department and fell under the Executive Director of Operations. With this change, Mrs. Blue and all school-based PowerSchool Coordinators have been involved in targeted multiple professional development training that directly correlates to reporting data for curriculum and instruction and college and career readiness. Mrs. Blue also assists the District Testing Coordinator in preparing the college and career data for the State Department of Education for the state report card. Mrs. Blue brings a parental perspective to this research, as she currently has two children in the LCSD school system, both at the secondary level.

The final interview was held with Mrs. Pink (pseudonym), a School Counselor for Tribal High School (THS). She describes her responsibilities as ensuring that students understand what they need to graduate with a South Carolina High School diploma but
also assisting them with figuring out what they want to do past high school. She is completing her eighth year at THS and indicates that exposing students to new things and helping them discover what they want to do is one of the essential parts of her job. Mrs. Pink is directly responsible for leading students through the IGP process and assists the School Career Development Facilitators with developing and implementing college and career activities.

As stated previously, each interview participant offered valuable insight into the relevance of the interview framework and its effectiveness and impact. Throughout the interviews, the responses provided by the participants were very similar on many of the topics discussed. Combining their responses with the relevant agency data allowed me to identify the themes reported below.

**Research Findings and Themes**

**Research Findings**

Through the targeted interventions, students in the 2023 graduation cohort have improved in being identified as college and career ready. In my analysis of agency data, I found mixed results about the impact of the interventions on student achievement. As noted in Chapter 2, agency data was analyzed using two approaches: data from students within the targeted cohort and five years of longitudinal data of students across cohorts (see Figure 3.1).
Table 3.2

Longitudinal Data Collection Table

<table>
<thead>
<tr>
<th>Year</th>
<th>Total in Class</th>
<th>Overall College OR Career</th>
<th>College Ready</th>
<th>ACT</th>
<th>SAT</th>
<th>AP</th>
<th>Dual Credit</th>
<th>Career Ready</th>
<th>CTE</th>
<th>Career Assessment</th>
<th>ASVAB</th>
<th>WBL</th>
<th>Employability</th>
<th>College AND Career</th>
<th>Neither</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017-2018</td>
<td>569</td>
<td>68.50%</td>
<td>36.00%</td>
<td>27.90%</td>
<td>17.80%</td>
<td>12.80%</td>
<td>18.60%</td>
<td>64.70%</td>
<td>15.30%</td>
<td>55.90%</td>
<td>6.50%</td>
<td>0.00%</td>
<td>NA</td>
<td>32.20%</td>
<td>NA</td>
</tr>
<tr>
<td>2018-2019</td>
<td>508</td>
<td>69.10%</td>
<td>35.40%</td>
<td>21.90%</td>
<td>15.60%</td>
<td>13.20%</td>
<td>20.90%</td>
<td>67.50%</td>
<td>14.20%</td>
<td>61.00%</td>
<td>5.30%</td>
<td>0.00%</td>
<td>N/A</td>
<td>33.90%</td>
<td>N/A</td>
</tr>
<tr>
<td>2019-2020</td>
<td>657</td>
<td>54.40%</td>
<td>54.40%</td>
<td>11.10%</td>
<td>47.70%</td>
<td>64.50%</td>
<td>14.10%</td>
<td>54.40%</td>
<td>13.90%</td>
<td>46.90%</td>
<td>2.10%</td>
<td>0.00%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2020-2021</td>
<td>631</td>
<td>53.72%</td>
<td>14.42%</td>
<td>5.23%</td>
<td>9.83%</td>
<td>9.52%</td>
<td>0.00%</td>
<td>53.41%</td>
<td>38.38%</td>
<td>44.37%</td>
<td>3.17%</td>
<td>0.63%</td>
<td>0.00%</td>
<td>14.10%</td>
<td>45.28%</td>
</tr>
<tr>
<td>2021-2022</td>
<td>588</td>
<td>58.50%</td>
<td>14.29%</td>
<td>7.65%</td>
<td>8.56%</td>
<td>8.67%</td>
<td>0.00%</td>
<td>58.15%</td>
<td>25.51%</td>
<td>46.77%</td>
<td>4.59%</td>
<td>3.23%</td>
<td>0.17%</td>
<td>13.95%</td>
<td>41.50%</td>
</tr>
<tr>
<td>2022-2023</td>
<td>624</td>
<td>60.58%</td>
<td>24.68%</td>
<td>7.21%</td>
<td>8.65%</td>
<td>8.81%</td>
<td>17.31%</td>
<td>58.17%</td>
<td>37.18%</td>
<td>37.18%</td>
<td>3.21%</td>
<td>8.49%</td>
<td>0.05%</td>
<td>22.28%</td>
<td>39.42%</td>
</tr>
</tbody>
</table>
The agency data of students within the targeted cohort shows considerable improvement in student performance following their participation in the intervention model. For example, in 2022, approximately fifty-nine percent of LSCD graduates were either college or career ready. That number increased to sixty-one percent for the class of 2023. There was an 8 percent increase in the number of students identified as both college and career ready. Notably, students identified as neither college nor career ready fell by 3 percent after implementing the intervention. All of which indicate growth (sixty-one percent of the class) in the number of LCSD students meeting at least one of the ten indicators in either category.

It is necessary to note that only some of the data indicated positive results. The number of students qualifying on the following indicators: the American College Test (ACT), the Armed Services Vocational Assessment Battery (ASVAB), and the Career Assessment (WorkKeys or Ready to Work) fell in 2022-2023. The ACT fell by .44 percent, the ASVAB by approximately 2 percent, and the Career Assessments by ten percent. However, several factors can be considered when looking at these results, such as the change in college and university to test-optional admission or the number of times the career assessment has been changed in South Carolina (five), including twice during the 2022-2023 school year.

While this research cannot definitively say that all these gains were the exclusive result of the intervention framework, I can provide evidence that not only did incremental gains occur during the intervention cycle, but there was also a two percent increase in student enrollment in CCR coursework, testing, and other intervention activities. The
findings also indicate that the framework must be implemented with fidelity to sustain these gains. Specifically, three reoccurring themes or focus areas were identified as significant: curriculum instructional framework redesign, comprehensive guidance, and professional development.

**Finding 1: Curriculum Instructional Framework Redesign**

The curriculum instructional framework helped to increase student enrollment and participation in CCR programming at the school level. Nonetheless, the system must continue to remove barriers and restrictions to give students equitable access to resources. In 2015, South Carolina replaced Common Core State Standards with the South Carolina College and Career Ready Standards. Nevertheless, Limelight County never developed an instructional framework based on these new standards for the district. Then in 2020, the COVID-19 global pandemic coincided with the LCSD Office of Curriculum and Instruction (C&I) reorganization. To match the instructional priorities of the superintendent and address the instructional deficiencies identified through an internal instructional audit, the new team led the process of restructuring the district’s instructional framework.

Participants considered the Curriculum and Instruction Redesign a significant component of the district's CCR interventions. They mentioned phrases including "curriculum mapping," "curriculum and standards," and "updating the district's curriculum" over two hundred times during the interviews. Participants also indicated that it was vital to begin by updating the district's curriculum to provide students with opportunities to be college and career ready. Dr. Green stated, "We are responsible for
not just making sure that they're [students] ready for their college goals or for getting a job or going into the military, but also that they will stay there.…." I interpret that to mean our previous curriculum and standards were outdated and academically focused. While very important, the previous standards neither addressed the skills that students needed to be successful post-graduation nor aligned with abilities that students should acquire to compete in the twenty-first century. Since a district's instructional framework is considered the roadmap or "blueprint" of effective instruction, any curriculum must be shared, cohesive, and standards-based (Desimone et al., 2019). For any improvement efforts to be impactful curriculum must be consistent, organized, and developed so that teachers can provide good instruction (Tyler & Hlebowitsh, 1949/2013). Therefore, rewriting the curriculum was not only necessary but also vital for the success of any of the programs within the LCRI framework.

Most of the CCR curriculum work happened at the secondary level in the three middle schools, two high schools, and one career center of Limestone County. Some of these changes were just minor adjustments in policies and procedures; others involved major curriculum-standard renovations and required months of meetings, workshops, and training. Dr. Green shared, "First thing we had to do was rewrite the curriculum to match our current college and career readiness standards." This process is essential to this study because the new curriculum helped to support the LCRI framework, establish the CCR goals of the district, and provide the reference for success. As a result, the findings of this study show an eight percent increase in student enrollment in career and technology
classes, a five percent increase in dual credit courses, and a two percent increase in advanced placement courses following the first intervention cycle.

At the high school level, the findings indicate that minor changes have resulted in solid gains in student achievement on the CCR indicators. In 2023, college- or career-ready students rose by approximately two percent, and students identified as college and career-ready rose by eight percent. Additionally, there was a ten percent increase in students who met the college-ready indicator. Likely due to the increase in the number of students not only taking dual credit courses and other college preparatory classes; but also meeting the benchmark of passing these courses with a grade of C or higher. The findings also reveal that before implementing the LCRI framework, the district had systemic barriers and obstacles that actively discouraged participation by students in CCR programs.

The curriculum redesign helped to remove barriers and access to college and career coursework for the districts' traditionally marginalized and underserved populations. Traditionally, students of color, migrant, and immigrant students were underrepresented in the district's CCR courses. However, with the new curriculum, more high school students took advantage of Advanced Placement (AP) and Dual Credit courses. As shown in Figure 3.1, the student enrollment in these courses showed an increase in the number of students receiving dual credit (seventeen percent) and the number of students earning three or higher on the AP exam (.14 percent).

In the equity and excellence report from the CollegeBoard, in 2022, only 10.6 percent of the graduating class scored a three or higher on the 2022 AP exams. However, in 2023
that number increased to 13.1 percent. As shown in Table 3.3, student enrollment in AP courses increased in every subgroup except for students that identify as American Indian or Alaska Native and students that identify as Black or African American. These subgroups may be outliers due to the subgroup’s population increase from 2022 to 2023.

Additionally, the data for 2020 and 2021 may be atypical due to the COVID-19 pandemic. Finally, there may be a relationship between ethnicity, AP course enrollment, and rural students. However, such research was beyond the parameters of this dissertation but could warrant further study. The option for diverse courses of study through the curriculum redesign has resulted in offerings such as AP African American Studies, Barbering, and Computer Game Design. All of which are new courses that are so popular that guidance staff now have waiting lists for students trying to enroll.

Table 3.3

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th></th>
<th>2020</th>
<th></th>
<th>2021</th>
<th></th>
<th>2022</th>
<th></th>
<th>2023</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
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<td>1.1%</td>
<td>7</td>
<td>2.6%</td>
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<td>2.6%</td>
<td>8</td>
<td>3.9%</td>
<td>10</td>
<td>5.3%</td>
<td>5</td>
<td>1.8%</td>
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<td>10.3%</td>
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<td>6.8%</td>
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<td>8.9%</td>
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<td>9.6%</td>
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<tr>
<td>White</td>
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<td>74.2%</td>
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<td>61.8%</td>
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<td>4.4%</td>
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<td>2.6%</td>
<td>16</td>
<td>5.9%</td>
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<tr>
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<td>3</td>
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<td>1.1%</td>
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Note: Numbers represent the total number of students enrolled in the course by ethnicity. Numbers and percentages are provided.

Another example of the impact of the curriculum redesign through the LCRI framework was the district implementation of College Board’s Pre-AP framework in
Algebra I. Since 2020, the number of LCSD students passing the Algebra I end-of-course exam has hovered around thirty-five percent. Algebra I instructors could use either the Pre-AP or the existing curriculum as part of the curriculum redesign. A former math instructor, Dr. Green, advocated for the new curriculum, ”Pre-AP is a game changer. It removes barriers and offers any child the chance to succeed.” Designed to meet students where they are, this program provides grade-level instruction for all students.

During the 2022-2023 school year, two classes implemented the Pre-AP Algebra I course as a curriculum intervention model. The students within the class were identified as either struggling or reluctant math learners. Many were identified as two to three grade levels behind the math iReady diagnostic, given to these students at the beginning of the year to identify their learning levels. The instructors reported an average increase of fifteen percent in the scores of these students during both the Fall/Winter and Spring administrations of the state End of Course Examination Program (EOCEP) for Algebra I. In the other classes, where the Pre-AP Algebra I course was not used, the passage rate fell from around thirty-five percent to approximately twenty-nine percent. Consequently, the district is making Pre-AP Algebra and Pre-AP Biology, another EOCEP course where students struggle, the required frameworks for those courses in 2023-2024.

The final example that I will provide concerns the changes in master scheduling. The findings show that the changes implemented by the curriculum redesign have allowed students to enroll in and explore college and career-ready opportunities. Something difficult before the interventions, primarily due to schedule restrictions. Dr. Red spoke on the importance of these changes, "students need these [courses]... So that they are not just
constantly concentrated on the core four, but on things that interest them and may spark some excitement about a future career." Before the intervention, each school developed its master schedule without vertical alignment between or among campuses. For example, the schedule restricted Wildcat High School (WCHS) students from taking CTE classes during their fourth block at Limelight County Career Center (LC3). The regional comprehensive needs assessment for LCSD lists cosmetology, computer programming, agriculture, engineering, and firefighting as students' five highest career choices. These courses of study are offered exclusively at the LC3, yet WCHS students could not or were not allowed to participate. Subsequently, with the curriculum redesign, student enrollment in the courses increased by eleven percent, and the number of students completing the sequential coursework to earn certifications increased by twelve percent.

At the middle school level, scheduling can have a consequential impact on student success. According to Rettig and Canady (2013), scheduling is critical in middle schools because schedules have the "power to facilitate the successful implementation of programs…and to institutionalize effective instructional practices." The findings show that the curriculum redesign has helped our middle schools identify opportunities for elective courses and effectively utilize instructional staff and resources. For example, middle school students were on a traditional seven-period day with forty-five minutes per period before the intervention. Students were required to take two English Language Arts (ELA) and two mathematics courses each day. Since students are also required to take science and social studies classes, this practice severely limits student choice for
electives. It also required additional ELA and math instructors, which financially strained the district's resources.

The curriculum redesign removed the double-blocked ELA and math courses for all students except those that were identified as needing additional support in those courses. The middle schools also installed a career exploration course for all students. Through these changes, middle schools have expanded elective and career and technical education (CATE) course offerings. New classes, like Project Lead the Way (PLTW) Launch, a middle school pre-engineering program, have allowed students to explore career fields. These changes have also made better fiscal sense by reducing the number of sections and instructors at the middle school and allowing the district to reassign instructional staff to the elementary and high schools with considerable shortages.

Interview participants feel that the impact of these changes has been demonstrated in student performance and participation in these programs. This type of purposeful design is essential for students in rural school districts like LCSD. Dr. Red explained the importance of the CCR curriculum by saying,

Students in districts like ours do not know about different careers because their parents have always worked in the same industry, doing the same job, or have no job, so they do not even know what exists there.

In other words, curriculum design focused on college and career readiness initiatives is essential because it exposes students to different career paths and opportunities. Exposure that students in rural school districts need just as much, if not more, than students that do not live in rural communities.
In conclusion, I cannot specifically say that all these improvements directly result from the curriculum redesign. Other factors could include parent or family influence, student support from teachers or counselors, or student self-efficacy. Nevertheless, when comparing the longitudinal data and the data from the semi-structured interviews, there is evidence that this intervention at least contributed to student success. Student enrollment in dual credit, A.P., and CTE courses increased. Student performance on state and national assessments such as the EOCEP, SAT, ACT, and A.P. examinations increased. More students are earning certifications, college credits, and employment credentials, and the number of students identified as either college or career ready increased to sixty-one percent for the class of 2023. The curriculum design is significant to this study because it allowed the district to provide opportunities for students to explore college and career opportunities while removing barriers or obstacles that might be restrictive.

**Finding 2: Comprehensive Guidance**

The district’s comprehensive guidance program is the foundation of the LCRI framework. To meet the district's CCR goals, counselors must be afforded the time, training, and opportunities to implement CCR components. Research (Dack & Merlin-Knoblich, 2019; Lapan et al., 1997; Lopez & Mason, 2017) indicates that a structured, comprehensive guidance program can result in student academic achievement, positive school culture, and climate, students feeling better prepared for their career choices and students feeling more informed about their career choices. Carey et al. (2012) state that school counseling programs are essential in improving student achievement. These quotes show that the activities and skills taught within the context of the comprehensive
guidance program enable students to succeed and thrive within their school communities.

Nevertheless, before the 2022-2023 school year, the LCSD Comprehensive Guidance Program had not been updated since 2015. The district had no career development facilitators, and school counselors were performing many duties and tasks that should not have been their responsibility. For example, counselors were responsible for developing master schedules, acting as school testing coordinators, creating Individual Education Plans (IEPs) and Section 504 plans, and providing long-term counseling services for which they were not certified. Dr. Green spoke about the impact of these duties and the need for change,

This district's push for college and career readiness has shifted the school counselor's role. When I entered the district, [school counselors] were doing testing, and they were doing course schedules, their IGP, etc., but they never were able to get into the classrooms and things of that nature.

This quote supports that these types of responsibilities prevented LCSD counselors from providing essential services to students. As a response, the schools were advised to evaluate and, if necessary, restructure the duties of the district's counselors. During the interviews, several participants indicated that this realignment of roles and responsibilities was necessary to serve the student body better. Mrs. Pink confirmed this by stating, "Before this school year, I did not get much classroom guidance done…I did not have the time." Counselors must establish and deliver an effective, comprehensive school counseling program as the district focuses on college and career readiness.
Gysbers and Henderson (1997) first outlined the comprehensive school guidance program model in 1994. In 1997, they updated their work to include practical applications of the model and provide the definition of the concept still used by South Carolina districts today. Gysbers and Henderson (1997) state that the ideal program is an integral component of a student's educational process, assisting students in acquiring the age-appropriate competencies related to career, educational, personal, and social pursuits. Subsequently, the South Carolina Comprehensive School Counseling and Career Guidance Model (2018) defines "assisting students with their personal and postsecondary goals" as an essential job function of the school counselor.

The many interventions and policy changes implemented under Limelight County's Comprehensive Guidance Program during the 2022-2023 school year resulted in increased student achievement and program improvements. These interventions included student-led conferencing at the elementary and middle school levels and restructuring the Individual Graduation Plan conferences at the high school level to emphasize college and career readiness. Additionally, counselors received focused training with the state education department. They attended monthly departmental meetings with the Office of Curriculum and Instruction on developing college and career school culture, providing alternative pathway options, developing and encouraging student soft skills, and assuring vertical and horizontal alignment to the South Carolina Guidance and Program Model.

The findings from the data analysis support the effectiveness of the comprehensive guidance program through increased student achievement. At the beginning of the semester before the intervention cycle, over fifty-seven percent of the students in the
cohort were identified as neither college nor career ready. Following the targeted interventions, that number was reduced to thirty-nine percent. The number of students identified as both college and career ready in the Class of 2023 rose by approximately eight percent. Counselors indicated that because of their workshops and training, they were able to provide students with better postsecondary counseling and advice during IGP conferences. They also reported a slight increase, less than 1 percent, in the number of parents or guardians attending IGP conferences. These changes have made the counselors feel more confident in directing students toward their postsecondary pathways. However, this responsibility does not solely rely on the school counselors. Dr. Red stated,

Not every student has a linear path, and that is okay. Only some paths must be scripted and follow an ordinary track toward graduation. We have had to do much retraining in our guidance department to help them, and our leaders look at different avenues for students to ensure that we are giving them what they need.

In other words, guiding students to their career goals should be the shared responsibility of everyone responsible for educating children. All educators, including building leaders, must provide students with the opportunity to achieve in their chosen careers. This can be achieved through offering various courses, having career conversations with students, or developing and promoting alternative college and career pathways. All of which are avenues that provide opportunities for students to succeed.

There are still some areas where assistance and improvement are still needed. For example, all schools’ counseling departments need help collecting and reporting data
accurately in the student information system. A vital function of any school counseling department because the information can only be entered by guidance staff and must be accurate for school reporting. Mrs. Blue stated,

So, we have been working this year with our guidance department trying to pull together and correct some things…in the past, when it came to transcripts and IGP's put into power school, the information has not always been correct., So that has been part of our overhaul and guidance audit throughout the year.

While most of Mrs. Blue's training involves PowerSchool clerks and school registrars, she does spend much time working with the counselors to correct transcripts and IGPs. The transcripts have been a focus lately because LCSD is scheduled for a curriculum audit in Fall 2023.

Another challenge identified by participants was the need for more community interactions. Implementing the newly expanded guidance structure helped counselors create positive student interactions. The schools offer community workshops on various topics, including financial planning for college, completing college or career applications, filling out FASFA forms, or dressing for an interview. Counselors also provide individualized career counseling and create, develop, or arrange for students to attend college and career fairs. The district has also placed career development facilitators in high schools and all three middle schools. These individuals help the schools identify student CCR needs, develop college and career programming for schools, and work as student graduation coaches.
However, several participants believe that students, parents, and the community still need additional workshop opportunities and to be more knowledgeable about the South Carolina college and career readiness criteria or the significance of the criteria for student success. For example, Mrs. Blue said,

I know they offer those tests and give information; guidance will give out information on those tests. Nevertheless, the three or higher on the A.P. exam was foreign to me. My child has taken an A.P. class before, but I never heard they needed a specific score to be considered college ready.

Mrs. Blue continued to note that if she, as a district employee, had these types of knowledge gaps, she knew that parents in the community did as well.

The counseling departments of the secondary schools in LCSD recognize this as an area of concern. During the interview, Mrs. Pink shared the following:

We need more exposure to those things…especially the IGP process; it is not like we have an option, but just getting more parent involvement and community knowledge of what that is. Because I think many people think that you are registering for classes. You will talk to your counselor about what classes you will take next year, and we will discuss everything. What do you want to do with your life? Are there any classes that we can give you to help you with that?

Mrs. Pink believes that the new guidance structure provides more opportunities for guidance personnel to provide individual and small-group services, advocate and help students with their future career goals and deliver school counseling core curriculum lessons. Activities that she believes help develop and maintain positive school cultures.
However, she acknowledges that this can be tough as some community members, including parents, need to see the necessity of students planning for their futures. Mrs. Pink shared, "I had one parent that refused to allow her child to complete a FASFA; it was sad; that child had the opportunity to go to college for free." She also shared that the student decided to go to the local community college and plans to transfer to a four-year university in the fall.

In conclusion, the LCSD comprehensive guidance plan changes have provided opportunities for student success. There have been multiple activities and programs which have resulted in positive changes that support the positive effect of this program. Short-term evidence includes the decrease in students identified as neither college nor career ready, the increase in the number of students completing the IGP process, and the increased opportunities for positive interactions with students. However, determining the efficacy of this intervention will be a multi-year process requiring considerable oversite, a sentiment repeated by all participants. We have come a long way, but considerable work remains.

**Finding 3: Professional Development**

Professional development has been the most significant factor in implementing the district's college and career readiness interventions. The district utilized professional development to increase the CCR acumen of the district and school administrators, guidance counselors, career development facilitators, PowerSchool clerks, and instructors of career and technology courses. Professional development increased the implementation of CCR on the building level. However, once teachers are included in
P.D., this intervention only partially supports CCR goals. Activities include developing professional development plans with a college or career focus, collecting and entering CCR data accurately, and developing student-led conference systems. Most participants believe these interventions have led to positive student outcomes. For example, on student-led IGP conferencing, Mrs. Pink stated,

I am glad that we want to move more toward self-guided IGPs. In our training, we are learning that if we implement them in 8th grade…by the time they are seniors, they do, you know, self-guided IGP, and it is like second nature to them.

IGP conferences are used to guide students through high school and beyond. Counselors meet with students and parents yearly to discuss class schedules and potential career choices. Student-led IGPs are unique in that students develop a presentation on these topics and lead the conference discussion. This statement explains that preparing students to do this type of conferencing in the eighth grade will create confident, independent, and practical students in high school. Students become active participants in creating their career plans, which teaches them several skills, including goal setting and perseverance. Most importantly, it empowers students to greater autonomy and eases the transition to postgraduate life.

Professional development that targeted college and career readiness was vital. The professional development activities introduced in this study have enabled staff to prepare students for their postsecondary goals better. Most experts agree that professional development provides opportunities for self-improvement and gaining new skills and abilities. Professional development is linked to improved school outcomes (Kilag & J.M.,
The district intentionally invested time and resources throughout the summer and school year, providing CCR-focused professional development sessions. Dr. Rose explained,

Our administrators, counselors, and career development facilitators (CDFs) use our general fund money and title funds to train folks during the summer on many different professional developments so that we are not just content-heavy but student-focused to ensure that we give them every chance to succeed.

These targeted professional sessions equipped counselors and administrators to deliver and implement CCR content and the LCRI framework at the school level.

Professional development training sessions focused on college and career readiness indicators, essential soft skills, CCR assessment opportunities, and accurate CCR data collection and reporting. As we began to develop the professional development plan for the district, we knew that we wanted to focus on college and career readiness and equipping faculty, staff, and students with the necessary tools, skills, and abilities to meet the state CCR indicators. Each of the focus areas was important. However, we chose to start with accurate data collection and reporting because of the number of errors in the state reporting. Reporting errors can result in funding loss, sanctions for schools and districts, and school accreditation. Mrs. Blue and I conducted these sessions quarterly for all school administrators, counselors, and PowerSchool clerks. Additionally, inaccurate records can have a significant impact on students. When asked why she believed that the selected professional development audience needed this training, Mrs. Blue said,
We must let them [the professional development audience] know the why behind the data. If we are not coding this correctly, it will become a problem for the child later. Training has always been a struggle in our district. However, I want to ensure that if I get the information, I relay the why to them [the professional development audience] so they know what is happening.

Through this training, Mrs. Blue is trying to correct these errors or ensure no future errors occur. LCSD has failed to address the importance of keeping and maintaining accurate records for several years. This has been to the detriment of both the district and students. Inaccurate reporting has resulted in poor school and district report cards.

One example of how this type of training is essential and impactful is seen in how the district reports work-based learning (WBL) and dual credit opportunities. WBL and dual credit data are required reporting as part of the state accountability model. Schools and districts receive points based on the number of reported student experiences in each category. Schools and districts accumulate points using the accountability matrix to determine state report card grades. However, for these two indicators, LCSD needs to be improved in collecting or reporting this data. Dr. Green explained, "...I mean, for years, we did not receive any credit for work-based learning, and we were doing it...just not entering it correctly...." Students participated and earned work-based learning credit, but the schools did not report the information. This was also true for reporting dual credit participation data.

This also caused issues for some students as this information was not reflected in their transcripts. An error that could result in the potential loss of income for students not
receiving work-based learning credit and college credits and income for students not receiving dual credit. Reporting work-based learning and dual credit experiences was one of many areas of data collection where deficiencies were found. The targeted professional development on proper data entry and management has yielded tangible and immediate results on the state college and career indicators. Data for 2023, see Figure 3.1, shows that the district grew by approximately five percent on the work-based learning indicator and seventeen percent on the dual credit indicator just by accurately reporting the data.

While these professional development sessions have been practical at the district and administrative levels, the district must increase and expand CCR PD for teachers. This is because classroom instructors need more college and career readiness standards exposure. For example, Mrs. Blue said, "I feel like there needs to be more emphasis placed on professional development as well as informing teachers of the criteria for college and career readiness." In this initial phase, the district prepares the school administrators and counselors. The intention was to use a "train-the-trainer" model to deliver the professional development content. This, in turn, allows the school administrators the autonomy to provide professional development in a manner best suited for their campuses. However, several interview participants believe that initial training must first come from the district and that additional training is still needed before administrative personnel can adequately deliver training in their schools.

We know that for this initiative to be successful, we must equip the instructional staff with the tools they need to deliver the intervention content to students. Mrs. White commented on what she believed was a lack of preparation for teachers stating,
….. there needs to be more emphasis on professional development for teachers on the college and career readiness criteria and giving them some strategies, they can use in the classroom to help prepare their students.

This statement is significant because research indicates that the quality of the teaching system cannot exceed the quality of its teachers (Sheehan & Childs, 2007) and that high-quality teachers directly impact student outcomes (Larsen & McCormick, 2021). Instructors must have sustained, relevant, and collaborative professional development to develop high-quality skill sets that drive student achievement.

The significant role that instructors play in the success of this intervention was demonstrated through the recent student performance data on the college and career readiness assessments. The data showed student gains on all the CCR assessments except for three, the ACT, ASBAB, and the Career Assessment. On the ACT, the class of 2023 fell by approximately .4 percent, and students fell by approximately 1% on the ASVAB. The most significant decline occurred in the career assessment, with a decline of almost ten percent. However, much of the decline can be attributed to two factors. First, the South Carolina career readiness assessment is the indicator mandated for all students in the state regardless of age, race, gender, or disability, which means that a more significant number of students were required to take this assessment. Secondly, the assessment has been changed five times in four years and twice during this school year. Districts learned which career assessment (Work Keys or Ready to Work) would be given in February 2023. Instructors were given access to the preparation materials early in March. These
inconsistencies impeded schools and teachers from fully implementing and delivering the interventions designed to help students prepare for CCR assessments.

Interview participants also emphasized the need for classroom strategies to assist teachers with delivering CCR content. An emphasis on instructional strategies is pivotal because they allow for more meaningful connections between concepts learned within the classroom and real-life situations (Quintero-Angel et al., 2023). Teachers use effective instructional strategies to deliver content, engage students and foster classrooms that allow students to become independent, strategic learners (Reardon & Derner, 2023). However, there needs to be more CCR strategies in LCSD classrooms. Even when teachers are provided with CCR standards, strategies for classroom use are seldom shared. Mrs. White stated,

I have never walked into a classroom and there have been specific strategies that say, hey, today we are working on those strategies that will support you when you take the ACT/SAT. I only sometimes hear the connection between the language of expectations and how it relates to college and career readiness. Does that make sense?

Mrs. White believes that LCSD instructors are not currently equipped to utilize CCR strategies within their classrooms. A surprising observation since LCSD is an AVID district and AVID strategies are based upon CCR strategies. These statements provide insight into what professional development sessions are needed at the school level. As we advance, there will be a clear focus on increasing instructor knowledge about the college and career indicators and providing instructors with specific learning strategies to assist
with career assessments. All goals are essential to continue the successful implementation of the LCRI framework.

In conclusion, professional development has been the most significant factor in implementing the district's college and career readiness interventions. Schools have increased student achievement on the college and career readiness indicators through targeted professional development. These professional development sessions have focused on equipping administrators, school leaders, counselors, and data managers with the tools and strategies they need to implement the LCRI framework at the school level. However, the findings suggest that once classroom instructors receive similar professional development, this intervention only partially supports CCR goals.

**Conclusion**

In conclusion, the findings within this chapter indicate that the four targeted interventions initiated through the district have provided some improvement in student performance. However, those improvements are identified within one intervention cycle and can only be substantiated after this first year of implementation. Through longitudinal data analysis and semi-structured interviews, I identified common themes around curriculum design, comprehensive guidance, and professional development.

Although the evidence is not definitive in saying that redesigning the curriculum instructional framework directly led to improved student outcomes, evidence such as student increased student enrollment in college and career readiness coursework and student performance on state and national assessments suggest that this intervention contributed to student success. The curriculum design is significant to this study because
it allowed the district to provide opportunities for students to explore college and career opportunities while removing barriers or obstacles that might be restrictive. The LCSD comprehensive guidance plan changes have provided opportunities for student success. Short-term evidence of the effectiveness of this program includes the decrease in the number of students identified as neither college nor career ready and the increase in the number of students completing the IGP process. However, determining the efficacy of this intervention will be a multi-year process requiring considerable oversight, a sentiment repeated by all participants.

Finally, professional development was the most significant factor in implementing the district's college and career readiness interventions. Through targeted professional development, schools have increased student achievement on the college and career readiness indicators. These professional development sessions have focused on equipping administrators, school leaders, counselors, and data managers with the tools and strategies they need to implement the LCRI framework at the school level. However, the findings suggest that once classroom instructors receive similar professional development, this intervention only partially supports CCR goals. The findings also indicate that targeted professional development is needed at the classroom level to ensure that all students are provided with the appropriate interventions to be successful.

In the following chapter, I will discuss my analysis of these findings as well as how these findings relate to current research and thoughts on college and career readiness. I will revisit the research question and define how these findings support improving
college and career readiness for all students. I will conclude this study with recommendations for future use of this research for district leaders and policymakers.
CHAPTER FOUR
DISCUSSIONS, IMPLICATIONS, AND RECOMMENDATIONS FOR FUTURE RESEARCH

Lao Tzu (n.d.) once said, "Give a man a fish, and you feed him for a day; teach a man to fish, and you feed him for a lifetime (Kitchen, 1976, p. 391)." In its simplest terms, this case study examines if a rural school district can establish a framework to ensure that students are given the tools to fish for their lifetime. Based on the premise that targeted interventions can promote postsecondary student success, this mixed-method parallel convergent study sought to answer the following research question: To what extent does a districtwide system of support of a targeted intervention program impact college and career readiness for students in rural school districts?

This chapter details the comprehensive lessons learned because of this study. For the remainder of this chapter, I summarize the study's findings and address their implications for participants, district leaders, policymakers, and communities. I will conclude this chapter by offering suggestions for future research or studies.

Discussion and Analysis of Findings

For this research, I found that implementing a districtwide support system for college and career readiness increased student success as measured by the South Carolina college and career readiness indicators. This is evidenced by over sixty-one percent of students in the graduating cohort being identified as either college or career ready and over twenty-two percent being identified as college and career-ready. These are increases that the district has not seen since before the global pandemic. Throughout the interview process,
the participants repeatedly spoke about the significance of the LCRI framework and how its implementation has impacted the district's College and Career Readiness (CCR) reformation efforts. The participants consistently provided insight into how the LCRI framework was significant in developing the district's new curriculum structure, comprehensive guidance plan, and professional development programs. In each of these areas, there is not only a direct correlation to one of the intervention programs within the LCRI framework; but also, incremental gains in student performance as determined by the ten South Carolina College and Career Readiness Indicators (CCRIs). It led to the conclusion that the interconnection of this framework was also necessary for the system to work and for the students to meet at least one of the indicators.

For programs like the Limestone County College and Career Readiness Intervention Framework (LCRI), success depends on how those systems are structured and how each component is implemented. Furthermore, I found that sustaining the intervention long-term requires fidelity to implementation. In other words, the framework's design, organization, and implementation were as significant as the interventions for students. These findings align with research on the importance of district governance, organization, and management for reforms (Duffy & Darwin, 2013; Saguin, 2019; Sunderman et al., 2010). As discussed in chapter one, it is the responsibility of districts to interpret state and federal policies and then develop the frameworks and structures that enable schools to implement programs and initiatives (Duffy & Darwin, 2013). Districts are "uniquely positioned to ensure equity and to increase the capacity of all schools—not just some—to succeed" (Childress et al., 2007).
As more and more studies are done regarding interventions from a systemic perspective, it is becoming clear that sustainable, effective intervention programming must include a coherent district-level support system (Cohen et al., 2017). For example, O'Connor and Freeman (2012) state that system-level structures are critical to extending Response to Intervention (RtI) initiatives. Zavadsky (2012) found that district involvement is essential to turning around struggling schools and obtaining notable student performance gains. According to Johnson et al. (2015), putting any districtwide strategy into practice requires building a coherent organizational structure. In other words, intervention initiatives or reform programs are more successful if they are aligned within a defined district framework (Cohen et al., 2017). Districts are the catalyst for leading, managing, facilitating, and supporting systemic change (Zavadsky, 2012), resulting in a more considerable impact on student and teacher success while reducing disparities among and between schools (Peurach & Yurkosfsky, 2018).

Most of this work, however, has been addressed by studying urban and suburban districts (Childress et al., 2006; Childress et al., 2007; Johnson et al., 2015; Zavadsky, 2012). Many of these studies detail challenges such as frequent turnover, lack of support, and lack of resources as impediments to the implementation of organizational change in large school districts urban school districts. At the same time, researchers advocate for structural frameworks, decentralized management, and additional school autonomy to advance program initiatives (Zavadksy, 2012).

Implementing structural changes in rural districts is more challenging than in urban or suburban districts (Lee & McIntire, 1999). Rural schools face many of the same
challenges and impediments of urban and suburban districts while dealing with obstacles considered unique to rural schools (Parks, 2021). For example, rural students attend schools where professional training is less abundant with inexperienced teachers, suggesting that these educators' quality is lower in rural schools (Arnold et al., 2005; Lee & McIntire, 2000). Rural students often travel considerable distances to get to school, contributing to fatigue and reduced learning time (Johnson et al., 2021). Many rural districts are so severely underfunded and under-resourced that they must create innovative solutions to overcome challenges (Desimone et al., 2019; Tieken & Montgomery, 2021). Rural schools often need more facilities, infrastructure for operation and maintenance, course materials, and educational programs that typify larger districts (Johnson et al., 2021; Lee & McIntire, 2000).

However, Johnson et al. (2021) argues that there are also certain advantages from which rural students, schools, and communities likely benefit that could positively affect achievement. Research supports the premise that rural schools often have closer relationships with students and families, translating to more individualized learning outcomes (Azano & Biddle, 2019; Johnson et al., 2021; Lee et al., 1993; Louis & Kruse, 1995). Rural school districts also benefit from the ability to invest in unique and innovative programs and initiatives that promote student achievement.

My study expands upon the limited current literature on the effect of organizational structure on the growth and achievement of rural students. My findings show that rural districts can provide the framework and structure needed to implement interventions that can result in the academic achievement of individual students (Johnson et al., 2021).
While current researchers argue that organizational frameworks are necessary for these programs to be effective (Peurach et al., 2020), this issue has yet to be examined from a district organizational perspective. Most of this work has centered around the school or local level. However, my research supports the importance of a solid framework. A recent study by Folk (2022) found that programs needing more organizational structure and support from a district level undermine intervention programs. Therefore, the most viable solution for the fidelity of implementation is to develop organizational structures that support any initiative or practice (Duttweiler, 2004).

For this research, the LCRI framework is the associated organizational structure that was put into place. I identified three research findings and discussed the associated research to support the research question. After the data analysis, I identified three key findings that were integral in successfully implementing the LCRI framework: The redesign of the district's instructional framework, the comprehensive guidance plan, and the professional development plan.

**Finding 1: Curricular Redesign is Essential**

In this study, I found that curriculum redesign was essential to the improvement process. Research from Dodd (2021) shows that robust curricular design can ensure districts have a focused vision to help students achieve appropriate learning outcomes. This district developed a cohesive, organized, consistent curriculum framework (Tyler & Hlebowitsh, 1949/2013). Rewriting the curriculum was not only necessary but also vital for the success of any of the programs within the LCRI framework. A point that all participants expressed during the semi-structured interviews. The interview participants
reiterated that because the school district had not revised its instructional framework since 2016, LCSD students were at a noticeable disadvantage when meeting national and state indicators. Students could only be expected to meet the standards they had been taught.

Furthermore, this was also a detriment to the teaching staff because there was no standardized foundation for their instructional practice. Veteran teachers were known to rely on the same outdated instructional plans they had used for decades. Novice teachers needed more instructional resources and support to develop their own (Darling-Hammond, 2008). Additionally, novice teachers are often given the most challenging classes associated with state or federal assessments. Thus, less experienced teachers are in the classrooms of students with the greatest needs. Both incidents resulted in poor instructional practice and lackluster student learning outcomes.

The interventions allowed the district to redesign a college and career student-centered curriculum focused on measurable outcomes. As discussed in Chapter 3, I found multiple examples of the effectiveness of curriculum-based interventions. After the first intervention cycle, several indicators showed noticeable increases, including a 0.2 percent increase in SAT scores, a 0.3 percent increase in A.P. scores, and a seventeen percent increase in students earning dual credit. Most notably, there were improvements in overall student performance, with over sixty percent of graduates identified as college or career-ready and twenty-two percent identified as college and career ready. These are gains that the district has yet to see since before the 2020 pandemic.
The curriculum design is significant to this study because it allowed the district to allow students to explore college and career opportunities while removing barriers and obstacles. Before implementing the LCRI framework, the district had systemic barriers and obstacles that actively discouraged participation by students in CCR programs. Barriers that research shows are impediments to students in rural schools obtaining the necessary skills and abilities to reach their postsecondary goals (Roberts & Grant, 2021; Agger et al., 2018; Hutchins et al., 2012; Johnson, 2008; Slocum et al., 2020). The purpose of the curriculum redesign was to ensure that instructors used cohesive and standards-based instructional practices instruction that was impactful and resulted in positive student outcomes (Tyler & Hlebowitsh, 1949/2013). My research shows gains within the research data following the first intervention cycle. These gains correlate with the introduced curriculum changes. For example, the change in master scheduling allowed more students to take career and technology education (CTE) courses. It resulted in an approximately twelve percent gain in the number of students earning certifications, college credits, and employment credentials in specific courses of study. Additional data analysis shows an increase in enrollment for CCR courses. I found an eight percent increase in student enrollment in career and technology classes, a five percent increase in dual credit courses, and a two percent increase in advanced placement courses.

**Finding 2: Role of Guidance**

These improvements did not happen in isolation, however. Student growth likely was influenced by increased interactions between students and the counseling staff. These interactions intentionally focused on ensuring every student had some postsecondary path
unique to them and their career interest. The need for these types of additional student-to-
counselor interactions became apparent after the district updated the comprehensive
guidance plan. The importance of career guidance is well documented (Carey et al., 2012;
Dack & Merlin-Knoblich, 2019; Gysbers and Henderson, 1997;). Following the
implementation of guidance interventions, including restructuring guidance duties and
responsibilities, aligning the district guidance model to the South Carolina model, and
developing a new process for conducting student conferencing, student performance
improved over those in previous years on the indicators aligned with the comprehensive
guidance program. This included a growth of 5 percent in students earning work-based
learning credentials and a ten percent growth in the number of students identified as
college ready. Numbers that align with the data from the previous section by showing
that the increase in enrollment in college and career readiness courses also corresponds
with an increase in the number of students meeting the criteria on the CCR indicators.
Anecdotally, participants reported an increase in guidance department-led career fairs,
college fairs, and community partnerships that created new work-based and job-
shadowing opportunities. The fairs also helped to educate students and parents on the
multiple opportunities available to post-graduation. An unexpected benefit from these
fairs was the students' renewed interest in meeting at least one of the college and career
readiness indicators.

The findings suggest that guidance is a significant component of improving student
college and career readiness. The critical role of the school counselor in college and
career readiness is well documented (Bryan et al., 2011; Cholewa et al., 2015; Engberg &
Gilbert, 2013; McKillip et al., 2012; Perna et al., 2008). According to the American School Counsel Association (2017), counselors provide and advocate for each student’s postsecondary awareness, exploration, and planning, thereby supporting students’ rights to choose from various options when they leave secondary education. The counselor is responsible for ensuring that students are academically prepared to pursue the postsecondary career option of their choice (Novakovic et al., 2021). Poynton & Lapan (2017) indicate that institutions where school counselors spend dedicated time providing college and career-readiness counseling services, have higher college-going rates, particularly for low-income students. However, unlike the school administrator, limited research examines counseling programs from a district or systemic level. Instead, most studies examine counseling from the school-level perspective (Brown & Knight, 2023; Donohue et al., 2022; Hilts et al., 2023).

My findings show that school counselors are critical to successfully implementing college and career readiness interventions (Bryan et al., 2023). However, counselors benefitted from using a districtwide framework, as they distribute responsibility while fostering shared accountability. In this approach, counselors are not solely responsible for the college and career readiness work; they receive the support they need to continue serving students (Green et al., 2021). Furthermore, they receive continuous training and locally-based implementation to meet student and district goals. Such systems approaches are pivotal to the success of college and career readiness reformation efforts (Conely, 2012).
I also found that the guidance program's shift to focus on CCR rather than graduation influenced the culture of the building (Bryan et al., 2021). IGP conferences were no longer routine meetings but rather a place where students, parents, and counselors had meaningful interactions. Students and parents began to value these conferences and the implications these meetings have for their students' future. This type of mind shift is significant but also has been challenging to implement. LCSD, like many rural communities, has its set of distractors – residents who disagree with the practices at the school (Shaw, 2023). Changes were initially met with resistance from the community. Parents called the school to complain that the counselor or the district office was trying to "make it harder on them" by providing students with postsecondary opportunities (Bryan et al., 2021). However, the LCSD Office of Curriculum and Instruction and Superintendent believed in the importance of the work and supported the district's guidance department throughout the implementation process. This kind of leadership support for new initiatives is critical to developing community buy-in and support at rural schools, as Pinkelman et al. (2015) and Furco & Moely (2012) noted.

**Finding 3: Importance of Professional Development**

The targeted professional sessions equipped counselors and administrators to deliver and implement CCR content and the LCRI framework at the school level. Additionally, professional development is essential for the success of the intervention framework. Continuous professional development was as pivotal as both a program delivery model and a tool to ensure the effectiveness of the established initiatives.
Participants reflected that professional development sessions increased awareness, coordination, and collegial conversations that helped everyone succeed at their work.

The most significant benefit of the professional development sessions was that they provided a delivery model for implementing the LCRI framework. These sessions were necessary for district leaders, counselors, and curriculum staff to be allowed to learn the importance of college and career readiness and its impact on student learning. Neither would they have been able to take the intervention components within the framework and facilitate the changes on the school campuses. The findings align with research on the importance of professional development in education (Clarke & Hollingsworth, 2002; Lloyd & Davis, 2018). Specifically, the professional development focus has shifted to a more researched-based purposeful professional learning to improve student outcomes (Bergmark, 2020). However, I also found that lack of access to professional development in college and career readiness programming undermines the fidelity of implementation on the classroom level. For example, my research found that the lack of simple training on entering CCR data led to inaccurate reporting, The effect of which contributed to poor report card ratings and the potential loss of state and federal funding revenues. This issue was resolved through targeted professional development, resulting in reported gains. For example, proper reporting increased the reported average daily membership for the district. This increase translated to the district's Title I per pupil allocation for 2023 from $340.00 to 415.00.

Guskey (1994) states that professional development significantly promotes organizational change and student achievement. Teachers that receive substantial
professional development can boost students' achievement by 21 percentile points (Yoon et al., 2007). Holland (2005) states that the more time teachers spend on professional development, the more significantly they change their practices.

In conclusion, my findings align with Peurach and Yurkofsky's (2018) research that shows successful support systems require developed infrastructure at the district level. My findings expand their results, however, by providing essential insights into the infrastructure of a rural school district. The interventions for this study have positively influenced student indicators for college and career readiness. In this study, students were the biggest beneficiaries of this intervention framework. Through their participation in the initiatives and activities in the LCRI framework, students actively pursued challenging academic coursework and authentic learning experiences and engaged in college and career readiness preparation activities. As noted in Chapter 1, research by Green et al. (2021) indicates that traditional predictive measures such as exam scores, placement tests, and grade point averages do not adequately measure students' college or career readiness. Instead, educators must focus on other cognitive and noncognitive measures (Conley & French, 2013; Lombardi et al., 2011) to develop college and career readiness indicators.

Furthermore, educators nationwide continue to realize the importance of preparing students for postsecondary success. Students need more than academic skills to compete in a global economy. More than a high school diploma is required; students must hold postsecondary degrees and industry credentials to attain employment (Hackman et al., 2018).
Many are beginning to establish frameworks to assess how effectively schools and districts prepare students for college and careers (Brodersen, 2020). While the data discussed demonstrates student academic achievement, the other potential benefit of this intervention is student ownership of learning. Nagatoka et al. (2013) argue that actively engaged students are motivated, confident, and persistent in reaching their goals and overcoming challenges. Thus, these students perform better and have high future aspirations (Green et al., 2021). More research is needed with additional intervention cycles to provide a more comprehensive picture of the long-term effects of these interventions; however, the findings support the concept that the short-term outcomes of students' participation in these initiatives have been immediately impactful.

I caution, however, that the recorded gains may not predict longitudinal success. One collection cycle needs to be more comprehensive, and I recommend multiple intervention cycles to increase the data set's validity. Additionally, I cannot predict whether this support system will successfully increase the ability of LCSD graduate students to persevere as that data is outside the scope and timetable of this study. However, the 2022 report of the National Student Clearinghouse shows an increase in student persistence since 2020 and a decrease in the percentage of students not enrolled or graduated. If the data trends remain consistent, LCSD is projected to increase the percentage of students entering college upon graduation.

I also found that sustaining implementation of the interventions must occur at the school level. The feasibility of such initiatives relies on the dedication of the people implementing the change. Regrettably, after the first intervention cycle, LCSD lost some
district and school leaders to resignations, retirement, or other employment opportunities. Several of these people played pivotal roles in the inception and implementation of the LCRI framework, including three of the interview participants referenced in this study. Additionally, the district will have a new instructional focus next year, which leaves doubts about the continued support of this initiative. Therefore, the sustainability of the introduced interventions and the LCRI Framework needs to be revised.

Regardless of the outcome of the changes, my study provides recommendations and implications for others who seek to develop, study, or implement college and career readiness interventions. In the following section, I discuss the implications of this study for district leaders, policymakers, and community stakeholders in the section below.

**Implications for Practice**

Limestone County School District developed a structured college and career readiness system to assist students in obtaining the skills and knowledge needed to be successful after high school. Study participants and other leaders who seek to implement college and career readiness frameworks can use tools like the Plan, Study, Do, Act (PSDA) cycle to implement the intervention. Based on my findings, improvements may include modifying the framework, assisting school administrators and counselors in the implementation process, and developing opportunities for instructors to learn and use CCR strategies within classrooms. District leaders must maintain the curriculum framework to continue to make an impact. Leaders must also ensure that the curriculum contains college and career readiness content standards. Finally, these standards must be delivered through
structured and ongoing professional development. It is also essential for experienced
district- and school-level leaders to support the framework implementation long term.

According to John Hopkins Institute for Education Policy (2017), effective
interventions have administrative and teacher support. The administrator makes the
fundamental decisions in their building that determine the educational practice of the
teachers within that building (John Hopkins Institute for Education Policy, 2017). The
district's role is to support the building administrator as they make fundamental decisions
while reminding them of the long-term impact these decisions have on student
achievement (Heffernan, 2018). In preparing students for their postsecondary goals, the
administrator's role is to develop a culture and climate that encourages and supports
students as they explore CCR opportunities. District leaders must encourage
administrators to create college and career readiness cultures within schools to have
impactful CCR programs.

For the school administrator, my findings indicate that programmatic shifts must
happen at the school level to be effective. One of the most significant ways
administrators can influence programmatic shifts is by hiring qualified instructors and
building solid instructional teams. Teacher quality is the most critical in-school factor
related to students' academic success, and low-income students benefit most when taught
by skilled teachers (Hanushek et al., 1998). Administrators must build schools that create
cultures where students feel free to learn, and teachers are proud of their work (U.S.
Department of Education, 2023). Researchers also indicate that administrative support
and professional development increase teacher satisfaction and retention (Heffernan,
While staffing was not the focus of my study, this will likely be a significant component of implementation success. Future research should consider hiring, recruiting, and retaining instructional staff. Administrators must be empowered to recruit and build staffing teams to meet school needs (Heffernan, 2018). This builds teacher quality and capacity directly linked to improved student learning outcomes. Nevertheless, no two schools are alike, and different support systems are needed for every school.

The implication of this study on district leaders, policymakers, and communities are interconnected. For the district leadership, the findings of this study indicate that a solid organizational structure and focused professional development intervention activities are necessary for improvement. District leadership must empower building administrators to make the necessary changes on their campuses for interventions to be effective. They must provide policies and frameworks so building administrators have clear goals and objectives. However, the policies implemented must be flexible enough to fit school contexts and allow organizations to change in ways that support teacher development for improved practices that impact student learning (King & Bouchard, 2011).

For the policymakers and community, the findings emphasize the need for continued partnerships on sustainability. Economic data and employment trends are frequently presented to promote college and career readiness policies and practices (Malin et al., 2017). As stated in Chapter 1, policymakers and communities realize that the strength of the U.S. economy is directly linked to the quality of its workforce. However, like Hansen (2021), many believe there needs to be a direct disconnect between education and
employability, where employers view universities and colleges as the gatekeepers of workforce talent. Nevertheless, those same institutions must prioritize job skills and career readiness. Support for the LCRI framework is critical for a viable workforce and educational system.

**Recommendations for Future Research**

Folk (2022) emphasized the importance of using a systems approach in implementation and study within her research. Often, rural educators need more knowledge and skills to gather and implement the intervention with fidelity (Folk, 2022; Shakman et al., 2017). Thus, having an established support system can help ensure that intervention programs are successful (Shakman et al., 2017). Since current research on support systems from a district perspective is limited, a continued focus on this topic could be beneficial as districts attempt to meet state and federal mandates. I recommend continued support and implementation of frameworks such as the LCRI as schools seek to develop a quality workforce of students equipped with the skills to preserve, acquire, and maintain employment regardless of their chosen career path.

I recommend that future researchers look at doing an extensive study into the role of guidance as it relates to college and career readiness. Just as the current research on college and career readiness is limited, school counselors' systemic importance has yet to be explored. Future research on the complexities of the relationship between school-level guidance counselors and college and career readiness would benefit any systemic framework or intervention policy. Additionally, researchers could examine the impact of intervention frameworks on traditionally underrepresented rural student populations.
Finally, to determine the success of the implementation, future research would benefit from a focus on the impact of professional development at the school level. They specifically concern current college and career readiness policies and practices for classroom instructors. Ultimately, to ensure student success, teachers must be able to provide the CCR interventions within the classroom and integrate them into daily instruction. A task that can only be accomplished if instructors are provided with the tools and training they need. Should this happen, there is a possibility of enacting transformational organizational change and sustainable student growth.

Since the pandemic, the emphasis on college and career readiness preparation has declined. Student engagement with counselors after the pandemic changed significantly, especially with students of underserved populations. Equity and access support student postsecondary transitions (Mulhern & Steiner, 2021). The findings from my study show that a systemic approach to college and career readiness can improve outcomes for all rural students.

**Conclusion**

This dissertation served as a case study that examined the impact of a districtwide system of support drawn from existing literature and organizational structure and management. I utilized the model from Peurach & Yurkofsky (2018) to identify the importance of systemic frameworks in organizational management. The identified framework, the Limelight County College and Career Readiness Intervention (LCRI) Framework, utilized the Plan, Do, Study, Act (PDSA) cycle of improvement science to answer the research question: To what extent does a districtwide system of support of a
targeted intervention program impact college and career readiness for students in rural school districts? The research found that a districtwide system of supports can positively contribute to student success as measured by the South Carolina College and Career Readiness Indicators.

Using semi-structured interviews and agency data analysis, this research was a mixed-method convergent parallel case study of a rural school district in South Carolina. While the study's findings are constrained by the density of the data gathered within a limited time frame, the findings provide many opportunities for longitudinal studies and confirm the integrity of the intervention framework discussed in Chapter 1.

For policymakers and communities, a well-prepared workforce enables communities to thrive economically. A benefit that is critical to rural communities and communities that serve underrepresented populations. All students should be allowed to graduate from high school with the ability to pursue meaningful, family-sustaining careers. For Limestone County, the LCRI framework can help schools provide this opportunity. Suppose the district continues to implement this intervention framework with fidelity while providing professional development opportunities.

The effectiveness of college and career intervention in the educational field is well-known by educational scholars and practitioners (Gee et al., 2021; Bates et al., 2019; Conley, 2012; Perry et al., 2018). Most of this work directly responded to the educational reform movements, such as implementing the Common Core Curriculum Standards and federal legislation, such as No Child Left Behind. CCR intervention programs such as Paths to the Future for All (P2F4A), Making My Future Work (MMFW), and
Advancement Via Individual Determination (AVID) were developed to promote college and career readiness for underserved populations through a multitiered approach. These programs fused traditional college and career development with building students' social-emotional skills. Research by Gee and colleagues (2021) found that these programs have a positive effect, particularly on underserved populations when developed and targeted for those populations. However, apart from AVID (Chandler, 2019), other research suggests that most of these programs have significant short-term outcomes (Bragg & Taylor, 2014), but the long-term outcomes are inconclusive.

These studies also confirm the research presented and substantiate inconclusive or general findings. Due to the limited amount of research on structured supports from a district perspective, it would be beneficial for educational institutions and practitioners to continue to seek understanding on providing pathways that will ensure student success and cultivate communities of change. Doing so will ensure that students continue growing and communities continue to thrive. Thriving children will continue to fish for the rest of their lives.
APPENDICES
Appendix A

Profile of the South Carolina Graduate

Profile of the South Carolina Graduate

**World Class Knowledge**
- Rigorous standards in language arts and math for career and college readiness
- Multiple languages, science, technology, engineering, mathematics (STEM), arts and social sciences

**World Class Skills**
- Creativity and innovation
- Critical thinking and problem solving
- Collaboration and teamwork
- Communication, information, media and technology
- Knowing how to learn

**Life and Career Characteristics**
- Integrity
- Self-direction
- Global perspective
- Perseverance
- Work ethic
- Interpersonal skills

Approved by SCASA Superintendents’ Roundtable, SC Chamber of Commerce, and State Board of Education.

Figure A-1: Profile of the South Carolina Graduate
## Appendix B

### South Carolina College and Career Readiness Indicators

<table>
<thead>
<tr>
<th>To be college-ready, a student must meet one of the following:</th>
<th>To be career-ready, a student must meet one of the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Scores a composite score of 20 or higher or the ACT;</td>
<td>1. Is a CTE completer and earns a national or state industry credential as determined by the business community; or</td>
</tr>
<tr>
<td>2. Scores a composite score of 1020 or higher or the SAT;</td>
<td>2. Earns a Silver, Gold or Platinum National Career Readiness Certificate on the state-approved career readiness assessment; or</td>
</tr>
<tr>
<td>3. Scores a 3 or higher on an Advanced Placement (AP) exam;</td>
<td>3. Earns a scale score of 31 or higher on the ASVAB; or</td>
</tr>
<tr>
<td>4. Scores a 4 or higher on an International Baccalaureate (IB) assessment. Only higher learning (HL) exams may count; or</td>
<td>4. Successfully completes a state-approved work-based learning program; or</td>
</tr>
<tr>
<td>5. Completes at least six (6) credit hours in dual enrollment courses with a grade of C or higher.</td>
<td>5. Successfully completes the South Carolina High School Employability credential.</td>
</tr>
</tbody>
</table>

---

**Figure B-1: South Carolina College and Career Readiness Indicators**
Appendix C

Fishbone Diagram
Appendix D

Limelight County Professional Development Calendar

<table>
<thead>
<tr>
<th>Educator Groups</th>
<th>September 28 and November 16</th>
<th>Session Facilitators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary Math—Please note that you should locate the PD selection of your choice by its title in Frontline. Secondary Math will not have a separate designation.</td>
<td>Marzano training</td>
<td>Marzano Team leads Marzano trainings.</td>
</tr>
<tr>
<td>Secondary Science</td>
<td>Continuing Curriculum Writing</td>
<td>Secondary Science Team</td>
</tr>
<tr>
<td>Secondary Social Studies—Please note that you should locate the PD selection of your choice by its title in Frontline. Secondary Social Studies will not have a separate designation.</td>
<td>Continuing Curriculum Writing</td>
<td>Secondary Social Studies Team</td>
</tr>
<tr>
<td>Secondary ELA—Please note that you should locate the PD selection of your choice by its title in Frontline. Secondary ELA will not have a separate designation.</td>
<td>Continuing Curriculum Writing</td>
<td>Secondary ELA Team</td>
</tr>
<tr>
<td>Elementary School Counselors</td>
<td>Collaborate to work on Comprehensive Guidance Plans</td>
<td>Guidance Department</td>
</tr>
<tr>
<td>Secondary School Counselors</td>
<td>Meet to discuss school clubs and chapters for students grades 6-12 Collaborate to work on Comprehensive Guidance Plans</td>
<td>College and Career Student Organizations</td>
</tr>
<tr>
<td>CATE Teachers (CATE teacher PD days)</td>
<td>AVID/ELEOT PD</td>
<td>AVID and Professional Development Coordinators</td>
</tr>
<tr>
<td>Multi-Language Learners</td>
<td>Frontline training</td>
<td>Frontline</td>
</tr>
<tr>
<td>Secondary AVID Coordinators, Administrators (or Administrative Designee)</td>
<td>AVID Selection Process—This meeting will be for elementary, middle, and high school coordinators, counselors, and/or administrators.</td>
<td>AVID Coordinators</td>
</tr>
<tr>
<td>School PowerSchool Coordinators and School Testing Coordinators</td>
<td>Ongoing Professional Development Sessions (Bi-weekly every Wednesday)</td>
<td>District PowerSchool Coordinator District Coordinator of Accountability</td>
</tr>
</tbody>
</table>
## Appendix E

### Limelight County School District Data Collection Schedule

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>Assessment</th>
<th>DATE</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precode Collection</td>
<td>CogAT/IA</td>
<td>Tuesday, August 23, 2022</td>
<td>4:00 PM</td>
</tr>
<tr>
<td>Precode Collection</td>
<td>4K and 5K</td>
<td>Friday, September 2, 2022</td>
<td>4:00 PM</td>
</tr>
<tr>
<td>State Report Due</td>
<td>45th Day</td>
<td>Monday, October 17, 2022</td>
<td>noon</td>
</tr>
<tr>
<td>Precode Collection</td>
<td>Fall/Winter EOCEOP</td>
<td>Monday, October 24, 2022</td>
<td>4:00 PM</td>
</tr>
<tr>
<td>Precode Collection</td>
<td>NAEP</td>
<td>Wednesday, November 9, 2022</td>
<td>4:00 PM</td>
</tr>
<tr>
<td>Precode Collection</td>
<td>ACCESS for ELLS</td>
<td>Wednesday, November 30, 2022</td>
<td>4:00 PM</td>
</tr>
<tr>
<td>Precode Collection</td>
<td>SC-ALT</td>
<td>Thursday, December 1, 2022</td>
<td>4:00 PM</td>
</tr>
<tr>
<td>Precode Collection</td>
<td>CCR Assessment-Preliminary File</td>
<td>Thursday, December 22, 2022</td>
<td>4:00 PM</td>
</tr>
<tr>
<td>Precode Collection</td>
<td>SC READY (3-8th Grade)-Preliminary File</td>
<td>Monday, January 23, 2023</td>
<td>4:00 PM</td>
</tr>
<tr>
<td>State Report Due</td>
<td>135th Day</td>
<td>Wednesday, March 15, 2023</td>
<td>noon</td>
</tr>
<tr>
<td>Precode Collection</td>
<td>SC READY (3-8th Grade)-Final File</td>
<td>Friday, March 3, 2023</td>
<td>4:00 PM</td>
</tr>
<tr>
<td>Precode Collection</td>
<td>Spring EOCEP-Final File</td>
<td>Wednesday, March 15, 2023</td>
<td>4:00 PM</td>
</tr>
<tr>
<td>Precode Collection</td>
<td>CCR Assessment-Final File</td>
<td>Wednesday, March 15, 2023</td>
<td>4:00 PM</td>
</tr>
<tr>
<td>District Report Due</td>
<td>Students Not Tested (ALL PROGRAMS)</td>
<td>Thursday, June 1, 2023</td>
<td>noon</td>
</tr>
</tbody>
</table>
### Appendix F

**Sample Agency Data Collection Worksheet**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Data Collection</th>
<th>Career</th>
<th>College</th>
<th>Early Childhood</th>
<th>Special Education</th>
<th>Prof. Art</th>
<th>Prof. Business</th>
<th>Prof. Career</th>
<th>Prof. Ed.</th>
<th>Prof. Science</th>
<th>Prof. Tech</th>
<th>Prof. Washington</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020-2021</td>
<td></td>
<td></td>
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<td>2019-2020</td>
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<td>2018-2019</td>
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Appendix G

Sample Percent of Students Failing to Meet State Expectations for College and Career Readiness Worksheet

<table>
<thead>
<tr>
<th>Year</th>
<th>Overall</th>
<th>Male</th>
<th>Female</th>
<th>Socioeconomic Status</th>
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<tbody>
<tr>
<td>2018-2019</td>
<td></td>
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<tr>
<td>2019-2020</td>
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<tr>
<td>2020-2021</td>
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<tr>
<td>2021-2022</td>
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<tr>
<td>2022-2023</td>
<td></td>
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</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Appendix H

Semi-Structured Interview Email Invitation

Dear District Leader 1:

I am a student in the Doctor of Education in Improvement Sciences program at Clemson University. I am emailing to see if you would be interested in participating in a research collaboration. I am looking to see the impact of our college and career readiness intervention programs on student performance on the state performance indicators. I believe that your experience and background will be vital in assisting me in defining the effectiveness of these programs. Additionally, I believe that your participation will be an invaluable information resource.

This research is designed to minimize disruptions to the school day. Also, please note that if you agree to participate, I will secure the needed permissions per Limelight County School District protocols. I have attached an overview of the study for your review. I am also available to answer any questions you may have by email, phone, or in person at your convenience.

I appreciate your consideration,

Lavonia N. Johnson-Davis
## Appendix I

### Semi-Structured Interview Question Rationales

<table>
<thead>
<tr>
<th>Question</th>
<th>Rationale for Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is your position, and what role do you play in ensuring students are college and career-ready?</td>
<td>Determine the role of each participant and how they utilize that role to encourage college and career readiness.</td>
</tr>
<tr>
<td>What are the indicators for college readiness and career readiness in South Carolina?</td>
<td>Determine the participant's awareness of the South Carolina College and Career Readiness Indicators and state mandates.</td>
</tr>
<tr>
<td>How do the skills taught in the learning environment move students toward college and career readiness?</td>
<td>Determine the focus on the content provided by educators and students to gauge the implementation and dedication level for college and career readiness.</td>
</tr>
<tr>
<td>How do daily instructional strategies in your classroom (building) prepare students for college and career readiness?</td>
<td>Determine the educators' focus and strategies encouraged to reinforce the Profile of the South Carolina Graduate.</td>
</tr>
<tr>
<td>What resources help educators ensure students are ready for college or a career?</td>
<td>Determine the participant's current knowledge of the available resources to prepare college and career-ready students.</td>
</tr>
<tr>
<td>How well does class instruction prepare students for college and career readiness? Why?</td>
<td>Determine the content and courses' effectiveness to prepare students for college and career success.</td>
</tr>
<tr>
<td>What professional learning opportunities are available to better prepare educators for educating learners for college and career readiness?</td>
<td>Determine the professional development opportunities available for instructional staff and the level of participation. Follow-up questions may include what opportunities should be made available.</td>
</tr>
<tr>
<td>Explain the assessment preparations presently in place for students through standardized testing.</td>
<td>This question aimed to assess the knowledge of interventions to help students succeed on the state-mandated college and career readiness assessments.</td>
</tr>
</tbody>
</table>
Appendix J

Semi-Structured Interview Protocol Form

Research Project: Examining the efficacy of a multilayered targeted intervention program to improve student performance in the South Carolina District on the ten South Carolina College and Career Readiness Indicators.

INTERVIEWEE: ______________________________________________________________

Date: ___________________________ Start Time: ____________________

Location: ___________________________ End Time: ________________

Was a release form signed? _____

Introductory Protocol:

Thank you for your participation. I believe your input will be valuable to this research in helping improve student performance and ensure the postsecondary success of the graduates of this District. To facilitate our note-taking, we would like to videotape our conversations today.

Please sign the release form. Only I will be privy to the videotapes, which will be eventually destroyed after they are transcribed. In addition, you must sign a form devised to meet our human subject requirements.

Essentially, this document states that: (1) all information will be held confidential, (2) your participation is voluntary, and you may stop at any time if you feel uncomfortable, and (3) we do not intend to inflict any harm.

I have planned this interview to last no longer than one hour with seven crucial questions. If time begins to run short, it may be necessary to interrupt you to push ahead and complete this line of questioning.

Introduction

You have been selected to speak with us today because you have been identified as someone with a great deal to share about college and career readiness, specifically regarding this school District. My research project focuses on examining the impact of the district system of support through a targeted CCR intervention program. Specifically,
I want to determine if this system can improve student performance on the ten indicators of college and career readiness.

**Demographic Information**

A. Interviewee Background
   a. How long have you been with the school district? ________________
   b. How long have you held this position? __________________________
   c. What is your highest degree? _________________________________
   d. What is your field of study? _________________________________

B. Role and Responsibilities
   a. Describe your role (office, committee, classroom, etc.) in student learning and college and career readiness attainment (if appropriate). *Probe: How did you get this role? What motivates you to continue in this line of work?*
   
   b. What resources are available to ensure the CCR strategies are implemented?
   
   c. How do the skills taught in the learning environment move students toward college and career readiness?
   
   d. Have you or your colleagues encountered resistance to these strategies/reforms?

C. Research Questions
   a. What are the indicators for college and career readiness in South Carolina? *Probe: How familiar are you with the indicators? Provide a copy of the indicators...how often have you examined data in these areas?*
   
   b. What is the district strategy for ensuring student college and career readiness? *Probe: Is it working—why? Or why not?*
c. What are professional learning opportunities available to better prepare educators for educating learners to be ready for college or careers? *Probe: What opportunities should be made available?*

d. Explain the current interventions to assist students in the following college and career indicators.

   - Assessments (ACT, SAT, Work Keys, ASVAB, etc.)
   
   Comprehensive Guidance (IGPs and Career Counseling)
   
   Programs (AVID, Scholars, CTE completion)
   
   Work and Project-Based Learning

**Reflection by Interviewer**

- **Closure**
  - Thank you to the interviewee
  - reassure confidentiality
  - ask permission to follow up ______
## Appendix K

### Codebook

<table>
<thead>
<tr>
<th>Coded Term</th>
<th>Description or Explanation</th>
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<tbody>
<tr>
<td>Agency data</td>
<td>District Data Collected from Agency, Sources, including PowerSchool, Enrich, IGP's, etc.</td>
</tr>
<tr>
<td>AGD-IGP</td>
<td>Agency Data-IGP (Parenthesis indicate Analytics Category)</td>
</tr>
<tr>
<td>CCRI</td>
<td>College and Career Readiness Indicator (there are a total of ten)</td>
</tr>
<tr>
<td>CGP</td>
<td>Comprehensive Guidance Plan</td>
</tr>
<tr>
<td>IGP</td>
<td>Individual Graduation Plan</td>
</tr>
<tr>
<td>PBL</td>
<td>Project Based Learning</td>
</tr>
<tr>
<td>Pseudo</td>
<td>Pseudonym for student data (changed to secure student privacy - all pseudonyms are securely stored in the nonredacted coding database)</td>
</tr>
<tr>
<td>WBL</td>
<td>Work Based Learning</td>
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</table>
# Appendix L

## Coded Data-Example

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Data Identified</th>
<th>Coding</th>
<th>Memo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Data</td>
<td>Student performance on indicators has decreased since 2015</td>
<td>Student Performance</td>
<td>Concern that in the five years CCR data has been collected, student performance throughout the district has declined—a most significant drop from 2019-2021 next pandemic.</td>
</tr>
<tr>
<td></td>
<td>College AND Career Readiness - Average 29.4</td>
<td>Postsecondary Support</td>
<td>No data about the district’s work-based learning initiatives were collected. Was this due to a lack of training? Significant implications for accountability reporting.</td>
</tr>
<tr>
<td></td>
<td>No record of Work Based Learning since 2018</td>
<td>CCR Knowledge</td>
<td>A comprehensive guidance plan has not been revised since 2009. Significant impact on student performance, IEP, and career guidance. (Still collecting and analyzing this data)</td>
</tr>
<tr>
<td></td>
<td>Comprehensive Guidance</td>
<td>Student Performance</td>
<td>This week, we spent most of our time analyzing the District’s Comprehensive Guidance (CGP) Plan</td>
</tr>
<tr>
<td>Agency Data</td>
<td>We have resources through the school district, we have resources through guidance and your career counselors. You can also bring college speakers, college speakers in... To help the kids see... you can also bring resources that let them see jobs that do not necessarily require a degree. I was listening to an interview this morning, and they were saying that you do not necessarily have to have a college degree to take some of</td>
<td>Postsecondary Support</td>
<td>The data analysis is almost complete.</td>
</tr>
<tr>
<td>Interviewee A</td>
<td></td>
<td>CCR Knowledge</td>
<td>Instructor’s beliefs about what they need to model in the classroom. A significant part of college and career preparation is helping students identify future goals.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Comprehensive Guidance</td>
<td></td>
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<tr>
<td>Interviewee B</td>
<td></td>
<td>Professional Development</td>
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<tr>
<td></td>
<td></td>
<td>Comprehensive Guidance</td>
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</table>
**Appendix M**

**Data Collection Table-Example**

<table>
<thead>
<tr>
<th>Type of Data Collected</th>
<th>Pseudo. Type</th>
<th>Site</th>
<th>Participant Type</th>
<th>Position</th>
<th>Data</th>
<th>Status of Data</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Data</td>
<td>see table</td>
<td>District</td>
<td>Data from Students</td>
<td>Students</td>
<td>3/25/2022</td>
<td>n/a</td>
<td>n/a</td>
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<tr>
<td>Interview</td>
<td>Interviewee A</td>
<td>N/A</td>
<td>Teacher</td>
<td>Teacher</td>
<td>4/4/2022</td>
<td>45 min</td>
<td>Y</td>
</tr>
<tr>
<td>Interview</td>
<td>Interviewee B</td>
<td>N/A</td>
<td>Teacher</td>
<td>Teacher</td>
<td>4/1/2022</td>
<td>45 min</td>
<td>Y</td>
</tr>
<tr>
<td>Interview</td>
<td>5 participants</td>
<td>District</td>
<td>Administrator</td>
<td>Administrator</td>
<td>4/11/2022</td>
<td>n/a</td>
<td>Y</td>
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</table>
References


Atwell, M., Balfonz, R., Bridgeland, J., & Ingram, E. (2019). Building a grad nation: Progress and challenge in raising high school graduation rates (pp. 8–42).


Bergmark, U. (2020). Teachers’ professional learning when building a research-based education: Context-specific, collaborative and teacher-driven professional
https://doi.org/10.1080/19415257.2020.1827011


https://doi.org/10.1177/0002764213515231


https://doi.org/10.1177/2156759x231165497


https://doi.org/10.1177/2156759x231153392


Clarke, D., & Hollingsworth, H. (2002). Elaborating a model of teacher professional growth. *Teaching and Teacher Education, 18*(8), 947–967. [https://doi.org/10.1016/s0742-051x(02)00053-7](https://doi.org/10.1016/s0742-051x(02)00053-7)

https://doi.org/10.3102/0013189x17743488


https://doi.org/10.15241/hd.9.2.80


https://doi.org/10.1080/10824669.2022.2062361


Hardy, A. (2022, February 14). The wage gap between college and high school grads just hit a record high. https://money.com/wage-gap-college-high-school-grads


https://doi.org/10.1177/2156759X231182135


https://doi.org/10.1111/j.1744-7984.2009.01154.x


Achieving coherence in district improvement: Managing the relationship between 
the central office and schools. Harvard Education Press.

Kilag, O., & JM, S. (2023). Unpacking the role of the instructional leadership in teacher 
professional development. Advanced Qualitative Research, 1(1), 63–73.

King, M. B., & Bouchard, K. (2011). The capacity to build organizational capacity in 
schools. Journal of Educational Administration, 49(6), 653–669.
https://doi.org/10.1108/09578231111174802


Lapan, R. T., Gysbers, N. C., & Sun, Y. (1997). The impact of more fully implemented 
guidance programs on the school experiences of high school students: A statewide 
https://doi.org/10.1002/j.1556-6676.1997.tb02344.x


Identifying instructional and organizational differences between rural and
nonrural schools. The American Educational Research Association Annual Meeting, Montreal, Quebec, Canada.


Roberts, J. K. (2019). *Alignment of ohio’s college credit plus policy with barriers to and supports for college enrollment of high school students in high-poverty rural areas.* http://rave.ohiolink.edu/etdc/view?acc_num=osu1555571977938049


https://screportcards.com/overview


https://doi.org/10.35608/ruraled.v42i2.1239

https://doi.org/10.1097/00019514-200401000-00002


https://www.irp.wisc.edu


https://doi.org/10.1002/ets2.12346


