





National Resource Center Working Paper I No. 3

Narratives in

South Carolina College and Career Readiness

A Collection of Case Studies Highlighting Promising Practices

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Introduction

We are thrilled to introduce the third in a series of working papers developed by the National Resource Center for the First-Year Experience and Students in Transition at the University of South Carolina. The partnership between The Center of Excellence for College and Career Readiness and the National Resource Center began in 2014 when the Center was initially funded by the South Carolina Commission on Higher Education. Although the National Resource Center's work had focused primarily on student transition and success in college, we believed their insights would be invaluable to this new Center, which focused on helping students before their transition into college and the workplace. For the past three years, the National Resource Center has supported the work of the Center by compiling an overview of the state of college and career readiness in South Carolina, surveying schools across the state, and following up with those that have particularly promising programs and initiatives designed to help students prepare for post-secondary success.

Following up on survey results, the National Resource Center solicited case studies and conducted interviews to answer the question "How do educators, counselors, and school leaders describe their efforts in administering and delivering college and career readiness programs?" The resulting report is, in part, a collection of stories—from administrators, guidance counselors, teachers, parents, and community members who have much to teach us about preparing students for success beyond high school. Here you will read the stories of 11 institutions in South Carolina that detail the efforts, successes, and challenges of working to prepare students for success in post-secondary endeavors.

More than ever, our students need to see themselves as lifelong learners who can adapt to new circumstances, build upon existing skills, and transfer what they know to different contexts. Post-secondary education, although still a luxury for many, is a necessity for high school graduates today. In this report, you will learn about programs that prepare students for these challenges. You'll find common themes throughout—the importance of students taking responsibility for their education, the value of infusing soft skills into the curriculum and life of school, the necessity of a growth mindset, the high expectations that teachers have for their students, and the value of listening to both students and parents and responding with programs that address their concerns. Further, you'll be intrigued by how these schools have updated traditional methods of preparation and developed new approaches to meet the needs of their students.

The Center is proud of our partnership with the National Resource Center, and we are thankful to Dory Hoffman, Jasmin Chung, and Dallin George Young for their thoughtful and enthusiastic commitment to their work on this report. We hope you are inspired by the wonderful efforts going on in South Carolina schools.

Sincerely,

Meredith Love & Matthew Nelson Directors, Center of Excellence for College and Career Readiness at Francis Marion University

About the Report

We set out to uncover the untold stories of success from educators in South Carolina middle schools, high schools, school districts, and technical colleges. The school counselors, principals, and educators with whom we spoke helped us craft narratives to highlight promising practices in college and career preparation. We conducted our research to answer the question, "How do educators, counselors, and school leaders describe their efforts in administering and delivering college and career readiness programs?"

This research seeks to provide educators, administrators, counselors, researchers, and policymakers with an in-depth look at college and career readiness practices. Participants were given broad, open-ended questions about their experiences to "focus attention on gathering data that will lead to a textual and structural description of the experiences, and ultimately provide an understanding of the common experiences of the participants" (Creswell, 2012, p. 99).

Our case studies and narratives include important demographic information about each institution to provide "an extensive narrative description of the case or cases and its or their context, which may include historical and organizational information important for understanding the case" (Creswell, 2012, p. 102). Demographic information about each school includes enrollment data, grades offered, school district, participant name and title, and the school website. Enrollment data was obtained through South Carolina Report Cards, National Center for Education Statistics (NCES) data, and by contacting the schools' staff directly. Participants could also review and revise their school's demographic data.

Methods and Source of Data

Data gathered by the National Resource Center for The First-Year Experience and Students in Transition serve as the foundation for participant recruitment. First, data was gathered from the National Resource Center report, Exploring College and Career Readiness in South Carolina Secondary Schools, 2016 (Young, Hoffman, & Chung, 2016), which included data from a 2015-2016 survey. Schools whose participants answered yes to performing college and career readiness assessment within the last three years of the 2015-2016 survey were selected for participation in this case study. In addition, selected presenters at the 2017 S.C. Education and Business Summit who met the criteria were invited to participate. While researchers attempted to recruit both public and private secondary schools, only public institutions agreed to participate in this study.

A total of 32 institutions were selected based on these criteria and contacted for case study submissions or interviews, with 10 public schools participating. Participants could submit a 2,500-word case study or participate in a 45-minute interview. Four schools and one school district submitted case studies, and six schools participated in 45-minute interviews. Interviews were held over the phone, recorded, and transcribed by members of the research team.

From the interview transcripts, narratives were created to represent the stories told by the participants. We wanted to give the participants the opportunity to describe the work in their own voice. They could write their own case studies and include substantive quotes in the narratives constructed from the interviews.

Participants were given the final say on the narratives, free to delete or change any data that did not represent their school authentically.

Organization of the Report

Cases in this collection include four traditional high schools, two charter high schools, three career and technology centers, one technical two-year college, and one school district. Participating schools are located across South Carolina, including Aiken, Anderson, Berkeley, Calhoun, Fairfield, Greenville, Horry, Lexington, and York counties. These represent schools throughout the different regions of the state and include a variety of population density areas, from rural to urban and several points between. A map showing the locations of the schools contributing the cases in this report is presented in Figure 1. The cases presented below are organized by institution type, beginning with the traditional and charter high schools, followed by the career and technical centers, Greenville Technical College, and ending with the Berkeley County School District. While the settings and administrative realities at each of these institutions are unique, there are common lessons to be learned across the collection of practices they describe. To that end, we will conclude the report with a discussion of the common aspects of promising practices in college and career readiness (CCR) programs in South Carolina.

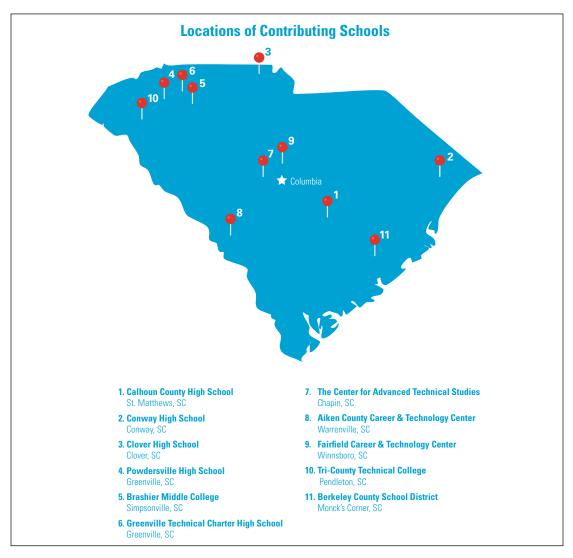


Figure 1. Locations of contributing schools.

Calhoun County High School



At a Glance - Calhoun County High School

Data Collection Method: Case Study School District: Calhoun County Written by: Cynthia T. Johnson Number of Students: 475 Grades: 9-12

Participant Title: Principal School Website: http://cchs.ccpsonline.net/

Description of Programs and Partnerships

Many years ago, Calhoun County High School (CCHS) stakeholders recognized a need to encourage students to become successful, productive citizens. Teachers and staff forged many opportunities to improve students' academic performance, including after-school tutoring; academic prep classes; Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP), a one-to-one technology initiative; Project Lead the Way; Top Saints recognition; fine arts expansion; and Jobs for America's Graduates.

A partnership with the local technical college (Orangeburg-Calhoun Technical College) has significantly impacted our students' efforts to become more college- and career-ready. This is a middle college program designed to allow students to earn college-transferrable credits; more than 100 juniors and seniors participate annually. Many students have entered college with at least 30 semester hours, and one accelerated student entered college last fall with enough hours to be considered a college junior. The student success rate in the middle college is 93%. This partnership stands out as exemplary in moving our students toward the college and career readiness (CCR) goals.

Our overall school goal is for 100% of graduates to be college- and career-ready. That said, each class sets its own goals for success at the beginning of each school year. Those goals aim for success on high-stakes examinations as well as in attendance and on-time graduation. Guidance counselors offer assistance with college and scholarship applications and sponsor a Free Application for Federal Student Aid night to assist parents with financial aid applications.

Implementing the advisement program was one of the turning points in the learning community of CCHS. Students can discuss CCR initiatives, explore different careers and colleges, and set CCR goals during grade-level meetings. Student data are shared and discussed during advisement with each grade level. Students look at trends and then develop grade-level goals based on the data. Career counselors use advisement time to discuss occupational outlooks, entry-level requirements, soft skills, and salaries for different careers. Student

School leaders spend a great deal of time discussing soft skills and infusing those into the daily lives of CCHS students. An example of this commitment was demonstrated after our teachers spent a day at the Ron Clark Academy in Atlanta, Georgia. The faculty and staff's commitment to CCR was enhanced by the opportunity to infuse *Essential Rules* used by the academy to prepare students for the real world. These rules included making eye contact when speaking to someone, respecting the opinions of others, showing appreciation, following established rules, the importance of honesty, and showing responsibility.

After reviewing student achievement data, student needs, assessment data, and the school-wide goal, the administration implemented SAINTS Success. This initiative provides a smaller setting for more one-to-one CCR counseling. SAINTS Success is embedded into the master schedule at the end of the day and does not infringe on instructional time. This time is used to assist students with reading, character education, CCR, and tutoring by content-area teachers. Freshmen can also receive tutoring after school.

The school's demographic composition is about 75% African American, 19% Caucasian, and less than 6% Hispanic. Most of the workforce in the county is agricultural, although there are a few industries in the northern portion. The lack of small businesses forces residents to work and shop in other counties. Being a rural, high-poverty school, college and industry partnerships are vital to fulfilling CCR initiatives.

Description of Vision and Goals

The district mission says it all: "Empower. Compete. Succeed." CCHS is located in a rural agricultural area of South Carolina where 74% of the student population is designated as impoverished. In 2005, the school was designated as unsatisfactory by the state Department of Education, and a new principal was hired. She held high expectations for all students and accepted no excuses from any stakeholder regarding student success. I followed in her footsteps. The first priority in the journey to prepare students for college and careers was gaining the support of all stakeholders. None were excluded in the process of setting a school-wide goal based on student data and expectations for improvement. Students had to know that stakeholders believed in them and their potential to excel.

It was also essential for the students to understand the important role they played in the success of the school and community. The administration capitalized on advisement time to help students understand what the data meant and their role in creating it. Students turned their knowledge into a challenge to improve over the previous year. Once setting a school-wide goal and determining class goals became part of the CCHS formula for success, the school climate shifted in a positive direction. School attendance increased, grade retention decreased, disciplinary referrals dropped, graduation rates increased, college enrollment improved, and the number of scholarships increased. The community became more supportive through School Improvement Council meetings. Efforts to engage, motivate, and move our learning community forward focused on revising curricula, pacing guides, and assessments. Intense staff development focused on improving instruction and understanding students.

Partnerships supported an increase in CCR opportunities. Career choices expanded through agreements with a nearby school district. A partnership was forged with the local technical college to support accelerated learning. Middle college enrollment ballooned from 50 to over 180 students, experiencing a 93% success rate. Many of our students enter state-supported colleges or universities as first-semester sophomores, while others are employed according to their career credentials.

Through collaborative efforts, performance on state and national examinations, and athletic achievements, the 2016 school year was the exemplar of our school's focus of "Offering the Total Package." Approximately 107 graduates earned over \$2.5 million in scholarships. A graduation rate of 92% exceeded the state and national average. This was partially because of programs that supported our self-contained population in pursuing a high school diploma, and early intervention for at-risk students. A variety of interventions, including online learning, at-risk counseling, and administrator mentors for at-risk seniors, contribute to the exceptional rate.

The staff makes efforts to locate students who miss classes through personal contacts and social workers.

In addition, seniors instituted an initiative, No Senior Left Behind, in which the class worked to make certain that all seniors graduated. Students also excelled in performance on the ACT test and ACT WorkKeys. CCHS received the 2015 Palmetto Gold award for closing the achievement gap, and U.S. News and World Report recognized us with a Bronze award for the 10th consecutive year. Our educational environment has evolved into a true professional learning environment with immense motivation.

CCHS's success is due to the spirit of teamwork. In my nine years as principal, I have learned that empowering all stakeholders to actively participate in a shared vision is a recipe for success. These factors are essential in establishing and maintaining a team and being able to offer a total package. This learning community works hard to prepare our students to compete in a global society.

Assessment and Evaluation

The CCHS family fosters an "I care" attitude with students. Students are dedicated to their individual success and the success of the entire school. Last year, 100% of students completed college applications and more than half enrolled in a college or university. School counselors are proud that well over 75% of the graduating class pursues career goals of their choice. Students maintain high expectations for learning, evidenced by their willingness to report troubling social and instructional issues. Students graduate and come back in times of distress or for guidance and recognition. We believe in them.

Faculty and staff work together to offer test-preparation classes for all students participating in statewide testing. CCHS also engages an expert to work with students to overcome test anxiety. Since stakeholders recognize that student assessment results are correlated to classroom instruction, the school uses the Effective Learning Environments Observation Test (ELEOT) observation tool, which focuses solely on student involvement in classroom instruction. Teachers have learned to "let go and let students" be more accountable for their learning.

Assessment results for CCHS have been formidable. In 2014, the ACT recognized the school for closing its achievement gap, and in 2016, CCHS was recognized as the only state school to show improvement in every tested area of the ACT. Teachers use data books to identify school and student weaknesses and set goals to address specific areas through professional development. The administration has changed teaching assignments, provided intensive remediation for teachers with low scores on high-stakes tests, and supplemented services in mathematics by adding a teacher at the freshman level. Students are challenged and offered incentives to meet state mandates for individual performance.

Our learning community faces two challenges in CCR. Overall success would improve if the test data provided more definitive information to address specific weaknesses, but the greatest challenge comes in supporting students as they make career choices. Age and maturity are critical to making wise choices, even though many job opportunities of tomorrow do not exist today. CCHS does not focus on outside evaluation, opinions, or what should be. We focus on placement results and what can be. No one expects a school like ours to overcome obstacles such as poverty, funding shortages, or insufficient resources, but we do, and we have. Two state superintendents of education visited over the past three years. The first was shocked that we made such a difference in the lives of our students, and the second came to validate our efforts. We are not the norm because we maintain high expectations for every stakeholder and accept no excuses.

The secret to our success lies with the school family. First, the entire staff believes in the possibility of excellence. The overwhelming commitment, however, comes from our student body. They believe in the idea that we can be excellent, be the best, and overcome obstacles. Students know the school community believes in them, and they perform. The local community is probably the most reluctant to buy in to this vision. However, our data speaks for itself. Enrollment has increased, and we now constantly have to verify residency for new students.

Description of Student Impact

CCHS's commitment to CCR has transformed our learning community. Students walk, talk, and perform

with a sense of pride. As stated previously, the 92% graduation rate has been higher than the state and national rates for the past five years. ACT WorkKeys gold and silver passage rates are almost 90%, among the highest in our geographical area. Collaborative partnerships with a neighboring technology center and Orangeburg-Calhoun Technical College have afforded our students enormous academic and career course selection.

The CCHS learning community works as a team to ensure that every child is successful. Everyone plays a vital role, from the custodian to the principal. The advisee/advisor program was implemented to ensure the success of every child. Each student is known by at least one adult. The program allows the opportunity for intense discussions between students and teachers about the school's data, grade-level goals, academics, character education, careers, college selections, soft skills, life skills, and social and emotional issues. The results of the program not only increased student achievement but empowered students to become active participants in their education. The students took ownership in developing individual and grade-level goals. They defend CCHS data and critique the data of surrounding schools. It is a challenge to remain on top, but this is accomplished through grade-level meetings and motivational talks from individuals inside and outside the school community.

To ensure the success of English speakers of other languages (ESOL), special needs, and at-risk students, intensive staff development focused on working with children of color, those in poverty, and those with special needs. Tiered interventions and smaller classroom sizes impacted the success of our special populations. Recently, two students identified as severely at risk of not graduating on time were assigned to an administrator. Discussions during the weekly individual meetings focused on attendance, grades, post-secondary plans, schoolto-work plans, and completing assignments and related applications. This intervention has been successful.

Our ultimate goals are to help our students see possibilities beyond high school, to instill hope, and to foster perseverance so they can become productive citizens. Parents and students are generally grateful for the support and assistance provided to their students. They are especially happy on graduation day!

Parent information nights focus on CCR initiatives, ACT WorkKeys, the Armed Services Vocational Aptitude Battery test (ASVAB), and Scholastic Assessment Test (SAT) performance. Parents, students, and community members are invited to College & Career Days, where local businesspeople speak about their careers and college representatives discuss enrollment requirements. Every child, along with their parent, completes an Individual Graduation Plan (IGP), which entails the selection of a career major and course progression.

After reviewing the data and several meetings with stakeholders, staff understood the need for more interventions in an effort to move our students to the next level of success. After-school sessions would have been ideal; however, when working with children of poverty in a rural area, transportation is a major obstacle. Therefore, the SAINTS Success Period was implemented. This time is embedded into the master schedule at the end of the day.

SAINTS Success is used to assist students with reading, character education, and tutoring, but more importantly, students and teachers have an opportunity to discuss students' career and college goals. The CCR conversations allow teachers to learn more about students' lives and cultures, ultimately building strong relationships. There is not a great deal of parental support because they are working to provide a living for their families. The faculty and staff understand the key to overcoming poverty is education.

Conway High School



Data Collection Method: Case StudySchool District: Horry CountyWritten by: Claudine Lance-SchofieldParticipant Title: Global CareerNumber of Students: 1,570Development Facilitator

Grades: 9-12

School Website: http://ch.horrycountyschools.net/pages/Conway_High_School

Description of Programs and Partnerships

Conway High School (CHS) has a long history of providing students with opportunities to increase their success in college and career after they graduate. A variety of programs—business and computer science, engineering, agriculture, and health sciences are offered—provide these opportunities. The school's engineering program, with the nationally recognized Project Lead the Way curriculum, exemplifies the opportunities that CHS offers its students. Through real-world experiences, students in this program gain the skills and knowledge learned in introductory college engineering courses, such as the ability to accurately draw structures in software used across the engineering industry. Instruction is scaffolded and differentiated to maximize its efficacy.

As students progress through the program, their courses become increasingly technical. Matthew Vanasse, a science and engineering teacher, supports students in the program and has taught these engineering courses for the past five years. He allows students to make mistakes as they learn and have fun in the process. This student-centered approach to instruction allows students to take ownership of their learning and learn more deeply from their mistakes, moving past a fear of being wrong and toward a mentality that stays open to new ideas and challenges paradigms. The program includes a partnership with the local technical school, Horry Georgetown Technical College (HGTC), which allows engineering students to earn credits for engineering technician courses that HGTC offers. This is the only program in the school district to have developed this opportunity.

This partnership is one of the most valuable to the engineering program, allowing students to move toward their college and career goals more quickly. The partnership was developed organically, with Vanasse teaching courses at the high school level and refining his teaching style. Over four years, the program garnered the attention of the HGTC faculty and the school district administration. Leaders who discussed the degree of overlap between courses taught at HGTC and CHS determined that students in the CHS engineering program were being taught with sufficient rigor to be exempt from introductory engineering courses at HGTC.

This is the first in a series of programs designed to increase the number of CHS students prepared to enter science, technology, engineering, and mathematics (STEM) fields directly after high school or better prepared to succeed in STEM college pathways in post-secondary settings. The other programs include biomedical science, health science, medical billing and coding, pharmacy technician, welding, horticulture, and veterinary assistant. These programs are built on a foundation the engineering program has established: student-centered instruction focused on industry-established skills and knowledge. Many of these programs lead to certification while in high school or very quickly after completing high school.

Description of Vision and Goals

CHS is expanding the STEM program to include health science-related programs, additional offerings in horticulture and agriculture, and computer science. This expansion is a project undertaken by the Career and Technology Education, Science, and Career and Guidance Department.

The school has adopted the *Profile of the South Carolina Graduate* in establishing goals as we build programs. The engineering program is moving students to greater fulfillment of these goals. Specifically, it is assisting students in the areas of world-class knowledge; rigorous standards in language arts and math for career and college readiness; multiple languages; STEM fields; 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; and interpersonal skills.

All college and career readiness (CCR) programs at CHS, but specifically engineering, assist students in exemplifying these skills and traits. In all their courses in the CCR curriculum and engineering, students must implement knowledge they have acquired to produce real-world products in an environment designed to simulate industrial or career settings. Students in CCR courses use current technology and hardware in labs, shops, and other environments to achieve useful, practical understanding of the career and college fields they are being prepared to enter.

As CCR programs expand, alterations are strategically planned to enable students to be more competitive and successful in their post-secondary endeavors. These pathways are based on industrial expansion in various career pathways. A major expansion is underway in the CCR programs in the health science and medical science areas because careers in these areas are expected to grow at exceptionally high rates.

Description of Assessment and Evaluation

Every student in their third year at CHS takes the WorkKeys test, designed by ACT to evaluate a student's readiness for entering the workforce. All third-year students also take the ACT Test, which is designed to evaluate a student's readiness for college. These tests have been given for the past two years. Data to evaluate the effects of the CCR programs are limited because few students have taken enough courses in their pathway to be evaluated along with the ACT and ACT WorkKeys. Of students who have taken all three engineering courses currently offered, the mean composite ACT score was 5.9% higher than the mean composite ACT score of the whole student body, which is statistically significant.

Students are continuously assessed and evaluated based on teacher-created, district-established, and nationally recognized rubrics and assessment tools. Because CCR initiatives focus on applying knowledge throughout courses, teachers evaluate the student's ability to produce a product, rather than the amount of information a student has committed to memory. That said, each CCR course has a final exam established by the state to evaluate student success.

Students can take additional assessments, including Kuder, an occupational survey that measures broad areas of interest such as outdoor, mechanical, clerical, scientific, literary, social service, persuasive, artistic, and musical. Respondents' choices can be compared with people in certain professions and with college students in different majors. Students can also take the Armed Services Vocational Aptitude Battery (ASVAB), a multiple-choice test administered by the U.S. Military Entrance Processing Command used to determine qualification for enlistment in the U.S. armed forces.

Description of Student Impact

The purpose of CCR courses is to prepare students for success in college and/or a career after high school. These courses and programs are intended to provide a background and environment in which knowledge and skills that students have gained in their academic courses become useful and necessary to achieve success. As stated before, students in the engineering program are better prepared for college than their counterparts in the general student population. Additionally, many of these students have been accepted by postsecondary programs directly or indirectly in the fields of engineering.

Students in special education, and specifically in the occupational education program, are required to complete a 360-hour internship in which they learn practical skills for career and employment opportunities after they leave CHS. These students can work in a career laboratory, which teaches skills they will be able to use specifically in the Grand Strand area of South Carolina. Students learn skills related to the tourism industry, one of the largest industries in this region.

Students whose first language is not English can fully participate in CCR courses and programs. Frequently these students are very successful in CCR courses, sometimes more so than in core academic courses. This is because these courses offer context and background to the application of information. Native English speakers and non-native speakers alike benefit from the applied aspect of their coursework in CCR classes and programs. Often, information that was abstract in a core academic course is understood with greater clarity when applied to solve problems or yield products in CCR coursework.

This positive impact can be attributed to many factors, including the events provided for CHS students that expose them to opportunities after high school. These events include a college application day, which allows students to apply to various colleges and have their application fees waived; and Free Application for Federal Student Aid (FAFSA) workshops, which help students and parents complete financial aid applications. Students can also participate in Career Day, job shadowing, and Ed-OP (in conjunction with Coastal Carolina University), as well as guest speakers, internships, and mentorships.

Often, community members and teachers hold the unfair misconception that CCR courses and programs are designed for students who are not academically capable of rigorous academic courses. This could not be further from the truth. Students in CCR courses are required to apply knowledge they have acquired from their core classes in business, computer science, agriculture, engineering, health science, and other CCR programs. Teachers and parents often steer academically gifted students away from CCR programs, erroneously believe these courses will not challenge these students or that they will negatively impact their college acceptance.

Gone are the days when CCR courses were limited to teaching physical labor. In addition to appropriate labor skills, students are taught the logic and academic content behind these careers. In reality, the CCR courses and opportunities that students have in conjunction with these programs increase and deepen students' learning and increase their likelihood of being accepted into competitive, post-secondary programs because of the experience they gain in their career fields.

Clover High School



Data Collection Method: Interview School District: Clover School District
Number of Students: 2,065 Participant: Jennifer Forest

Grades: 9-12 Participant Title: Counseling Department Chair

School Website: http://www.clover.k12.sc.us/Domain/16

Description of Programs and Partnerships

Clover High School staff members are particularly proud of their college and career readiness (CCR) programs because of the way events are structured surrounding *Individualized Graduation Conferences* (IGC). Though South Carolina mandates IGCs for all students in grades 9-12, Clover High students benefit from an innovative approach that sets them apart from other high schools. Staff talk with parents and provide a variety of information at evening meetings. The school invites guest speakers from partner colleges and businesses that offer student apprenticeships in the junior year. Presenting this information to students two years before their apprenticeship allows them to explore college and career options to ensure they make the most of the apprenticeship experience.

In the fall, Clover holds a college fair, inviting speakers from mostly four-year colleges, a few two-year colleges, and the military. The event is required for students, and in the 2016-2017 school year more than 80 colleges attended. Senior-year students who are not yet decided on college have their own fair, created to focus on two-year colleges and a variety of career opportunities. Area employers are invited to both college fairs and offer summer employment to students, which can help them pay for the rising cost of college tuition and fees. In addition, Clover school counselors meet with all students to focus on finding the right fit for college and career. Other area high schools have also been invited to Clover's college fair, but none have been able to attend because of budget cuts and the price of busing students in.

School counselors also conduct career assessment inventories for each student and act on that information by discussing it during the IGC. Parents are also involved with IGCs, so they can be prepared to keep the college and career preparation conversation going during all four years of high school to craft a plan for their child. Jennifer Forest explains how educators have overcome some of the challenges in implementing the IGCs:

College fairs are helpful to students and parents but they do have their challenges:

We started out doing college fairs on Saturdays because we didn't want to pull students from

In addition to offering college fairs to all students in grades 9-12, Clover High's CCR practices are highly innovative. The counseling department adjusts CCR requirements to the needs of each student. Although school leaders, educators, and counselors in the "Metrolina" region all have the same goal of success for their students, the needs of students at Clover High are different. Charlotte, a large city just across the N.C. border, has different demographics than Clover, which is more rural. Part of the challenge with delivering college and career fairs in Clover is that some students come from families living in Charlotte suburbs who tend to have college-educated parents, while there is also a sizeable population of first-generation college students.

With such a diverse group of students, how does Clover High meet the needs of its demographics? CCR cannot be a one-size-fits-all approach, so Clover's CCR curricula and assessment are catered to each type of student. Clover's programs have also been successful at adjusting to students' parents' experiences and preferences. Some parents want as much information as they can get about future college and career opportunities for their students, so the school publishes that information online. In addition, counselors and educators meet with students one-on-one, as they recognize that not every CCR lesson can be learned online. These one-on-one meetings help students apply the knowledge they have learned online or in class with assistance tailored to their specific needs.

Further, with IGCs, Clover staff realized they were saying the same things to every student over and over, which made them question the one-on-one meeting approach. Staffers now use the counseling department conference room to gather students in small groups for 15-minute conferencing sessions. Here, students can access information from counselors in an iMovie format. Clover's seven counselors schedule six conferences every 30 minutes, until all students are seen. Parents can also view the conferences in iMovie to get information to meet their students' needs. Students and parents are mandated to meet at least once a year throughout high school, adding consistency to the counseling schedule.

In addition to meeting with students in various ways, Clover has a wealth of CCR partnerships. Jennifer Forest, the school's counseling department chair, explained their importance:

We partner with York Technical College and USC Lancaster. Our students can complete their senior year at the technical college or just the second semester. We have someone who works with York Tech to make sure students are developmentally ready even if they're academically ready. We have students doing welding certificate programs. We looked at adding that at Clover High, but it wasn't economically feasible and we need more certified welders in our area. It has been a wonderful opportunity for our students. We partner with USC Lancaster to offer college classes on our campus. We have another partnership that deals with careers [and] offers apprenticeships. The staff at our second partnership has done a great job partnering with businesses in South Carolina and Charlotte, North Carolina. These apprenticeships begin after 11th grade and the summer after 12th grade.

Description of Vision and Goals

Clover High's ongoing CCR projects provide a strong foundation for students preparing for life after college. CCR goals and approaches change based on students' needs. One of the school's CCR goals is to expand its apprenticeship programs, as there is a high need in South Carolina and the country. There are also

apprenticeship programs with a Trident Technical College in Charleston that prepare them to work at Boeing. When a student participates in an apprenticeship, Clover staff connects them with technical colleges and local businesses. The overarching goal for every student is to graduate with a plan for life after high school.

Clover has a good college acceptance rate, with most graduates attending four-year colleges, though some graduates still attend technical schools, such as Midlands Technical College, to work toward more specific careers. The culture of higher education has shifted from high schools' previous focus on college or career. High schools now offer variations, preparing students for both, hence the use of CCR programs. This shift allows more students to earn certificates and associate degrees, opening up a wealth of good employment options.

Description of Assessment and Evaluation

Forest described the ways assessment plays an important role in the progression and impact of CCR programs at Clover High:

We ask parents after meetings, did the meeting meet your needs, did we advertise it well, etc. For eighth-grade parents coming into ninth grade, we ask them if the meeting helped with their student's transition to college. We usually have a half sheet with a comments section so parents can identify what they need. We also send it out electronically in case there is something we missed. At the end of our IGP, we send out a detailed electronic survey to assess the IGP content and processes. Last year, we registered for an alumni tracker so we can see how well our students are persisting in colleges. There are many different levels of data collection. It's not a formal process yet, but I would love to use our alumni's expertise because we have alumni all over the world doing wonderful things.

Using assessment data, the Clover staff can better understand what is working at the school and what might need reform. On a daily basis, assessment guides how the school's CCR programs function and how staff relates with students' parents. Forest explained the importance of school–parent relationships to students' success. She sends out several lengthy e-mails a year to parents on scholarship information, which is constantly updated. In a special e-mail format, the subject line shows two dollar signs (i.e., "\$\$") and the name of the scholarship, so these important e-mails are not lost in the barrage of online communication inherent to schools. Keeping up with e-mail also lets the counseling department immediately apply feedback from parents and counter misperceptions they may have about the CCR preparation process.

Of course, not all parent feedback can be incorporated, but the counseling department, faculty, and school administrators keep lines of communication open to help plan for the following year. Students say they appreciate the school's use of e-mail for communications. However, Forest recounts that when students were asked whether Twitter should be used instead of e-mails, and they said, "absolutely not."

While assessment data collection and implementation are vital to successful CCR programs, Forest explains that there are challenges:

There is a lack of longitudinal data. I would love to see how our students are doing five years down the road and create a more active alumni network. We get data about our students' first semester in college, and we evaluate that data to see how well prepared our students are academically, and that's great. But after that first semester, how are they doing? The National [Student] Clearinghouse has a lot of information regarding persistence, but in terms of how our students are doing in their careers, we have to rely on anecdotal data. At this point, I would love more data like the National [Student] Clearinghouse can provide. I don't know how to go about that, so that's a challenge.

Description of Student Impact

Clover High's students have benefited in many ways from the staff's commitment to college and career readiness. The number of students completing the Free Application for Student Aid (FAFSA) each year has risen because of faculty and staff's dedication to helping students understand the application's importance. This has not always been the process; several years ago, the number of students completing FAFSA paperwork was not measured. Now that studentaid gov allows high school counselors to see who has completed the FAFSA, Clover staff can view the data and take action. These data allow school counselors to track students who have not completed FAFSA forms and meet with them individually. FAFSA workshops are available but take place an hour away from most students' homes, so attendance remains low. Clover staff are devoted to these workshops, so the school reached out to local colleges to set up two FAFSA workshops on campus. So far, all of the workshop participants have completed their FAFSA paperwork.

Clover has one of the state's best graduation rates for its type of school. Its college acceptance rates are rising to a good rate for Clover's size and demographics. Yet, Forest explains that school test scores are still a work in progress:

Our students' SAT and ACT scores are not quite where they should be. We know our academic teachers do some test prep with students, but our students did not have a good goal regarding those test scores. We told our students what scores they needed in order to get into certain institutions and receive certain scholarships. Our test scores rose because we talked about the importance of these scores and talked about the variety of ways our students can do test prep, including online and reasonably priced in-person classes. Because our test scores were holding back our students, I negotiated with companies to lessen the cost of these in-person classes. I don't like to over-emphasize test scores, but if you're being evaluated by colleges on those factors, students need to be aware of those factors. I attribute some of that change to our college and career readiness programs.

Clover faces other difficulties in implementing and assessing CCR. For students, financial aid and the rising cost of college are continuous challenges. There is an overwhelming concern from families regarding the cost burden for tuition, fees, and transportation. The school puts a greater focus on financial aid than it did 10 years ago because of the much higher cost to attend college now. Forest explains that Clover staff faced other challenges when implementing a higher focus on financial aid:

I had to get over acknowledging that I wasn't a financial aid expert. I had parents coming in with their taxes and asking for help, but it encouraged and forced me to reach out to financial aid offices. I will never be an expert on South Carolina financial aid, but now I have the opportunity to have a more honest conversation with families. We are aware that college is expensive, so we lay out ways to pay those expenses. We had a student who attended our FAFSA nights, and she brought in letters with scholarships, but she was still unable to pay for college. But in March, we began to strategize more financially feasible colleges for her, and she found one and is doing great! I'm convinced that programming and bringing it back to the student level has made a difference in our students' lives.

Powdersville High School



At a Glance - Powdersville High School

Data Collection Method: Interview Number of Students: 808 Grades: 9-12

Participant: Meagan Scott

Participant Title: School Counselor

School District: Anderson County 1

School Website: http://www.anderson1.k12.sc.us/pvhs

Description of Programs and Partnerships

Meagan Scott, a guidance counselor for Powdersville High School, talked highly of her school's college and career readiness programs. The most successful program has been *Advisory*, where students meet with teachers for academic advising for the entirety of a student's academic career—from 10th to 12th grade. In Advisory, teachers are alphabetically matched with students and meet with them three or more times a year. One of the first meetings includes a career inventory and having students think about potential careers, the second meeting focuses on transcripts and the courses needed, and then Advisory and *Career Action Planning Services* (CAPS) rolls into the school's registration program.

During CAPS, parents had the opportunity to get involved with their students' academic plans. Scott said, "We take two days—in fact, we just had it a couple weeks ago, where parents come and that's where they sit down with the advisor and say, 'Here's what your child has been recommended for, here's what they've chosen to do for their classes. Let's make sure that's what you want them to do." This past year's CAPS session, Scott said, "was very successful. Parents come in 20-minute rotations and sit down with the advisors and go over it. Then we have all the counselors in there. Administrators are in there in case parents have any questions. It runs very smoothly."

Advisory also has proven successful because of consistency in the teacher-student pairings, especially since a student's advisor will likely also be their homeroom teacher. With this consistency, teachers have taken advantage of the opportunity to get to know their students better—their likes, dislikes, and interests. Scott said Advisory "creates a partnership between the advisor, the student's counselor, the parents—they kind of work together," which in turn makes the program more innovative and successful.

Advisory's partnership with the Career Center also serves as a great college and career readiness program within the school. Although the school did not offer specific career classes, students could take advantage of various programs through the Career Center. Before attending Powdersville High, ninth-graders could tour

Additionally, the high school has a College Decision Day, originally spearheaded by the South Carolina Commission on Higher Education (SCCHE). This event, which mirrors Athletic Signing Day, is an opportunity for seniors to share where they are going to college and make it a big deal. Students headed into the military, receiving certificates, and working full-time jobs after graduation are also commended on this day. The high school partnered up with the local elementary school to have fifth-graders make signs for the seniors while they envisioned their own College Decision Day. Further, Scott recalled, "The night before, or that morning, we found out that the state superintendent was stopping by our program! That is something our seniors who graduated last year said that was, by far, one of the best things. So now our seniors coming up are asking, 'OK, so when is it? What are we doing?" College Decision Day was so successful, the school plans on making it an annual tradition.

SCCHE released a statement on April 26, 2016, recognizing College Decision Day in the state. In this statement, SCCHE announced its goal: "to recognize high school seniors for their future educational plans and to motivate younger students and families to prepare early for postsecondary education." SCCHE also encouraged high schools to participate and host various events. In the event's inaugural year, South Carolina hosted at least 50 events recognizing seniors and their decisions to enroll at various postsecondary institutions. Such strategies have motivated students and promoted investment in their education and futures.

Description of Vision and Goals

At Powdersville, college acceptance is a specific part of students' career readiness goals. Scott described sharing the enrollment profiles of colleges and universities in the state as "opening students' eyes to realities of 'Hey, this is where I really am' and 'Here's the average for Clemson [University] and [the University of South] Carolina.' These are things I think [that] definitely open students' eyes. It's a nice way of putting it to students without crushing any dreams, but just saying, 'Here's where you are. Here's where you need to be.' We try to talk about that as much as we can. It's definitely something that we try to focus on." College acceptance is the goal and sharing information about standards for admission has been a good motivator for students and a realistic way to explain to parents where their students are academically.

The high school also emphasized parent involvement in their college and career readiness goals where Scott stated, "A lot of first-time, first-generation college students [are here] so training parents, as well, is just as important. Teaching parents is just as important as the students." The school met with parents to talk about a student's freshman year and how it will look. The school also kept parents engaged and educated with meetings regarding the senior year and financial aid.

Scott said, "I have kids. I try to do as much as I can saying, 'Come in and meet with me.' I love when parents do that: 'I don't know what I'm doing; help me.' That's like one of the best parts of my job." With experience and a personal joy that comes from educating parents, Scott, along with others at the school, has done a great job getting parents involved as much as possible in their students' academic plans.

Although many of Powdersville's programs focus on college readiness, Scott talked about job placement becoming a greater part of students' career readiness goals. "I think that is definitely one of the things we will start to get judged upon by the state," she said. "I wouldn't say it's something that we keep at the forefront right now." Even without concrete career readiness goals in place, though, the Career Center did a great job helping students with internship opportunities and allowing them to learn more about careers. For example, Scott said, "We don't have a career class, but we have a couple classes like our law education class and things that try to incorporate the careers and take field trips and do those kinds of things." This has helped students gain experiences that challenge them to look at various potential career paths.

Description of Program Assessment and Evaluation

Formal assessment is something Scott admits her school is not particularly focused on. "We are given initiatives and we go with it. ... I will say [assessment] is one area that we're lacking," she said. Without any formal methods, Powdersville has still been able to assess its CCR programs informally. This informal assessment and getting parents' feedback has proven to be the most indicative quality of its CCR programs. As a fairly new school, having had only three graduating classes, Powdersville has based many of its program success rates on graduation rates and statistics for students going to two- or four-year institutions.

Also, since the school is relatively small, teachers have kept in touch with students after graduation. "You can see the ones who you talked to about being prepared and whatever and you can see that they weren't," Scott said. "You can see sometimes, we have a high rate of students who go to college, but I don't necessarily know that all these students should be going straight to college or that they should be going straight to a four-year. I wish we could have that set-in place to talk about the realities of when you go to college: 'Here's what it's going to be like,' and I don't think we get to spend enough time on that."

The small community has allowed teachers to reach out to alumni and ask what the school can do differently to help students better succeed in the future. Through this process, teachers and advisors have taken students' input into account to tweak the school's CCR programs to better fit students' needs.

Teacher Training

Since Advisory is a mandatory component for teachers at Powdersville High, teacher training is required, but buy-in is not. As guidance counselor, Scott trains all teachers for Advisory and equips them with the necessary tools to help students succeed. Scott trained new teachers through the Advisory process while educating them on CAPS and graduation requirements. As these teachers did not have a choice in participating, it was difficult to create enthusiasm and excitement. "Sometimes getting [teachers] to buy in and getting them to know the answers for students is definitely a challenge," Scott said.

Description of Student Impact

Powdersville students have benefited exponentially from the school's CCR programs. Without formal assessment, we were unable to see the statistical jump from the pre-implementation stage of the programs to post-implementation, but Powdersville students had a 97% graduation rate, were accepted to four-year institutions at a 76% rate, and attended two- or four-year institutions after graduation at a 98% rate. Scott said the school's focus on CCR has resulted in students going to schools they want to go to, as opposed to going where they can get in, as was the emphasis in previous years. Powdersville has also seen higher percentages of students succeeding in college, not just getting accepted. These informal assessment data were collected via teacher and alumni interaction after students' graduation.

Students also showed high levels of engagement and buy-in, making CCR programs more effective. Scott said, "They love it! They eat it up. ... With one of the programs that we did, we did it the year before, that was having students sit down and say, 'Look, here's my transcripts. Here's the parts of it. If you're going to college, if you're going to get a career, here's what they're looking at and what does that say about you? What about it doesn't say anything good? What can we do about that?' So [we're] discussing those things.

"They are definitely interested. They want more knowledge. Any time they can get that information, they respond to that."

Brashier Middle College Charter High School



School District: Anderson County 1 Participant Names/Titles: Mike Sinclair (Principal) and Nancy DeYoung (Master Spanish Teacher)

School Website: http://www.brashiermiddlecollege.org/

Description of Programs and Partnerships

We spoke with Principal Mike Sinclair and Spanish teacher Nancy DeYoung from Brashier Middle College Charter High School, a high school in Simpsonville, South Carolina. Asked which college and career readiness (CCR) program or course made them proudest, Sinclair discussed Brashier's philosophy, senior projects, and location:

The biggest program we have that sets the tone for college and career readiness is our dual credit program. That's really what the school's founded on... Our senior project is something that personally, I think, prepares students well because we have a group of students who don't qualify for the college classes. They would have to pass the same placement test that you and I would have to take applying to college. We are partnered with Greenville Technical College. Our building is on their satellite campus. ... Students take all of their college courses there. We teach no dual credit courses in our buildings.

He also discussed the importance of navigational capital, referring to when students learn how to navigate a college environment. Brashier students take mixed-age classes in an independence-driven environment. School leaders and educators have connections to Greenville Tech staff and professors, and that open communication allows Brashier staff to be made aware if students have problems, though such reports are not the norm. Brashier students are very independent and are reliable in reporting information to their teachers.

Early on, Brashier school leaders and educators noticed students were not advocating for themselves in college classrooms at Greenville Tech. Students had trouble transitioning to an environment where their parents were not able to call their educator for a conference. Brashier staff addressed this by explaining collegiate processes, such as setting up a visit within a professor's office hours and how to prepare for it. This problem is not unique to Brashier, as many first-year college students are unaware of how to use resources provided by Navigational capital is an important part of CCR, as students need to learn how to best use their resources. Professors can help students make appointments at the campus writing center, explain financial aid and loan processes, go over student schedules, and help with assignments. However, not all professors communicate these services to students, and not all students are interested in them. Brashier staff members help students transition to the college environment by walking students to buildings, but they do not go inside with them. This process helps build self-confidence and problem-solving skills as students learn to advocate for themselves.

College has a social component not present in high school, so Brashier staff does everything it can to support students as they transition while instilling the expectation of independence that is present in postsecondary education. Brashier staff thinks it is important for students to know that not all professors write homework reminders on the board. Even small tasks such as navigating a syllabus can be challenging for students new to college. Staff members remind students how college assignments can be weighted heavily. With the exception of courses such as English, many courses have only three major assignments graded for each class, so it is important that students give their best. It is also important that they know that most professors are adjunct instructors, especially at two-year colleges. Students should be prepared on the best ways to interact with adjunct professors as they do not have office hours, often have limited time to meet with students outside of class, and many have not had extensive training on how to successfully mentor students.

One project that helps prepare Brashier students is the *Senior Capstone*, which every senior must complete before graduation. Students choose between two options: a research essay or a project, such as car restorations or architectural activities. Sinclair explains that students have additional options for the senior year:

We have one student who ... did a dental internship. While interning, she shadowed different types of dentists, which helped her redirect her career goals to general dentistry. There are many components: coursework, product, and presentation. Students' products, such as the digital portfolio, are where the students create Google sites. During a college or job interview, the student shares a link to their portfolio so the college rep or interviewer can see their work. Finally, students give presentations. We have a senior project night with over 100 community judges. Seniors present their projects for a panel of three community judges they do not know. We go over professional speaking and coach students through 12-13 minutes of talk time, then facilitate a Q&A.

This process of producing and presenting a project helps students learn how to deal with adults as mentors. It also helps them with time management and exploring a college major or career.

Brashier's goal is to have all students enroll in at least one dual credit; the rate currently stands at 85 to 90 percent. Sinclair said this senior class seems to be less motivated than previous classes. With college tuition costs rising and the minimum wage stagnant, many students see college as a dream and not an achievable goal. During other school years, Brashier has had as much as 97 percent of the student body taking dual credit, with courses such as computer programming or public speaking. Brashier stafffeels that students should experience at least one college course beforehand in order to be successful in college. The high school thinks this process can help break the barrier to a smooth transition into college. Brashier has another goal: for 50% to 75% of the student body to take at least 24 hours of first-year courses during high school to help bolster students' college readiness skills.

In addition to this curriculum, Brashier offers students an innovative CCR approach, as Sinclair explained: I think the support the students get is innovative. We build a course in the freshman year. We have two courses that are unique: our freshman and college seminars. The college seminar is a match with students taking college courses. We try to coach them on successful behavior such as college-level reading, setting up study groups, and how to do college research. Between these two classes and the senior project, we're still missing some of the intro skills. So we built the freshman seminar around surveys from teachers and students. The freshman seminar is geared around the senior project and college readiness. They learn how to do research on what college they want to attend and what it takes to get admitted. For career preparation, students learn

which resources to use and how to complete a job application.

To get an educator's perspective, we also asked DeYoung what makes the school's CCR approach innovative. DeYoung said: "One of our main goals in our professional development is to create independent learners by teaching these strategies to our faculty. This gives teachers a toolbox that encourages critical thinking to prepare for college. We do professional development in our clusters. By the end, students are trying to decide which strategy works best for the task at hand."

The advantage of Brashier's close partnership with Greenville Tech is that students get access to the college's contacts. Students can then build relationships with college faculty and staff as they work on their senior projects. Greenville Tech also sends guest speakers to Brashier to discuss grade-specific opportunities, as well as information about associate degrees and transfer processes to four-year institutions.

Description of Vision and Goals

The objectives for CCR programs at Brashier are central to their implementation. Several goals came up when Sinclair described ongoing CCR projects:

We're working on an integrated STEM program. ... We have a faculty member who got her PhD at Clemson in science education, and she's teaching anatomy and physiology. She's working to help us design programs to look at science initiatives. We want to prepare students for a variety of college science classes, but we're a small school. We want to broaden our science programs to get students into the college courses. In the past, we didn't offer honors classes, nor did we have tracking. We found that we need something to propel that group to gain more exposure and confidence in college math and science. Now we are seeing a higher number enrolling in college math, science, and biology.

In addition, Brashier is in its second year of offering honors courses. The first year was challenging, and staff had to overcome a common misconception. Many parents were upset to find out their students were not honors students just because they felt they should be. The school's faculty and staff talked with parents to help them understand that the honors designation comes from data-based assessment. Over the course of a few years, Brashier staff created a pretest and correlated each student's test score with other scores to make an accurate assessment.

The honors courses are designed to be independent, with teachers walking a fine line of watching a student struggle and providing strong student support. These courses help students problem-solve independently, which they will need to do in college. The goal with honors and other courses is to support every student so they will be college- and career-ready before graduating high school. The key, staff say, is knowing when to step in and find more opportunities for students to problem-solve based on their prior learning. Brashier encourages both two-year certifications and four-year degrees.

Asked whether college acceptance is part of the learning outcomes for Brashier students, Principal Sinclair replied:

Yes, it is. We look around our economic setting, as Greenville is very high-tech manufacturing, health care, financial, and banking. I'm from a small textile town. Part of it is overcoming the stigma of manufacturing. Our approach to career is through college, to have an associate degree to stand out. There's a huge applicant pool for places like BMW, and our kids are competing with trained adults. We do not track associate degrees like other schools; we focus on the individual. Our college does the *Thirteenth Year*, lottery, scholarships, and Pell Grants. Our students get all, if not most, of that first year covered. But if going to four-year college is their goal, things are more diversified. We strive to make our students more marketable and employable in a competitive job environment.

Brashier staff also reiterates the need for associate degrees and two-year certificates during Friday Enrichment. The school brings in guest speakers such as college representatives from different departments. Speakers talk to students about why they might need an associate degree. In turn, this process helps parents understand the

return on investment when their students obtain a two-year certificate or degree. Brashier teachers also run freshman seminar courses to build college and career understanding within students' freshman portfolios. Job-shadowing days help students find an apprentice-like experience through the contacts they have made. They then report back to Brashier and document the skills and concepts they have learned from the worker they shadowed.

Description of Assessment and Evaluation

Brashier staff conduct a wide range of assessment, starting with pre-baseline testing at the beginning of students' first year, to gauge CCR. The academic leadership team performs assessment through a freshman baseline test and ACT WorkKeys. The leadership team uses the data to communicate with teachers and students and individualize learning experiences for each student. Additionally, leadership team members hold a data session at the beginning of each year to ensure teachers understand how to interpret and act on student data. Teachers are asked to build a picture of each student using data from end-of-course exams, high-stakes testing, and other forms of measurement. Students complete surveys evaluating their college instructors, and Brashier staff and Greenville Tech faculty meet to discuss how students are doing in their college courses.

Asked about the most significant findings from Brashier's CCR assessment and evaluation efforts, Sinclair said:

On our campus, the college calculus is a challenge. We tend to guide students through a formula-based approach to math, so our students were relying on our consistent tests. A good student tries to figure out how the test is going to look. So we were building assessments in a predictive way. Yet when they got to college, they were taught in a different way—algebra, trigonometry, etc. Our students were so frustrated. We looked at our math assessment. College courses used engineering-based math, so we moved to more application-based teaching and assessment. We got together with our math teacher to sit down to align the curriculum. We look at that every year to see how students deal with new skills. We teach a growth mindset.

The toughest challenges in assessing CCR programs and outcomes relate to Brashier's designation as a charter school. Brashier needs to develop more partnerships in the community, as it tends to be isolated because of its status and size. The school has moved away from meeting with partners regularly but plans to return to more consistent meetings. Funding for assessment is also challenging for such a small school. Despite some inherent obstacles, Brashier staff is resolute in its commitment to assessing students' performance."As Sinclair stated:

We all own it. We don't put as much emphasis on high-stakes testing, but on the program, not the teacher. Our art teacher is the only fine arts [instructor] we have in house. We have to ensure we spend our resources on mission-driven programs. Even art has to be assessed on college and career readiness and success. With art, there's a lot of planning—it's academic. We try to create no new bureaucracy. We don't have a district office over us. We try to be as efficient as we can.

Description of Student Impact

Brashier is committed to students' success. Sinclair describes how school leaders, teachers, and counselors are dedicated to ensuring all students leave school prepared for college and a career:

We fight the perception in the community that there's this magic pixie dust that prepares students, when it's really a result of hard work and commitment. One thing this year, we do have a mastery learning approach. Each student must have an 80% in their classes, and they have afterschool tutoring if they need help. Students can retake tests if they make less than an 80% to master that. The state has decided a 60% [grade] is passing, and we don't follow that. We could work with that 60% student using a growth mindset to stay engaged and get to 80%.

For Brashier, college readiness means creating a specific environment: From day one, all students are future college students, whether that means getting a certificate in welding or going through a four-year program.

Greenville Technical Charter High School



Data Collection Method: Interview School District: Greenville County
Number of Students: 432 School Website: http://www.gtchs.org

Grades: 9-12

Participant Names/Titles:

Mary Nell Anthony (Principal),

Amanda Burrow (Teacher, Career Specialist),

Ginger Cash (Assistant Principal of Student Services)

Description of Programs and Partnerships

We spoke with the principal, assistant principal, counselor, and a teacher at Greenville Technical Charter High School (GTCHS). Hearing the voices of people in different positions yielded unique narratives that illustrated promising practices in college and career readiness (CCR). An added benefit of interviewing multiple staff members is that they referred to one another for missing information. While the participants held different roles, they all echoed the school's mission and vision for CCR policy and practice. Also, as most of our interviews were with counselors and school leaders, having a teacher's perspective added depth to the narratives contained in this report. Teachers know what goes on in the classroom and what promising practices are most effective, but their narratives are silenced in educational research and policy at times.

When asked about one CCR program they were most proud of, the participants began by talking about the freshman transition course and weekly class schedule:

We do a few things for our program. The first thing we do is a freshman transition course to set students up for success. We also have an advisory program that is pretty phenomenal, in my opinion. Every Monday through Thursday, students are assigned an advisor that they loop with, basically. So if you're a student, you come in and you might be assigned to one teacher, and then you would be in a community of 12-15 students with that teacher all four years. On Mondays, students do an academic reporting reflection. Tuesdays, they have a study hall tutorial, and then Wednesdays and Thursdays, students alternate between a town hall and attending a talk by an outside speaker.

One example of outside speakers came during the 2016 election cycle, when members of the election

board visited the school to talk with students. Rather than reading about the Electoral College from a textbook, students got to engage with workers in the field to fully understand the voting process. Students were able to ask election board members questions, making for an interactive lesson. Besides helping hands-on, visual, auditory, and kinesthetic learners, this interactive approach also helps students with disabilities and students who are English speakers of other languages (ESOL).

Students at GTCHS could speak with election officials one-on-one or be observers, depending on their comfort level. They could also sign up to volunteer at polling stations throughout Greenville County, South Carolina, giving them more hands-on experience speaking with local voters. This allowed for a more in-depth understanding of local political processes. They also heard from college admissions advisors and even had one of the directors from the local MedEx program, a program offered by the Greenville Health System to create interest among young people in health care careers, give the Top 20 tips for high school students preparing their resumes and practicing for job interviews.

GTCHS students also learn about issues such as suicide prevention, drug addiction prevention, and healthy coping skills. In a climate in which one-third of college students will consider suicide at some point in their education, it is important that high school students learn positive coping mechanisms. High school staff can be vital to that effort, helping students build healthy coping mechanisms before they face higher levels of stress in college. This holistic approach ensures that students build the resilience they need to enter and graduate college.

Additionally, GTCHS students learn character education:

We're building our comprehensive character education program that will expose students to different aspects of that program over four years. That advisory program is key because it gives every student a trusted adult. We have student-led conferences in the fall and the IGP [Individual Graduation Plan in the spring. Student-led conferences are when we meet with all the parents for the first-quarter report card. They sit down with their student's advisor, who has compiled a portfolio—all the work the student's proudest of from their core and elective classes. So the students can talk through the work with their parents about how they've grown and how they can improve their learning. It's been the culture of our school since I've been here. It might be influenced by our charter. It was started with funding from the Bill and Melinda Gates Foundation, Coalition of Central Schools, National Consortium for Middle Colleges, and other funding sources from 18-20 years ago.

Connection With Greenville Technical College

In addition to innovative charter programs, GTCHS has the added benefit of being on Greenville Technical College's campus. Students are thus exposed to a wealth of professions, as technical colleges such Greenville Tech have several career-training programs and certificates. Students at GTCHS take classes with college students and can take full advantage of a collegiate environment. Students complete their senior projects on the campus in addition to internship components. With internships, students can select mentors in their career fields and partner with people in the community. Giving students agency to select mentors catered to their specific interest produces learning that is more meaningful and specialized.

These high school students start college courses in their sophomore year, and 60% of all GTCHS students in grades 10-12 took a college course during the 2015-2016 school year. The students benefit by getting early preparation for college, as well as saving money on tuition. They also benefit from the close access to expertise at Greenville Technical College; this year, one student partnered with a college professor to do a research report for her senior project.

As GTCHS is unique in the number of associate degrees granted, participants shared some of the school's many accomplishments:

We have three students graduating this year with associate degrees [in] science, art, and one student graduating with both science and art. Last year, we had six students graduate with associate degrees. We usually have between two to 10 that earn an associate degree, and that's hard work. They have to take additional courses for two summers to accomplish this task. Each year, our sophomores can take four classes, our juniors take six classes, and our seniors can take eight classes—then the additional two per summer. And we assist the students with financial help for those college classes by providing the books and help with some of the tuition costs.

Although GTCHS students are progressing toward their college goals, financing the dual enrollment and early college programs has its challenges:

In the past, 100% of the cost of college was covered for the students. But Greenville Tech's funding had to change our funding model. Now there is a cost associated with it. What I've proposed for the budget this year would be a \$50 fee for tuition and books. Greenville Tech partners with us in what's called the 13th Year. They use their alliance with the Middle College [National] Consortium so they have funds for graduates of the charter high schools for tuition assistance and scholarship programs. Students who graduate and go directly to Greenville Tech with suitable GPA and hours can attend college for free that year. A lot of students choose that route over going straight to a four-year school or the workforce.

Description of Vision and Goals

The accomplishments of GTCHS's staff and students would not be possible without dedication to the school's CCR vision and goals. Most of the students focus on college over careers, seeing the former as an integral step to a future career. For the past two years, GTCHS has had a 100% college application rate, as students receive help filling out applications, writing cover letters, and finding letters of recommendation. School staff provides college application workshops in the fall and invites college staff to the school for a college and career fair. While the school and its students focus on college preparation, they do not do so at the expense of career preparation. Rather, students learn important skills and qualifications essential to helping secure work during or after college.

This focus on college readiness leading to career readiness is explained as "the concept that we go with, regardless of what job you pick, you're going to need a postsecondary degree, whether that's a certification, associate degree, or bachelor's degree. Six months after graduation, most of our students are in some sort of postsecondary education. There's very few jobs today that don't require some degree." Recent estimates show that 79% of jobs in South Carolina and 80% of jobs nationally require some form of postsecondary education, and that percentage is expected to rise with each graduating class of high school seniors (Achieve, 2012; n.d.).

Though GTCHS staff and students do not only focus on career preparation, the staff plans to provide information through career exploration in the future:

We plan to implement a career day, ongoing projects, trying to increase the number of community mentors and the involvement of the community in grading senior projects. We are taking it to the next level, improving our processes. Our guidance center is working hard on creating handbooks, videos and how-to's for parents to ensure clear communication on what we can offer. In the advisory program, we're developing a comprehensive curriculum. Because students are at the college and loop, we want to ensure there are certain skills and enrichment opportunities, each year and over the four years. We're developing it by year one, two, three, and four.

Specifically, involving parents and giving them resources would allow future students to plan their career exploration and preparation at home as well as in school. While most parents work, the jobs their students will obtain have the potential to be vastly different, especially in the technology and science sectors. Therefore, it is important that schools provide parents with the resources to ensure their children can compete for jobs in a fast-paced, global economy. These factors make career preparation more important than in previous generations, and GTCHS staff plans to make career preparation and placement part of its future goals for students.

Description of Assessment and Evaluation

In addition to expanding its career exploration and preparation, GTCHS staff is planning more compre-

hensive assessments of its programs. One of the many challenges for first-year Principal Mary Nell Anthony is trying to pick up where the previous principal left off with assessment and evaluation:

Part of what we're doing is looking at the data of what we've been doing and what we can do. We do a data review at the end of each year to see the scholarship money—how much our students earn, how many are placed directly into jobs, careers, or the military, and colleges they're accepted to. We look at ACT Work Keys assessments to see whether students are prepared for ACT exams. One finding was that our first-year math readiness was lower than expected, so we're working on math curriculum alignment. Overall, our students are performing exceptionally, and there was no achievement gap in English. It takes time to collect data, ensure it's accurate, analyze it, then decide what to do with it. The assistant principal of instruction runs the data analysis. As a new principal, it's like drinking out of a fire hydrant.

Description of Student Impact

While GTCHS school leaders and counselors plan to bolster their career preparation and CCR assessment, students have already benefited from their school's commitment to CCR. For example, in the 2014-2015 school year, one student graduated with an associate degree in criminal justice with the goal of joining the military, then pursuing a career in law enforcement. GTCHS staff provided the student with resources early on in high school to start college early and set him aside from other applicants. This student was nominated by all three South Carolina military schools, which is uncommon. This student was accepted into the U.S. Air Force in 2016 and has successfully completed his first year there. He is evidence of the school's commitment to CCR, as his success encourages other students to study their passions and use their skills to find rewarding careers. It is not uncommon for former students to visit GTCHS to share their success stories with school leaders, counselors, and educators. If students ask for help achieving a certain career goal, someone at GTCHS is willing to help:

Several students right now are interested in a health career. Last year we had five applicants accepted into the Greenville Hospital MedEx program, and that's more than any other high school in the county, I believe. And we have the smallest high school in the county. Personalization of reaching their goals is probably the most impactful for students. We had a student this year that wanted to apply to [the University of] Oxford, so he had to take a special test. One of our guidance counselors went online, and we became an Oxford testing center so that any student could take the test and complete the application.

While GTCHS staff has helped many students reach their college and career goals, working in public education has its challenges. Participants explained that CCR is broad and often more philosophical than practical as a goal or framework. The challenges of preparing students for college and careers is complicated by the various definitions of CCR:

What does it really mean to be college- or career-ready? We examine that in a deep and meaningful way in communicating the message to the students that every career is valid. I see that sometimes that rhetoric can be that if you're not going to a four-year college or law school, it's not as good. We make sure our message is that every goal is valuable and attainable. Your contribution to society is equal, whether you're a doctor or a law enforcement officer. You can choose to be a university professor or major in theater. These are all valuable ways to contribute. I go over the entire early college program with all ninth-grade students and their parents.

As this administrator implied, college readiness is not simply attaining content knowledge or skills (Conley, 2012). Rather, it is also a mindset, a philosophy, and a predictor of one's future contributions to society. GTCHS offers Advanced Placement and dual enrollment options, increasing students' chance of enrolling and succeeding in postsecondary college after high school graduation (Tierney & Duncheon, 2015). Though originally developed for high-achieving students, accelerated learning programs are successful tactics for increasing college readiness (Hoffman, Vargas, Venezia, & Miller, 2007). These strategies have proven successful at GTCHS, where 100% of students apply to college.

Aiken County Career and Technology Center



At a Glance - Aiken County Career and Technology Center

Data Collection Method: Case Study Participant Name: William Hudson

Grades: 9-12

School District: Aiken County

Participant Title: Director of Programs

and Partnerships

School Website: www.acpsd.net/acctc

Description of Programs and Partnerships

Aiken County Career and Technology Center (ACCTC) has a unique apprenticeship program that partners with a local manufacturer, MTU America. This partnership provides specialized education and training to high school students to prepare them for postsecondary careers and educational opportunities.

The success of the program is rooted in its stakeholders, all of whom are highly invested and thus acquire substantial benefits. The key stakeholders are parents, educators, industry partners and, most importantly, students, who earn valuable training, experience, and certification to launch them into rewarding careers. Parents gain assurance that their students can attain gainful employment and contribute financially toward further education and training. The high level of students who successfully attain meaningful employment or further their education validates the work of educators, who witness the outcome of their efforts. Industry partners can fill positions requiring applicants with specialized knowledge and skills. The positive results from this program indicate the power of college and career readiness (CCR) in preparing students for the future. Seeing these outcomes has caused us to pursue more similar opportunities in which students can participate.

The ACCTC apprenticeship program was one of the first high school programs of its kind registered through the U.S. Department of Commerce. Consequently, it has been recognized nationally on several occasions and is used as a model for other programs. In South Carolina alone, more than 100 apprenticeship programs have been established. The characteristics of the program, which adapts German-style apprenticeships, are unique as high school students work alongside veteran employees in the work environment. Many facets of the apprenticeship program lend to its uniqueness. One of the first signs of distinction came at its creation when the school was approached by MTU, a local German-based manufacturer, which sought to meet a portion of its workforce needs through a traditional, German-modeled training system.

This deviates from the norm because most often, school systems pursue business and industry partners to establish such partnerships. The program employs an application-based selection process that allows students, the school, and the employer to choose one another in hopes of producing the best possible selection of candidates. Further, certifications from two accrediting bodies, the National Institute for Metalworking Skills and Skilled Metalworker through the German American Chamber of Commerce, are available to students. With these certifications, students are better qualified to obtain jobs in the United States and Europe, particularly with German corporations operating in the United States.

At the program's inception, the training and educational attributes were different from most of this type. Since then, the apprenticeship has served as a model for many other programs. Students spend two days a week working at the job site and three days in the classroom and shop at the career center on campus. Hours on the job are compensated, so students earn money in high school while receiving training. They also work full-time much of the summer, gaining even more valuable experience. At work, students are assigned a mentor by the employer to provide guidance and cultivate appropriate soft skills. These program attributes contribute toward the development of well-rounded students who are better candidates for employment or additional education and training.

Description of Vision and Goals

We are working to increase the number of work-based learning opportunities for students in the district. Those include internships, structured field trips, virtual and live job shadowings, and apprenticeships. Our goal is at least one work-based learning experience for every student in the district before graduation. These experiences are becoming more important as our state continues to grow and accumulate high-tech manufacturers. As a result, South Carolina's Department of Education is quickly moving to adopt accountability measures that include some form of work-based learning for high school students. Our district has also recognized the importance of these experiences for students and accordingly has emphasized locating venues and creating them. We are moving forward for the benefit of students and to get ahead of the state mandate.

To ensure these opportunities were available, we had to evaluate our offerings and data collection processes. The conclusion of the evaluation and current workforce needs caused us to make changes. We transitioned responsibility for documenting student activities from individual schools to a district-level staffer, giving us better ability to track and compare progress at the school level. At ACCTC, it was also important to continue pursuing apprenticeships, given the success of our partnership with MTU America. Our area's workforce needs have necessitated partnerships with local business and industry to produce more apprenticeship programs. This synergy has led to the creation of a second apprenticeship program and a meeting with several other manufacturers to discuss even more.

Description of Program Assessment and Evaluation

Our school uses multiple assessment and evaluation measures, both formative and summative, to determine the effectiveness of the apprenticeship program and other CCR goals. During instructional delivery, teacher assessment is integral to ensure that students receive quality instruction and training. Likewise, teachers use formative assessment to track student progress toward predetermined learning objectives. These measures help to better guarantee student outcomes on summative assessment measures that ultimately determine levels of success.

The initial student assessment measure for any ACCTC program is student retention. Our center strives to maintain at least 90% retention for each program. The MTU apprenticeship program operates within our machine-tool technology program and only has six slots per year. Consequently, the acceptable retention rate for this program has been set at 83%. Students participating in the apprenticeship program undergo quarterly evaluations by the employer to gauge soft-skills attainment and technical job performance.

Success of these assessment and evaluation measures is measured by several factors that also serve as state accountability marks, including program completion, professional certifications earned, and placement rate. Although not all students receive employer evaluations, our center has still increased the number of professional

certifications earned by students. The MTU program is unique in that participants can earn two certifications, and many do. The program also serves as a model to help prepare students for the workplace or two- or fouryear college. To date, several participants have taken advantage of all of those opportunities. It is now common for all students who complete the program to choose at least one of those options, with those choosing to go directly to work obtaining jobs in this field.

The MTU apprenticeship program has introduced areas where changes can be made in other programs to improve student outcomes. Emphasis has been placed on attaining certifications, as viable certification increases the odds of gaining meaningful, related employment. As such, we are moving to have every program at ACCTC offer a federally or industry recognized credential. It is our goal to position every student to transition successfully into the workplace, so they can then self-fund additional education and training. The importance of the input and participation of business and industry partners has become particularly evident. The impact of apprenticeships on students greatly enhances their experience and increases their employability. They gain invaluable real-world experience and mentorship, moving them ahead of students who have not had the same opportunities. Therefore, we are moving forward to incorporate as much interaction as possible with students and potential employers in work-type situations.

The challenges to implementing effective CCR programs are numerous. Our most prevalent problem is a lack of stafffrom the loss of two integral positions. The first was our middle school liaison, who was responsible for all career and technology marketing and interest-generation measures. The other was the career and education technology coordinator, who handled all data functions. Because of the losses, new systems must be created to take on some of that workload. The three remaining staffers must absorb these residual tasks. Another obstacle is lacking the transportation to quickly increase the number of work-based learning opportunities available to students. We currently only have a mini-bus and one driver for more than 500 students. Finally, in order to meet our goal, we will need to pay for many more certification exams, which will become cost-prohibitive.

Description of Student Impact

Students have derived a wide array of benefits from our CCR efforts. At 98%, ACCTC's graduation rate is near perfect. For several years, all of the MTU apprenticeship students have gained employment in the industry with a local manufacturer or attended a two- or four-year college upon graduation. The apprenticeship program with MTU has also led to the creation of another program and will soon lead to others. This, combined with other actions, continues to raise the number of authentic, work-based learning opportunities available to ACCTC students. The number of professional certifications earned by students continues to rise each year. All of these contribute to students who are better prepared for and more attractive to business and industry recruiters and institutions of higher learning.

Many special-education students are enrolled in our programs, having been introduced to offerings with other 10th-grade students through our exploratory course. Sometimes guidance counselors enroll them by customary means, but others are referred directly through special education. The exploratory program allows those students to try out career options with other general education peers. This course also lets instructors become familiar with the special-education students and any accommodations they require. Instructors can identify behaviors, accommodations, or disabilities that might cause safety concerns or inhibit a student's potential for success. This process has produced several success stories in which students gained certifications or job skills that led to unlikely, yet well-paying employment opportunities.

Another avenue that has attracted non-traditional students to CCR programming is MTU Girls' Day. Our apprenticeship program partner sponsors and organizes a daylong event to heighten awareness of STEM career options with middle school girls, giving students get a hands-on, first-person view of the many career fields available in manufacturing. The activity works to dispel myths and create a positive level of interest.

It is still a widely held belief that a college degree is the only route to career success, and parents receive and readily accept that message. This stance is further perpetuated by grading scales that offer more quality points for high-rigor academic classes but do not allow parallel standing for equally rigorous career courses. Consequently, our most difficult challenge in career and technology education is fighting the stigma that career and technology education is not for college-bound students, and we still have to address this mindset with a few guidance counselors. In many cases, quality students are being steered away from our programs when, in fact, these programs may provide the most career-wise and financially sound route to a successful future.

To combat these disparate viewpoints, our district has moved career development facilitators to the middle school level to emphasize the viability of career courses and establish rapport with parents earlier in the educational process. Our hope is to develop a genuine interest in and demonstrate the value of CCR. We attempt to put our programs in front of parents and students in as many venues as possible, knowing that increasing exposure creates more contacts with potential participants. We also have been more active in highlighting the successes of our programs, such as apprenticeships, in as many local media outlets as possible.

Finally, we are adding more cutting-edge programs that meet the workforce needs of our community. This is particularly wise, as parents and other community members are in some way touched or affected by workforce deficiencies. These measures are helping us change opinions about CCR and boosting the positive impact of career and technology education.

Center for Advanced Technical Studies



At a Glance - Center for Advanced Technical Studies

Data Collection Method: Interview Number of Students: 1,100

mber of Students: 1,100 Participant Title: Principal

Grades: 9-12 School Website: www.lexrich5.org/CATS

Participant Name: Dr. Bob Couch

School District: Lexington-Richland County 5

A Model School of the Future

On August 19, 2012, the Center for Advanced Technical Studies opened its doors to 600 students in Lexington and Richland School District 5, and those students walked into a future school. The center's former principal, Dr. Bob Couch, outlines the school's academic history:

The center gives district students a choice by remaining enrolled in their high school and taking their major course of study at the center in a three-hour block of instruction every other day. [In] 2012-2013, we had 140 honors and Advanced Placement students, with nine Merit Scholar finalists. The fall enrollment for 2014-2015 was 965 students, with 42 percent honors and AP-level students. The student enrollment increased to 1,100 in 2015-2016, replacing 250 graduates.

Description of Programs and Partnerships

Asked to describe one college and career readiness (CCR) program or course he was most proud of, Couch discussed CCR's broad, inclusive approach to education, saying that although many schools follow the traditional definition, the college-to-career preparation ratio can be a bit off for some. He said some schools focus on either college or career instead of training their efforts in both arenas. "Today's workforce and global marketplace requires all students to have a set of knowledge and skills to address the intelligence economy," Couch said.

He explained that all students should be prepared for the workforce whether they enter directly from high school, during college, or after college. The idea that all students need workforce skills, such as a high-level ability to interact with others and work well in a team, speaks to the increasing cost of higher education and the need for students to work. Many would not be able to attend school without working because of rising inflation and a stagnant minimum wage. Couch went on to explain particular programs related to his school's specific CCR approach, including the school's latest projects team with Santee Cooper, Verizon, and Midlands Technical College:

Our latest project is a partnership with Santee Cooper, a local electric company, and Pitsco Education, a national organization. We are \$100,000 project-funded by them, so we have two major solar panels for our clean-energy program. All solar power flows into our grid to power the school. Students study all aspects of solar power and share it with the electrical company and Santee Cooper. Another partnership, with Verizon, is a summer camp with 60 female rising eighth- and ninth-graders interested in STEM. We invite women like pilots and engineers to speak with these young ladies to build interest in STEM fields.

Through these partnerships, students get hands-on experience working with solar panels so the school can power itself. They also see first-hand that women can be scientists, while also hearing from experts in various fields from all over the country. These experts have included guest speakers from Harvard University, Carnegie Mellon University, and The Department of Labor from Washington, D.C. Students have the opportunity to interact with a variety of people; the center counts approximately 10,000 visitors every year. Interacting with these visitors helps students develop a growth mindset about career preparation, a positive outlook that can help them reach their goals.

Such partnerships allow for high-level innovation, preparing students for an ever-changing workforce, especially in science and technology. According to Couch:

The design of the programs enables the students to be innovative learners and problem-solvers. The learning environment transfers the responsibility of learning to the students, who become the owners of their ideas learned through project-driven activities. Students are required to complete a capstone project as part of their major. This learning strategy provides teachers and students the opportunity to use their imagination, [creativity], and innovation to develop solutions to problems in health care, energy, animal science, aerospace engineering, film production, construction industry, advanced manufacturing, and in the 3-D and virtual design of products.

Description of Vision and Goals

The center is designed to prepare every student to graduate college- and career-ready, enter the global workforce, and be a successful, contributing citizen in solving problems. Couch illustrated the school's goals by connecting policy to practice:

At the center, the mission is to offer high-wage and high-tech programs that meet global academic and technical standards, integrate academic and technical studies, and provide students a seamless transition through a PK-20 educational pathway. Dual-credit opportunities prepare every student with a foundation to be successful after high school. The core value of the center's purpose is to create a learning environment where teachers and students are free to explore and take calculated risks, and failure is part of problem-solving and critical thinking. The core belief at the center is "Create the future by challenging the impossible."

The school's leaders and educators stay away from strict program definition, rather seeing CCR as an integrated approach influenced by international programs and practices. As principal, Couch traveled the globe to find successful and promising practices in CCR to incorporate into his school's vision for student success. He visited one high-technology high school in San Diego, California, and another, Thomas Jefferson High School in Virginia, both of which he used to identify successful American models of CCR practice.

Then Couch traveled to Denmark, where he served on a U.S.-Denmark delegation board as a secondary school representative for five years. This allowed him to visit schools abroad and see the hands-on, collaborative approach taken by Danish schools. In Spain and France, two countries with high college-going and completion rates compared with the United States, Couch saw the European Union's approach to CCR. In comparing other American and international approaches to CCR to those of South Carolina schools, Couch found differences and similarities. He asked, "What is the common thread that moves through their educational system that made things different [from his school]?"

Answering this question helped the school leader formulate an inclusive CCR platform at the Center

for Advanced Technical Studies. What makes these programs cohesive is that they each take a cultural and instructional approach that enables students to graduate high school prepared for both college and a career. For example, educators limit lectures to 10 minutes per class to ensure students have time for hands-on work, public speaking, group work, and art. This approach caters to students' various learning styles, including students with disabilities, whereas pure lectures would cater only to auditory learners. Its success is evident in the school's on-time graduation rates, which are the same for general-education students and students with disabilities: 99% according to Crouch. This rate contrasts with the average rate of students with disabilities in South Carolina who graduate from high school in four years (30.5%; U. S. News & World Report, 2017).

Speaking more to his school's approach to CCR, Couch explained the importance of learning ownership: What we look at is not about program, it's about process. Procedural learning, taking ownership of your learning, if you complete those tasks in your program, you will be successful in it. So it's, I can be a mature learner, in that I'm responsible for what I am supposed to do. I'm responsible for my behavior to make sure it gets done and I'm accountable for whatever the result is. I own it. So it's owning learning, behavior, and results, and it's not about blaming someone else or casting aspersions of responsibilities somewhere else.

Couch shared some statistics that illustrate the success of the school's approach: "50% of our students are AP/honors-level students. We have about 15% special-education students with IEPs [individualized education plans]. We have about 100 students, or 10%, who are [classified as] 504, needing extra help in math and reading. Then we have 38% that are free and reduced lunch. Our graduation rate runs about 99%."

Description of Assessment and Evaluation

Asked about the school's method for assessing and evaluating CCR programs, initiatives, or partnerships, Couch focused on teacher evaluation, saying that "traditional observation does not work with teachers." At the Center for Advanced Technical Studies, administrators tasked with evaluating teachers do so with a conscious effort to reduce stress on educators. When teachers are evaluated, the idea is to avoid "giving them heartburn" by departing from outdated rubrics and other metrics that do not match the school's vision. Instead of focusing on the product or outcomes of learning, such as current student grades or how much content is covered, evaluation takes a learning process-centered approach.

While student grades and content coverage are evaluated at other times, they do not always accurately correspond with how well an educator teaches, Couch said. An innovative and strategic approach to evaluation follows the structure of ensuring a teacher does not lecture more than 10 minutes, something that encourages group work and student participation. While some traditional evaluation methods would suggest writing up a teacher for sitting down, the center's methods do not suggest marking sitting as an infraction, as long as the teacher is available to students. Some students, in fact, may learn best while sitting on the floor with their teacher, as it balances the power dynamic in the typical student-teacher relationship.

Teachers are encouraged to walk around the room and to provide appropriate levels of assistance through every lesson. Teachers use a scaffolding technique in which they slowly dial back support and direction until students can complete lessons and tasks individually. When students ask for help, teachers are instructed not to run to them obediently, so students learn to problem-solve on their own. The main aspect of the center's evaluation process is looking for what the students are doing, instead of the teacher. As Couch explained, "If the teachers have done their job, the students are engaged in their projects."

Couch also explained the process for assessing media and film students, which includes an Oscars-like ceremony celebrating achievement. Instead of adding more testing to the already high number of state- and federal-mandated tests, Center students partake in a fun, red-carpet night that showcases their work:

Our media/film program requires a capstone project where students complete a two- to five-minute film. That means writing the film, acting in it, filming it, editing, and producing it. We have two film viewings at the school in a public venue with 200 people, including parents and teachers. Then we selected the top five films and replicated Oscar night with red carpet—the students In addition to creative internal assessment, the center uses outside assessment data to improve policy and practice. The center is reviewed by the Southern Regional Educational Board (SREB), which named it one of five platinum recognition schools in 2015 in South Carolina. It is also recognized by the National School Boards Association (NSBA). The SREB and NSBA reviewed all the test data to determine the recognition based on independent evaluation. For school leaders and educators, that outside feedback validates what they are doing to prepare students for college and careers, in addition to the glowing student feedback they receive each year.

Participants were asked about the challenges of evaluating and justifying their innovative approaches to CCR. Couch said taking an innovative approach is not easy:

People say we're just flying by the seat of our pants. But innovation breaks down the barriers of these traditions of committees that study it to death. I think committees kill dreams. I challenge the traditional and I get pushback from the system. They put up barriers because we're going too fast or outside the mission. To our advantage, the superintendent and the board support our approach 100%. But we always have a funding barrier. How do you maintain innovation, growth, and development with structured funding? You have to go outside into the community. Since I started here in 2011, \$350,000 has been donated to our school.

Description of Student Impact

Asked how students have benefited from the center's commitment to CCR, Couch explained the strategic class and advisement schedule. The center's educators, counselors, and school leaders meet with 300 students each day. An A/B block schedule runs three hours a day, every other day, enabling students to meet with staff. Educators, counselors, and administrators meet with students and go over their individualized education plans (IEPs), the learning process, and the learning strategy specific to the center's mission. The staff approaches teaching and advising by expecting students to fail and even telling them they want them to fail. This approach reinforces the educational process based on problem solving and critical thinking, two skills mentioned frequently by workforce-hiring staff who lack entry-level workers.

The idea behind wanting students to fail is not to make them feel bad, rather to fail better and understand what resilience truly means—to succeed in the face of adversity. Staff members do not expect students to be perfect, then knock them down every time they are not; the school espouses a vision in which learning is attempting to be imperfect and being comfortable with mistakes in a trial-and-error approach. The center staff feels that the only way to create an environment conducive to exploration, innovation, and creativity is to break away from the traditional construct of perfection as the ultimate goal of education. Couch describes this approach as process- and project-based, with students expected to use high-level critical thinking from the moment they enter the school:

The average ninth-grader coming in here that is not a mature learner, they're not going to be able to adjust. There's too much freedom here. We had a program here for ninth-graders, took it out, put it in middle school because we found it worked better with middle school guidance. We push the students in a direction where they're able to accomplish something that they probably thought they couldn't, or wouldn't, accomplish until later.

Couch also discussed the state of CCR in our current educational climate:

I have two daughters who teach, so I'm mindful of what they face. There's so much focus on making teachers accountable to testing that they can't innovate. If they go outside the lines, they're pulled back. You would have higher test scores if your principal encouraged and challenged you to do things differently. When you can use your academic core and apply it, you learn more and it becomes more permanent. I'm anti-test. I think all the testing ought to be for certifications. That's one reason some universities are going away from the SAT in favor of other measures.

The school's success, in terms of a 99% graduation rate and successful teaching strategies for students with disabilities, is impressive, considering it is a public school with dwindling state appropriations and funding. Couch ascribes this success to one of the school's mantras: "If you stay in your office and walk the halls, then you'll maintain a school. If you get in your car and go out in the community, then you will build a school."

Fairfield Career and Technology Center



At a Glance - Fairfield Career and Technology Center

Data Collection Method: Case Study Grades: 9-12

Written by: J. Patty Reid School District: Fairfield County

Culinary Arts Instructor

Number of Students: 445

School Website:

sites.google.com/a/fcsdchromebooks.us/fairfield-career-and-technology-center/home

Description of Programs and Partnerships

Fairfield Career and Technology Center (FCTC) is proud to present its success with the culinary arts program as a successful college and career readiness (CCR) initiative. This program is still a work in progress and continues to grow with industry requirements, community needs, and global demands.

Our staff, district, and community have supported this exemplary program by becoming a ProStart School (a nationwide, two-year high school program sponsored by the National Restaurant Association aimed at developing future restaurant and food service leaders) and building a new school, which includes a state-of-the-art commercial kitchen that is beyond high school level and on par with college-level culinary kitchens. This kitchen has contributed to our school's overall commitment to CCR by allowing students to gain skills and experience to apply in college and their future career, and with certifications for the culinary industry and college. Certifications are important for students as certificate holders earn 20 percent more, on average, than high school graduates (Carnevale, Rose, & Hanson, 2012).

Culinary arts, as well as other Career and Technology Education (CATE) programs at our school, are innovative in giving our students real-life experiences that will apply in work, career, college, and community. We are located in a rural setting in Winnsboro, South Carolina, and at times have found it challenging to help students get the skills, behaviors, and experiences that industry and colleges desire. We challenged ourselves to be creative and give our students hands-on, soft-skill learning experiences.

The first step began as a weekly activity. We simply required students to shake hands properly, including eye contact, a handshake, and a greeting returned to the instructor, once a week for a grade. This became part of the school culture as the way to greet students at the door when they arrived to class. We also wanted students to be able to do this with others and apply this lesson directly to the workplace.

Because we are a career center, the whole staff works with students toward completing projects. We had

We set up outside our school and provided booths for all the participating programs. People from the culinary program sold hot dogs, participants in the masonry program sold flower pots, and members of the carpentry department sold dog houses. In addition, members from the horticulture program sold flowers, and small-animal care program participants displayed baby chicks at our first Expo. Our students ran their own booths and were responsible, hardworking, and skilled. The community, teachers, district office, and parents all came to see our students in action.

It is now a monthly, student-driven event. Students usually choose something such as providing shaved ice or other food-related items. Each month we add more events, and more programs are participating. We are astonished that something so simple has turned out to be such a success and has benefited our students so much. These are skills they will apply throughout their lives. Each month gave us opportunities to improve and create better experiences.

Our last Expo of the year included a local vendor. We thought about how great it was to have business members come in and show our students what they do. It was also beneficial when the business members saw our students at work. We decided to have two vendors at each future Student Expo, one business chosen by the students and one chosen by staff. We want it to be student-driven, while also exposing students to different businesses. This choice will hopefully lead to our students get hired to work or intern for the businesses present at the Expo. We will address the local Chamber of Commerce this year and present our project. We also have shared this project at the Business & Education Summit in Greenville and at the Southern Regional Education Board (SREB) Conference in Nashville, Tennessee.

Description of Vision and Goals

This year I plan to further expand on the soft skills and certifications for students. I am starting a community meal in addition to our Student Expo each month. I want the students to work in the kitchen and dining room as they would in a restaurant to get the full experience. This will encompass job interviews, customer service, management, and housework skills. Students will meet all standards of food service as well as the South Carolina *Culinary Standards and Competencies*. Each month it will be open to the entire community, but we will do special invites to targeted groups (e.g., college representatives, chefs, Chamber of Commerce members, government representatives, restaurant association representatives, local food services, school advisory committees, the district office and school board members, and others in the community). Our goal is to rotate duties and be graded on performance in all areas as well as testing and receiving food handler permits and *ServSafe Food Protection Manager Certifications*. We feel strongly that adding the application and interview component each time students rotate through different positions will help them gain necessary CCR skills. Students who complete their training also create a virtual portfolio for job and college use.

The mission of FCTC is to prepare students to achieve excellence in a global society. We may be a small school, but we deliver a big experience to our students. Being a small, rural school has had challenges, but we believe in embracing what we have and building to use every opportunity to give the students what they need to go anywhere and be successful. Our staff has participated in SREB conferences yearly to help gauge the changes needed to help students compete with those from larger and often better-funded schools.

Every year, we challenge ourselves to be the teachers who pave the road for every child's success. When SREB and our advisory committees said students primarily lacked soft skills, we worked together to bridge the gap, focusing on our subject area and understanding the students and our community. We realized we had to create opportunities for students to engage in soft skills and customer service, but it did not have to cost a lot. We started with handshakes, greetings, and eye contact and moved to interaction with customers, and now applications, interviews, a virtual portfolio, and running a restaurant monthly.

We use these programs to create and communicate a culture of success. Adding the virtual portfolio will help encourage the drive for college acceptance. We will include financial aid information as well as college applications and acceptance letters. Students are added to a Career Board when they bring in their first payroll stub or college acceptance letter. This will be framed and hung up again at the beginning of next year for all our new students to see and understand the culture of our school. We will also, for the first time, host a Draft Day. Similar in style to professional football's NFL Draft, colleges, businesses, financial aid officers, and others will be able to draft our seniors. Staff will dress like cheerleaders and players and serve food tailgate-style.

Among our goals for our students, we search for 100% student placement. Some graduating students will choose a military track or college or directly enter the workforce. Many will be placed into entry-level jobs, job shadowing, or experience internships before graduation. I am proud to say our seniors were awarded more than \$9 million in scholarships this year. Additionally, we strive to have our students commit to goals after graduation. One step is an interest survey; they also write commitment letters for their post-graduation goals.

Description of Assessment and Evaluation

All teaching objectives of the programs at FCTC are based on state standards and competencies from the S.C. Department of Education. Our school participates in High Schools That Work, a national initiative focused on improving student achievement by using research-proven strategies. We also are evaluated yearly and evaluate overall teaching in-depth every three years. Our individual programs have advisory committees that work closely with each program and include representatives from industry, business, community, parents, former students, and higher education. They can add to standards to keep programs in touch with CCR.

We have struggled in some ways, including securing a teacher for our certified nursing assistant (CNA) program and maintaining sufficient class retention. It is difficult to recruit and hire a teacher for the CNA program because we cannot compete with the salaries the health care industry offers. Fortunately, we do have a CNA teacher under contract for this year. To address class retention, we realized scheduling for some classes clashed with Advanced Placement (AP) class schedules. We are offering different times for those classes, and this year's class rosters are up by 10%. We also have updated our class offerings in recent years, adding firefighting, barbering, robotics, and small-animal care courses. We have a STEM class for middle and high school students, and our CNA program instructor trains for STEM careers. We are pushing for certification in these areas when students complete the programs.

Our rural location poses some additional challenges, one of the toughest of which is the lack of work opportunities in the area for students upon training and completion. Another obstacle is finding housing for students who go to college. Many two-year schools do not offer housing; in our case, we are sometimes too far from the schools for students to commute, and local housing near the colleges is too expensive. These challenges impact traditional measures of student success, such as job placement or college attendance.

Another challenge facing our staff related to assessment is that the state standards competencies list grows while class time does not. Teachers map out their objectives and may have to really push to complete them. This was compounded when FCTC was at its former location, as we were losing almost 60 minutes a day busing from the high school to our Career Center. Fortunately, we gained a small amount of class time with our new school being located between the middle and high schools.

We often take on additional job responsibilities to give our students the best learning practices and experiences. Our monthly Student Expo is one example. We realized after the second Expo that it became easier, student-driven and operated, and by the end of the year it was no longer a challenge or a hardship. We always face funding limits—there are never enough funds to accomplish what is needed and sometimes mandated. We brainstorm together and usually find a way to make the best experience possible. We are currently staffed for the upcoming year. The FCTC Teacher of the Year meets with our school superintendent to discuss ideas for improvement and, as a district, we are trying to address issues of teacher shortages as well as retention.

Two years ago, our school lacked community involvement. However, the community believed in the Career Center, as voters supported a referendum to build a new Career and Technology Center. Our challenge seemed to be to get members of the community physically in the building, but we are changing that culture day by day and month by month. To address insufficient resources, student travel is difficult, costly, and heavily restricted. This will be an issue I try to work on this year. Partnerships with businesses and industry in our area are great but scarce, as businesses often have high demands put on them by the community.

Description of Student Impact

Our students have benefited from our school's commitment to CCR so much over the past two years. The culture of our school has changed, and so have expectations of students and staff. The students expect jobs, careers, college opportunities, and certifications. Teachers expect the students to further their education and careers without exceptions. Teachers no longer ask "Are you going to college?" but rather "Where have you been accepted to attend college?"

Our staff works with special-education educators and students by holding individualized education plan meetings and addressing each student's needs. Student placement is carefully chosen by ability and drive for the program of interest. Students are evaluated weekly, with some using a shadow teacher to help with this transition. Instruction for English speakers of other languages has not been necessary; however, a translator and representative at the district level has been used to communicate with some parents on occasion.

We started a student-shadow program two years ago with at-risk students in some programs. Students who were at risk of failing from the middle and high school levels were rotated through our programs for a week at a time. These students double up on many subjects to try to get to grade level. To attend our classes, they must pass the core subjects, get to grade level, and maintain good behavior and attendance. We are trying to transition them by early high school level and give them an interest in CCR.

Our largest misconception about CCR is that many school counselors and high school educators think the educational offerings at FCTC are for students who will not go to college. This culture has changed some, but not enough. Now that many students actually apply, attend, and accept scholarships in our fields, some counselors have begun to see that we offer more than just job training or "McDonald's University." Some of our toughest challenges with CCR programs remain in changing the culture.

We have changed the culture in our school, however, and it truly makes a difference. Changing people's mindset and what they have experienced for so long is difficult. I realized some families had generations that had never seen a family member graduate from high school. Your environment, along with what you see, experience, and are told by others, impacts your life and actions. I take every opportunity I get to have a former successful student to come talk to my students, either in person or by teleconference. Seeing is believing, and seeing someone just like yourself be successful is even better.

This upcoming year, our school's programs will

- improve and commit to continue the monthly Student Expo;
- begin a monthly *Community Meal*;
- create Commitment Graffiti, as students and alumni will sign a board when they have a payroll stub and/or acceptance letter to a college;
- begin a Draft Day for Seniors to work on financial aid and applications for jobs and college;
- build a virtual portfolio for career and college, a place the student can show work and display related information, references, their resume, service-learning hours, certifications, and achievements;
- award national certifications for students in their program of study; and
- begin brainstorming solutions to our student transportation issues—an SUV, equipment trailers, or possibly a food truck.

In closing, so much is about experiences. FCTC changed its culture to give students better experiences to prepare them for career and college readiness. We may be small, but we are "going big" to enable students to succeed in an avenue they choose. It may take more work and creativity to make it happen, but it is all worth it.

Tri-County Technical College



At a Glance - Tri-County Technical College

Data Collection Method: Interview Number of Students: 6,128 Institution Type: Two-year College Location: Fairfield County Participant: Amanda Blanton
Participant Title: Director of High School
Engagement and Outreach
School Website: www.tctc.edu

Description of Programs and Partnerships

We reached out to Tri-County Technical College (TCTC) in Pendleton, South Carolina to better understand college and career pathways for middle and high school students. This unique perspective benefited our research, as we learned about the role of the technical college in both college and career preparation. When asked about one college and career readiness (CCR) program or course that exemplifies the school's CCR goals, Amanda Blanton, the director of high school engagement and outreach, said of their dual enrollment program:

We partner with seven school districts in Anderson, Oconee, and Pickens counties. We have a partnership with dual enrollment called *Career Pathways for Success*. Students from these school districts participate and take courses in either university transfer or in one of our technical divisions. We have developed career pathways for students interested in coming to Tri-County after high school. These pathways provide students with an understanding of the actual program, labor market, and salary information.

In addition, high school students learn how many college credit hours they need to earn in high school in order to afford college down the road. Students have opportunities to explore and prepare for pathways to four-year universities. TCTC has partnerships and relationships with Southern Wesleyan University, Clemson University, Anderson University, and other colleges throughout the state. These options show students they can enroll at TCTC and later continue working toward a bachelor's degree without loss of credit. Depending on the program and articulation agreements TCTC has with a college, students can continue toward their associate degree at a four-year institution.

In addition to working toward associate and bachelor's degrees, high school and college students at TCTC receive strong support from specific service areas in TCTC's three counties, as well as school districts and members of local businesses and industries. Members of these organizations spend time in school talking to students about their future college and career pathways. In addition to TCTC's dual enrollment program, Career

TCTC's objective is to help students to stay in college after high school to complete their associate degree, Blanton said:

We have developed these pathways to be stackable, so students can get a credential—a certificate—in mechatronics, industrial electronics, and welding. Students could actually get more than one certificate before they graduate high school, depending on when they start their pathway. These programs in engineering and industrial technology, we actually have money some from the state of South Carolina because it's considered a model pathway that helps with economic development. In our area, there are so many jobs in these fields, so we stay very busy. We had over 700 students in dual enrollment this fall, and 114 students in a technical career pathway, which was a funded STEM pathway.

Description of Vision and Goals

Blanton also talked about TCTC's current CCR programs and the motivation behind these projects. TCTC's pathways are funded by the state, and staff members focus on growing them. They also work with surrounding school districts to better align high school curricula in similar fields so students can transition seamlessly from high school to college. With aligned curricula, students can take two years of high school subjects such as mechatronics and get a certificate. With the abundance of available jobs in STEM fields, TCTC needs 200 students in these majors to fill those positions. Attracting and retaining students in STEM fields, aligning high school and college curricula, and working with several state- and district-level educators and school leaders is challenging, however. It requires a lot of curriculum work between the college and school districts to ensure they are aligned. This type of work is never finished.

As TCTC is the only college in our collection of cases, we asked Blanton what advice about CCR she would give middle and high school educators, counselors, and school leaders from her perspective:

We wish they had a better understanding of economic development, career opportunities, and [realized] that a four-year bachelor's degree is not the only way for students to be successful. There are many jobs available that do not require a four-year degree; they might need a two-year certificate. Students might have a better chance of getting a well-paying job out of college with a certificate [than] with a four-year degree. We have four days of intense information focusing on the engineering, health, and business divisions to educate counselors about local jobs. Most educators come from four-year pathways, so we aren't exposed to two-year schools. We need to expose teachers and students to all options, and it's challenging.

Blanton further clarified the problem with the current CCR definition, saying it devalues the benefits of technical colleges and certificates:

The definition of CCR is being able to succeed/pass a college course without remediation. We're a technical college, so yes, we remediate. We give our Accuplacer placement assessment to all high school juniors in the fall. We do workshops with them before and after and explain to them what their scores mean. Juniors get this information and have time to act before they enter college. If they need remediation, they need to know early in high school so they can take their high school courses more seriously, and so they don't need remediation in college. We want them to understand what college placement is. Many students wait until college to take pre-college courses, and that's a waste of time and money.

Blanton and other TCTC staff members say it is important for students to have college pathway information early in high school. TCTC staff discuss these pathways with students and offer additional guidance, support,

and resources. The staff are thankful for the school districts that spend time with college staff and high school students to explain the intricate process of college and career pathways. While Blanton says high school staff and students hear about these pathways from school counselors, she feels it is important to get information from the college side, as well.

Students must deal with lots of challenges and a wealth of information. Graduating high school with a high GPA or a LIFE Scholarship does not make them college-ready, as even students who earn LIFE Scholarships are sometimes placed in remedial college courses. Students need to take their courses seriously while they are in high school to avoid having to use financial aid. LIFE Scholarships also do not cover pre-college courses, something students need to understand. TCTC staff works with its district program, The College Ready Initiative, with juniors each fall. The idea is for students who are college-ready and interested in TCTC's dual enrollment pathways to begin a pathway early in their senior year. Blanton explained TCTC's success stemming from this focus on CCR pathways:

The college overall has almost a 90% job placement rate for students who do not transfer. Our largest division is the university transfer division; they transfer to other colleges. For students who graduate with an associate degree in one of our technical programs, our success rate is very high. Our overall success rate at Tri-County is one of the highest in our technical college system in South Carolina.

Description of Assessment and Evaluation

Blanton further discussed TCTC's methods for assessing and evaluating CCR programs, initiatives, and partnerships:

We assess CCR programs in terms of how many students graduate with a college credential before graduating high school. We then assess how many of those students graduate from high school, transition into college, and graduate from Tri-County and without entering the workforce. We follow those students from the time they enter a dual-enrollment technical career pathway in high school until they have a job in the field. Overall in dual enrollment, we look at success rates for those students, as well. We have found that high school students taking college courses at Tri-County have one of the highest success rates at the college of any student type here. By that, I mean success in their classes—making a C or above. We have a conservative philosophy regarding dual enrollment here. We want to ensure that our students have an authentic college experience, so we treat all of our dual enrollment [students] the same as all our other college students. We assess those students and their faculty the same way we assess our college students and faculty. TCTC has four college campuses: Pendleton's main campus and three community campuses in Easley and Anderson and Oconee counties.

Asked about the toughest challenges in preparing students for college and careers, Blanton discussed the constant changes in state policy, in addition to the lack of government funding. The technical career pathways are funded, but TCTC's pathways at other technical divisions and university transfer pathways are not. Students are eligible for lottery tuition assistance for courses, but that does not cover books and the full cost of tuition. This lack of funding perpetuates issues of equity inherent to American education. Many students cannot afford dual enrollment, despite being highly qualified and interested in this pathway. With no other financial aid available while they are still in high school, students who take dual-enrollment coursework are often those who can afford it, not those who are most qualified.

Description of Student Impact

Asked about the impact of TCTC's college and career readiness approaches and programs, Blanton told about a student who was almost pushed out of school:

Many students who enter these programs are ready for college. One student was struggling with

high school and his mom said, "I didn't think my son would graduate high school until he came to this school." We got him in an automotive pathway because he wants to work in the auto industry. He took some courses in high school and in his senior year here at Tri-County, and that has motivated him to continue. He will graduate high school this June and from Tri-County with a certificate in automotive engines. That's the whole purpose with pathways—to help students get to work and start studying in career fields that interest them.

While technical pathways serve to motivate students that other high schools would push out, dual enrollment also has financial benefits:

Our technical career pathways have had a tremendous impact on students who may not have graduated from high school or be in college had they not entered this pathway. And they are graduating Tri-County with an associate degree into fantastic careers, making \$49,000, \$50,000 a year, and many of them are barely 19 years old! They start their pathway early in high school, so they finish the associate degree early. Many of them, like those in mechatronics, come to Tri-County and have opportunities to be a BMW or Michelin Scholar, and those companies pay tuition. Once they get to college, they can be a technical scholar, then they are [working] high-paying jobs. It cuts down on student loan debts.

Blanton explained that technical pathways aim to help students find their niche and get them into tracks that align with their interests before they become unmotivated and withdraw from school. "If students don't find this niche and aren't getting into a career field that interests them in high school, they are just lost and flounder for several years," she said. TCTC staff members work to ensure that students are aligned with their college and career interests, but they cannot help students alone. They need the cooperation of high schools interested in helping students find their niche to enter a pathway early on.

Blanton talked about communicating with middle and high school teachers, counselors and educators, but said parents are also important. "I'm a parent, so I understand," she said. "We want our children to have every opportunity in the world. We want them to follow their dreams and do what *they* want to do. But because of that and society in general, parents think a four-year college is the only option."

Technical colleges are becoming increasingly important in today's economic climate, however. While college tuition and fees continue to rise, state and federal funding for education continues to drop. When many parents attended college in previous decades, they may have only needed to work one summer at minimum wage to pay for all four years of college. Parents need to educate themselves and realize that college students can work full-time, earning scholarships, loans, and grants, and still not afford the cost of college.

That is where technical colleges such as TCTC play an integral role. They can drastically cut down on the time and money spent in college, making it possible for many students to fulfill their dreams and get great jobs without attending a four-year institution. However, a stigma for technical colleges remains because of societal and data-based conversations. While many educational researchers say community and technical colleges have drastically lower completion rates than four-year colleges, few studies take transfers into account, while others focus solely on on-time graduation.

Asked why two-year colleges can have low graduation and transfer rates, Blanton blamed a lack of student affairs and academic advising resources:

Probably poor advising. Many students haven't found their niche when they start college. And they go to college without knowing what they're going to do. There's a lack of communication. Students aren't sure about what careers are out there or what they should be doing. I think helping the students figure out good career development that is appropriate and effective is really important. You have to start with students when they're young, even in elementary school, help them learn and explore different options that are available.

Berkeley County School District



At a Glance - Berkeley County School District

Data Collection Method: Case Study
Written by: Sonya D. Addison-Stewart
Career Academy Coordinator

Number of Schools: 42
Location: Berkeley County
District Website: www.bcsdschools.net

Number of Students: 33,000

Description of Programs and Partnerships

For the past three years, Berkeley County School District (BCSD) has sponsored a countywide career program focused on obtaining and enhancing workforce development skills. At this Career Conference (formerly called Teen Summer Job Expo), students participate in sessions designed to teach and enhance necessary workforce development skills required for college and career readiness (CCR). Examples of session titles from the Career Conference include Completing Online Applications, Soft Skills Training 101, Positive Work Ethic, Interviewing Skills, Professional Conduct, and Networking.

After completing a minimum of two sessions, students can speak with potential employers offering a variety of opportunities, such as summer employment, apprenticeships, and internships. Students can also talk with employers about potential post-secondary employment at the conference. Many of our students are not familiar with the significant industries in our region or may need more direction in preparing for these positions. The Career Conference allows students and parents to acquire information about these industries and the skills needed for successful employment directly from employers. They can also learn about various types of post-secondary education and training, such as youth apprenticeship, on-the-job training, military, and two- and four-year colleges.

The Career Conference incorporates elements of a career fair, including one traditional career exploration activity in which students visit with professionals about their companies and/or careers. BCSD does not solely sponsor this event; community, business, and industry partners also give support. During the first two years of its creation, the BCSD Career Conference was co-sponsored by a local community Exchange Club, which had previously sponsored a workforce-related program. This event included a panel discussion of employability skills with local community members describing their occupations to students. Once the local Exchange Club collaborated with the school district, the event was rebranded as the Teen Summer Job Expo. The partnership with BCSD allowed expansion of the program to include students from all high schools in the district.

In planning the Career Conference, we meet with our co-sponsors to find professionals to conduct the sessions and assist with coordination. Since the program is held on a Saturday, coordination from the district high schools is very important. Our Office of Career and Technical Education works closely with the career academy coach at each high school to ensure the event is publicized and students know about the opportunities available. Students who belong to clubs and organizations and need service hours are asked to volunteer to assist with setup, monitoring, and cleanup of the event. Assistance from various student organizations is imperative for efficiency and allows these students to interact with participating business, industry, and community partners in a professional setting.

This past year, the event was co-sponsored by two major utility companies that employ many county residents. This partnership, highlighted by sessions on topics related to soft skills and workforce development, shows the entities of business, industry, and education collaborating to ensure the future workforce is collegeand career-ready.

The innovative segment that separates the Career Conference from a traditional career fair involves the breakout sessions that students must attend before speaking to employers about various types of employment. These sessions are designed to help students develop the skills to effectively apply, interview, and maintain summer or future employment. After a student attends at least two sessions, they can visit employers to discuss future employment.

After several years in existence, the event was rebranded as the Berkeley County School District Career Conference. This change was a result of students and community members' interest in focusing on post-summer employment. While maintaining the format of the Teen Summer Job Expo, the Career Conference has added sessions focusing on workplace development skills for summer, part-time, and future employment. The Career Conference shows a new approach to CCR, as it models professional conferences while incorporating a typical career exploration model. Students can interact with business, industry, and community partners in a professional manner throughout. They can focus on a specific part of their personal development (e.g., employability skills), just as a more seasoned professional would.

The most important quality that students need to successfully gain and maintain employment is soft skills. The main purpose of the Career Conference is getting students to interact with professionals. These professionals are then able to impart employability information to our students that applies to the real world. In this way, the Career Conference supports BCSD's mission by giving students opportunities to develop these skills through interacting with professionals in a conference setting.

Description of Vision and Goals

Our CCR philosophy is based on the school district's vision and mission. While the vision states, "Empower all students for success," the school district's mission is stated as such: "In partnership with our community, ignite in every student a passion for world-class knowledge and skills through dynamic instruction and personalized educational opportunities." These statements show how our organization is committed to ensuring that students are college- and career-ready through various community partnerships. Everything we do is based upon this vision and mission. It is important that all students are empowered for success. We are looking for ways to empower our students to be successful in life by developing world-class skills through a variety of personalized experiences.

The Career Conference is an ongoing project that we will continue to improve. Its goal is to help students develop necessary soft skills and workplace development skills to successfully gain employment. This employment can be a summer position, an internship, an apprenticeship, or part-time or future employment after post-secondary training and education. The immediate outcome will be some students gaining summer employment that may lead to part-time employment while they are still in high school. The initial motivation of this project was helping students get summer employment. Upon delving deeper, it was determined that for students to gain any type of employment, they need certain employability and soft skills. The employability sessions developed from that motivation.

College acceptance is part of our school district's college and career goals. However, our district also believes each student should be empowered for success and that success does not always follow a traditional model of progressing straight from high school to college. We believe all students should receive some type of post-secondary education or training, whether on-the-job training, an apprenticeship program, a diploma, a certificate, a two-year degree, a four-year degree, or military experience. It is important to determine the career interests of each student and obtain sufficient information to help them on the best path to successful employment.

Job placement is also a district goal. For example, one district goal is that our students who participate in career and technical education are successfully placed in an applicable position (related job, educational institution, military) nine months after graduation. Additionally, workplace skills are ranked as very important in obtaining and maintaining employment. Job placement, then, whether summer, part-time or through another program such as an apprenticeship, allows students to gain successful workplace skills that will assist them in college and/or careers.

Description of Assessment and Evaluation

The use of assessment to evaluate the effectiveness of our program is an area we need to improve. We have asked the industry partners to evaluate the Career Conference. When we send them thank-you letters for participating, we also send a link to an online survey asking for their feedback. The survey asks questions about initial contact, planning, the actual event, and possible areas of improvement. One area we need to follow up on is evaluation from students. We need to make sure we are receiving adequate feedback from those students in order to plan future events effectively. This has proved challenging, as many high school students do not follow up via e-mail. We need to ensure they are evaluating us before they leave the event.

The most significant finding from business, industry, and community partners in the online survey is that they feel the event is necessary and important to prepare students to succeed in the workplace. These industry partners believe in this event and are committed to participating because they see its value, especially in the breakout session. Response has been very positive, and partners say they prefer it to a traditional career fair, which does not yield as much relevant contact. Here are follow-up comments to the questions:

- Overall, we loved participating in the Career Conference. We love being able to help the students in any way that we can and give them insight into the business world. We are looking forward to participating again next year!
- I enjoyed the interaction with the students, co-presenters, and the BCSD staff. This event was well planned and worth every minute of my time.

For the first event (then called the Teen Summer Job Expo), about 550 students participated. This event was held in March, and most students attended because they were looking for summer jobs. Students acquired information on completing online applications, making good first impressions, and conducting themselves on social media. From our feedback, the Expo was held too late for students to acquire summer positions. Also, an unexpected issue was the number of parents who attended with their children. During this first Expo, we did not have a plan for parents. One of the business partners suggested that a parent session be added, and we did so for the next year's event.

In the second year, the Expo was held in February based on our feedback from the previous event. Attendance dropped to about 280 students. Again, feedback from evaluations told us the date was still too late. Some of the area's major employers of young people close their application cycle for summer employment at the end of January.

We also added parent sessions, as recommended from the previous year. During these sessions, we included topics to help parents to encourage children to succeed during and after high school. Topics included career and technical education programs, credits required for graduation, dual credit, and the youth apprenticeship program. This addition became a huge asset to our Expo. Parents said these sessions helped them better understand how to prepare their children for future employment.

During the third year of the newly named Career Conference, the event was held during the first weekend in January to ensure students had the best opportunity to appeal to summer employers and their deadlines. However, the weather was not cooperative, as snow on the day of the conference greatly affected attendance. Notwithstanding, about 200 students participated in conference sessions, with nearly 75 parents attending the parent sessions. Parent sessions included presentations from district personnel, a local manufacturing company, and a consulting firm that focuses on preparing students and families for college. We received feedback that the event was beneficial. Some survey respondents suggested holding the event during school hours, increasing the length of sessions, and adding a panel discussion made up of past graduates of our school district. As we plan for this year's Career Conference, we will review these topics.

The toughest challenge in assessing this program has been getting adequate feedback based on the number of participants, both employers and students. As we plan this year's conference, we aim to determine how to maximize the number of evaluations we get back so that we can make effective changes with adequate feedback. One possible solution is having students and employers complete the survey before leaving the facility.

Description of Student Impact

The work competency that employers request most is soft skills—i.e., employability skills found to be lacking among current hires. Business and industry leaders are looking to schools to ensure students have these skills upon graduation. All schools in South Carolina now focus on ensuring students meet the characteristics in the Profile of the South Carolina Graduate. The Career Conference has benefited students by addressing many of the world-class skills and life and career characteristics that comprise the Profile. Through this event, students can hear directly from potential employers about necessary requirements to be successful in the workplace.

One constant challenge is a misconception among many parents that students must go to a four-year college to ensure career readiness. This may be based on parents' knowledge from their own high school experience. Students have many options to ensure they are career-ready other than requiring a four-year degree, but most will need some type of postsecondary education or training. The parent sessions at the Career Conference are a great way to inform about career-readiness options for students, as parents get to hear this information directly from the industry partners employing them. We have tried to overcome this misconception by collaborating with two major employers in our district to share this information with parents. Parents need to understand the many options available for their children that lead to successful careers.

Another challenge of providing this CCR program is getting educators to fully embrace its importance. Many educators hear that soft skills and workforce readiness skills are vital but do not focus on them in classes. All educators should vigorously promote the Career Conference as a program that helps students become college- and career-ready.

Transportation is another barrier to the Career Conference's implementation. Our district covers the county with the largest amount of land space in South Carolina, and most participants are from schools closest to the event site. This year, we plan to offer transportation to schools to allow more students from rural areas to attend.

Continuing this event is a priority for the district. As we strive to ensure our students rise to the most rigorous academic standards, we also want to guarantee they are empowered for success by giving them the appropriate world-class skills and life and career characteristics to become productive citizens.

A Discussion of Common Aspects of Promising Practices in CCR Program

Throughout the preceding narratives, educators in South Carolina described their efforts to support students' readiness for postsecondary success. A variety of voices and school types were collected and numerous initiatives described. Considering all of these cases, we were able to identify several themes illustrative of successful and promising practices related to college and career readiness (CCR) in South Carolina. We would like to discuss five themes of promising CCR practices in greater detail:

- 1. Students' attitudes, skills, and competencies can be developed.
- 2. CCR goals must be connected to community, county, region, and state.
- 3. Partnerships are crucial.
- 4. Program success requires (re)defining college and career readiness.
- 5. Professional development and support is vital.

These themes will be explored throughout the rest of this section and will be followed by some concluding thoughts.

Students' Attitudes, Skills, and Competencies Can Be Developed

The first key takeaway we saw was that successful CCR programs operated best when educators explicitly stated that the students in their settings were capable of achieving more than was previously believed. Moreover, expectations for student success were frequently low among multiple stakeholders, including educators, members of the community, and students themselves.

One approach regularly mentioned as successful was students being appropriately challenged and supported through CCR programs. Students in Conway High's engineering programs started with high levels of support, and their skill development was met with appropriate assistance along the way. Other schools discussed programs that engaged students in intentional, academic, goal-setting conversations, explicitly holding them to higher standards and challenging long-held beliefs about their abilities. When describing these student-focused approaches, a common message was that giving students the opportunity to see themselves through a positive, achievement-oriented lens was important.

Through these programs, students were given opportunities to take ownership of their learning experiences and developed attributes such as resiliency, self-advocacy, grit, and growth mindset. Among the cases and narratives, we found descriptions of students taking this ownership, leading to increased confidence and openness to learning new ideas. Fairfield Career and Technical Center described how students' participation in the program developed their ability to see how the skills they were gaining would be important throughout their careers.

Another way that students gained confidence for postsecondary success was through connecting CCR programs to authentic experiences and the importance of working toward a credential. Examples of this came

in several ways, whether through working toward an associate degree, taking part in a certificate program offered in partnership with a local technical college, or working with local industry to achieve international certification, as was the case in the partnership with Aiken County Career and Technology Center and MTU America. When students can see their education is connected to real-world application and is developing competence in something they care about, they are likely to be more internally motivated. While we do not have research to show an absolute causal link, the programs' student-centered and authentic learning activities likely are among the strongest contributors to improved outcomes shared among the cases, as measured by graduation, participation, post-secondary enrollment, and job placement rates.

CCR Goals Must Be Connected to Community, County, Region, and State

Another important theme was the connection between what CCR programs aimed to achieve and the requirements of each school's community, county, region, and the state. Schools described working with community organizations, businesses, and local governments to identify ways to improve long-term postsecondary outcomes for their graduates. This happened in a few specific ways. For instance, several schools developed initiatives aimed at meeting their community's workforce needs, ranging from manufacturing to technology and tourism. These employment-related outcomes included the technical skills and knowledge needed for work in their respective sectors, but also the success skills that employers consistently report as key competencies from graduates of programs at any level. These skills included verbal and written communication, critical thinking, problem solving, and teamwork. Engagement at the local level also involved community organizations, such as the Berkeley County School District partnering with the local Exchange Club to create an annual career conference.

Statewide programs and policy have had a profound influence on CCR programs. The cases and narratives mentioned such statewide programs as College Decision Day, an initiative of the S.C. Commission on Higher Education. The adoption of ACT and ACT Work Keys in all public high schools has influenced the assessment and evaluation of what constitutes a college- or career-ready graduate. The Profile of the South Carolina Graduate has also affected the way CCR programs are designed and discussed. Programs have been reformatted or developed to meet the three aspects of the Profile: world-class knowledge, world-class skills, and key life and career characteristics. Throughout these narratives, it is clear that these statewide initiatives are influencing the structures and objectives of CCR programs. Moreover, they have given educators a common language when discussing the goals of CCR efforts and the ways they make meaning of their evaluative activities.

Partnerships Are Crucial

One thread that was nearly universal when the contributors described their CCR programs was not only that these efforts were done in partnership with other organizations, but that those partnerships were vital to the programs' success. Those included relationships with local institutions of higher education/postsecondary training, local community and community organizations, and business and industry. These partnerships were key in delivering on what was discussed in the two previous sections: identifying authentic and meaningful, student-centered learning opportunities and connecting with important partners from industry, post-secondary training, and the community to help prepare students for success after graduation.

These partnerships were crucial because they allowed educators to present students a concrete connection to real opportunities for success. Partnerships with employers gave schools a pathway to involve people who work in various sectors to communicate the skills they desire in their employees and the training it takes to achieve them. Moreover, these partnerships provided opportunities for student involvement through experiential learning, job shadowing, internships, and earning credentials. Partnerships helped involve members of the community and communicated the value of education in supporting community needs. Partnerships with two-year technical colleges created opportunities to meet the goals of students, high schools, and the colleges. These partnerships made navigational capital—the understanding of how to make sense of information about

careers and the postsecondary education needed to succeed in them—available to students as well as their parents, teachers, counselors, and administrators.

Partnerships can require much work, including the discovery, coordination, and implementation of meaningful and collaborative joint ventures. When done well, however, the benefits justify the investment of time and resources. The partnerships described in these narratives illustrate how well-structured collaborations are built on outcomes that mutually benefit both partners. For instance, Brashier Middle College High School and Greenville Technical Charter High School partnered with Greenville Technical College, and Conway High paired with Horry-Georgetown Technical College to create outcome-oriented opportunities for students making college-level progress toward certification.

(Re)Defining What College and Career Readiness Means

To effectively design programs aimed at supporting student, community, industry, and state goals for college and career readiness, the narratives in this collection highlighted one of the most fundamental issues: defining CCR. Many contributors expressed that college readiness and career readiness were so fundamentally linked that they did not separate them in practice. Several described one being the pathway for the other. For instance, at the Center for Advanced Technical Studies, Bob Couch described the school's ethos: that all students should be prepared for the workforce whether they enter directly from high school, during college, or after college. Others explained that college-level preparation would equip students with the skills and abilities employers wanted, whether or not they attended a two- or four-year college or university after graduating.

However, there are challenges to common or traditional definitions of CCR. One is some educators' perception of career training opportunities as inappropriate for college-bound students. This was named as a narrative and a stigma common among guidance counselors and one that many participants are working to re-norm. In a similar fashion, contributors described their efforts to shift the understanding of the skills, knowledge, and cognitive strategies necessary for both college and careers among key stakeholders, including members of the community as well as parents, teachers, and guidance counselors.

Another challenge relating to traditional definitions of CCR was illustrated by Tri-County Technical College. A common definition of college readiness is the ability of a student to successfully earn college credit in a course without remediation. However, Tri-County Tech, as a two-year technical school, offers developmental education. This has spurred school leaders to reach out to students at partner high schools to understand how placement in developmental education is determined and share how students can become college-ready. While this approach does not challenge the fundamental metrics of this traditional definition of college readiness, it challenges the timing of its application. It uses the fundamental structure as a proactive tool to inform students of areas for improvement, rather than as a reactive mechanism that can be demoralizing and financially costly for students.

Professional Development and Support Is Vital

The narratives frequently discussed the importance of professional support and development for these initiatives to achieve their potential. It should come as little surprise that support from administrators was seen as critical in meeting CCR goals. However, it may surprise some that this message was frequently named by the administrators who contributed to the report. These leaders admitted they could get in the way of success by discouraging innovation. Administrators set policy and practice in educational settings, frequently treating them as if set in stone; however, leaders who took part in this report advocated for thoughtfully reconsidering practices and attitudes that might hinder success.

Additionally, they suggested they had a responsibility to demonstrate leadership in positive ways. For example, the administration at Calhoun County High School changed the level of expectations for student success. This required gaining buy-in from all stakeholders, including teachers, students, and members of the community. It also required role modeling—trying new approaches aimed at increasing student learning and success.

Strong administrative support goes hand in hand with another aspect mentioned in the cases: High-quality CCR programs both require and become platforms for professional development. To ensure that teachers, counselors, and administrators are up to speed on the latest thinking and practice in preparing students for careers and college, they must have opportunities to learn from others who are pioneering effective new practices. Attending conferences and other professional development events was identified as an important way to improve schools' CCR efforts. Similarly, respondents described how going on the road to share the successes of their programs presented important avenues for professional development. For instance, the success of the student expo at Fairfield Career and Technology Center led to teachers and staff getting to speak about the program at state and regional conferences. Presenting their work at these events serves as a positive feedback loop; as they attend, staff can learn from others who are also sharing their work.

Finally, contributors described structural realities that posed challenges for their initiatives. The physical location of CCR programs was mentioned as an obstacle. In some instances, the programs were offered in closer proximity to population centers; in others, they were some distance away from the majority of students. In these cases, transportation had to be or will have to be arranged.

Other challenges related to getting information to the right people at the right time (e.g., getting information to students and parents earlier, changing the timing of a career expo, moving career development staff into middle schools to start that connection sooner). Another issue highlighted sustainable staffing practices, whether that meant losing staff members who had expertise managing systems or challenges hiring qualified teachers because of salary considerations. In all these cases, contributors were honest and candid about the challenges they encountered. It is fair to say that none had solved all their problems, but they all seemed to have hope of finding solutions. These examples are helpful, as they illustrate the kinds of obstacles that might come up when implementing innovative programming and provide patterns for how to overcome them.

Conclusion

The contributions describing the promising practices for CCR programs in South Carolina provide insight into educators' approach to meeting the emerging needs of the state's citizens and employees. A final observation of these programs is that when schools succeed with their CCR initiatives, that success leads to the development of other programs. Conway High started with engineering and now has programs supporting several other fields, including programs for biomedical science, pharmacy technician, welding, and veterinary assistant. Aiken County Career and Technology Center's success with MTU America has led to the development of a second apprenticeship program. Taken together, these cases illustrate opportunities to help students achieve their potential and long-term success. When educators work together to reimagine what students and schools are capable of, what the community can contribute, what teachers can do, and how the district and other administrators can support this success, the future of education in South Carolina looks bright.

References

- Achieve. (n.d.) South Carolina's college and career ready commitment. Washington, DC: Author. Retrieved from http://www.achieve.org/files/SouthCarolinaCCR_FactSheet-Sept2012.pdf
- Achieve. (2012). Closing the expectations gap: 50-state progress report on the alignment of K-12 policies and practice with the demands of college and careers. Washington, DC: Author. Retrieved from http://www.achieve.org/files/Achie¬ve201250StateReport.pdf
- Carnevale, A. P., Rose, S. J., & Hanson, A. R. (2012). *Certificates: Gateway to gainful employment and college degrees.* Washington, DC: Georgetown University Center on Education and the Workforce. Retrieved from https://cew.georgetown.edu/wp-content/uploads/2014/11/Certificates.FullReport.061812.pdf
- Conley, D. T. (2012). A complete definition of college and career readiness. Eugene, OR: Educational Policy Improvement Center. Retrieved from http://www.avid.org/dl/eve_natcon/nc12_four_keys_handout2.pdf
- Creswell, J. M., & Poth, C. N. (2012). *Qualitative inquiry and research design: Choosing among five approaches.* Los Angeles, CA: SAGE Publications.
- Hoffman, N., Vargas, J. A., Venezia, A., & Miller, S. M. (Eds.). (2007). Minding the gap: Why integrating high school with college makes sense and how to do it. Cambridge, MA: Harvard Education Press.
- Tierney, W. G., & Duncheon, J. C. (2015). The problem of college readiness. Albany, NY: SUNY Press.
- U. S. News & World Report. (2017). *Best states for education*. Accessed from https://www.usnews.com/news/best-states/rankings/education
- Young, D. G., Hoffman, D. E., & Chung, J. K. (2016). Exploring college and career readiness in South Carolina secondary schools, 2016. National Resource Center Working Paper No. 2. Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience & Students in Transition.