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# Report on the State of College and Career Readiness in South Carolina:

National Resource Center for The First-Year Experience  
and Students in Transition, Under the direction of Center  
of Excellence for College and Career Readiness

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## Introduction

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In today's global economy, postsecondary education attainment and training have become the requirements that open the door to students for higher wages and increased potential for growth (Lockard & Wolf, 2012). In the United States, 63% of the occupations projected to grow fastest by 2020 will require some form of postsecondary education for entry-level work (Lockard & Wolf, 2012). Similarly, in South Carolina, 79% of jobs require some type of postsecondary education or training, yet only 35% of the adults in this state have an associate's degree or higher (Achieve, 2012). It is also estimated that the United States will fall short in creating the 22 million new college degrees needed by 2018 to meet the demand in current job-market trends (Carnevale, Smith, & Strohl, 2010). This suggests there is a national crisis on college and career readiness. To understand the problem fully, it is essential to grasp the important role college and career readiness has in the future of America's students (Hein, Smerdon, Lebow, & Agus, 2012). College and career readiness (CCR) is a priority at the national level, as well as in South Carolina (South Carolina Education Oversight Committee, 2014). With increased access to postsecondary education, it is vital that students are prepared once they walk through the doors of college. However, preparing all students for college and the job market continues to challenge high school educators and leaders across South Carolina and the nation. Research on college and career readiness suggests high schools face a variety of barriers when working towards this goal. Moreover, the Middle Class Taskforce at the White House found that students in the lower and middle class were less prepared for college than those in the upper class (White House Task Force on the Middle Class, 2010), pointing to disparities in how CCR is offered among different groups in the population.

### Defining College and Career Readiness

While the concepts of college readiness and career readiness are not necessarily the same thing, research suggests there is an overlap in the foundational skills and knowledge necessary to be successful in both. As a result, several states, professional organizations, researchers, policymakers, and other key stakeholders have begun to treat college and career readiness as a singular concept (Conley, 2012). In general terms, Conley (2008) argues that a certain degree of educational and personal experience is what defines college readiness and enables students to make a successful transition to postsecondary education. In more specific terms, college readiness refers to the extent to which students enroll and succeed in a postsecondary institution without taking remediation courses (Conley, 2012). Traditional indicators of college readiness are outcomes-based such as "high school GPA, course-taking patterns, and college entrance exams or standardized test scores" whereas nontraditional indicators are skills-based such as key cognitive skills and professional behavior (Strayhorn, 2013). Some research, however, indicates that traditional indicators used to measure readiness explain only 25% of the variance in the educational outcomes while the nonacademic, or noncognitive, measures account for the rest (Strayhorn, 2013).

Conley (2008) developed a conceptual model of college readiness that includes the following four domains: (a) key cognitive strategies, (b) key content knowledge, (c) academic behaviors, and (d) contextual skills and knowledge. Additionally, college enrollment and attainment are two measures that researchers use to illustrate the faults in college and career readiness initiatives. Researchers have found that without proper paths to success, students are less likely to

obtain their goals of attending and completing college or gaining the skills and training necessary for a career (McCarron & Inkelas, 2006; Pusser & Levin, 2009).

## State Definition of College and Career Readiness

Recent trends in state policies indicate a movement toward identifying and creating a definition of college readiness, career readiness, or both (Conley, 2012). This increased emphasis points out the need for understanding what it means to be “college-ready” and “career-ready.” There is, however, a large diversity among the definitions of college and career readiness, as well as the indicators of readiness (Conley, 2012; Education Commission of the States, 2014; Strayhorn, 2014). To be assessed as college and career ready, students need “developed cognitive strategies (problem solving, inquisitiveness, precision/accuracy, interpretation, reasoning, research, and intellectual openness), content knowledge (writing and algebraic concepts and key content knowledge from core subjects), academic behaviors (self-monitoring and studying skills) and contextual skills and awareness (awareness of college admissions processes and culture, college-level academic expectations, tuition and financial aid)” (AIR, 2015). Many national organizations and individual states have attempted to establish a definition of college and career readiness (ACT, 2009; National Assessment Governing Board, 2009). Yet, the statewide definitions of college and career readiness vary among the 33 states that have adopted them, and there are separate core elements that emerge from the multiple definitions. South Carolina is among the 18 states that have not yet adopted a statewide definition of college and career readiness, which, according to the Education Commission of the States (2014) is one way states can bridge K-12, higher education, and the workforce. Despite the lack of a statewide definition of college and career readiness, SC has made college and career readiness a priority on the state’s policy agenda (Achieve, 2012).

Despite not having a formally adopted definition of CCR, South Carolina utilizes *Profile of the SC Graduate* developed by the SC Association of School Administrators Superintendents’ Roundtable. The SC graduate profile provides a framework by which educators and school leaders can help students prepare for today’s competitive workforce. A South Carolina Graduate demonstrates: “world class knowledge (rigorous standards in language arts and math for career and college readiness, multiple languages, science, technology, engineering, mathematics (STEM), arts and social sciences); world class skill (creativity and innovation; critical thinking and problem solving; collaboration and teamwork; communication, information, media and technology; knowing how to learn); and life and career characteristics (integrity, self-direction, global perspective, perseverance, work ethic, and interpersonal skills)” (SC EOC, 2015). Educators, school leaders, and counselors in South Carolina have provided a wealth of support to their students using the Profile of the SC Graduate as a benchmark for assessment and framework for curricular alignment with state standards.

After an examination of states’ college and career readiness definitions, the Education Commission of the States (2014) indicates that the most common goals of these policies are: (a) aligning common core state standards with college and career standards, (b) increasing collaborations among K-12 and higher education, (c) addressing the remedial needs as identified by higher education and employers, (d) informing stakeholders about the core competencies necessary to be college and career ready, (e) providing support for elementary and secondary teachers to understand core competencies students need in order to achieve, and, (f) creating uniformity between K-12 and higher education policies that can lead to a more seamless transition for students (Education Commission of the States, 2014).

## Purpose of the Report

The purpose of this report is to collect, synthesize, and organize available information on CCR in South Carolina set in a national context. The report begins by introducing the conversation on CCR by providing a definition and description of the issue in a broad, national context followed by an exploration of how South Carolina approaches CCR. The remainder of the report examines the state of CCR in South Carolina by describing state indicators of CCR, policy outlining state goals and expectations, pathways and supports in high school and postsecondary education, CCR programs and initiatives across SC, and the role of business in CCR efforts. Following these areas, the report concludes by describing future directions, namely implications for practice, policy, and future research.



# Outcomes and Measures of College and Career Readiness

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College and career readiness can be measured and assessed in many ways. The National High School Center created three main categories for assessing outcomes of college and career readiness: (a) on-track indicators, (b) attainment and authentication measures, and (c) accountability and improvement feedback. On-track indicators determine whether students are adequately prepared for college and the workforce. The most frequent indicators are grade point average, enrollment in advanced placement (AP) and International Baccalaureate (IB) classes, and completed college and workforce applications (National High School Center. 2012). Attainment and authentication measures focus on validating the on-track indicators by looking at high school completion. The idea behind this category is to validate that college and career readiness standards are met. These measures include high school diplomas, GEDs, and certification in certain skills. The last category, accountability and improvement feedback, includes data collection that holds schools accountable for providing students with information on college and career readiness, which is often required by the state. Examples of this data include SAT scores, ACT scores, and high school report cards (National High School Center, 2012). The purpose of these measures is to help educators ensure they are providing students with enough information and training for college or the workforce.

## On-Track Indicators

While readiness for college and careers is explicitly about outcomes at the end of K-12 education, there is an implicit need to understand and measure whether students are on track to meet those goals before they reach the end and the opportunity to intervene has passed. Three on-track indicators SC has been reporting include the National Assessment of Educational Progress, along with student performance in Advanced Placement and International Baccalaureate courses and exams.

### ***National Assessment of Educational Progress***

The National Assessment of Educational Progress (NAEP) is one of the largest-reaching assessment tools designed to gain insight to what students know (National Center for Education Statistics, 2015b). The NAEP is also known as the Nation's Report Card and assesses students' progress in math, reading, science, and writing. It is given to students based on cluster sampling and is only administered in schools where statewide characteristics are present. The most recent data on the NAEP are from 2013. In 2013, math and reading were assessed using a scale from 0 to 500, 500 being the best. The national average for fourth grade math was 241, while the state average for South Carolina was 237. While the state average was slightly below the national average, this difference was not statistically significant. However, only 35 percent of South Carolina students reached the proficient or advanced level. In eighth grade math, the national average was 284. The average in South Carolina was four points lower at 280. Only 31 percent of eighth graders tested in South Carolina were proficient or advanced in math. Reading results were similar to math. In fourth grade students, there

was only a seven point difference between the nation ( $M=221$ ) and the state ( $M=214$ ). Twenty-eight percent of fourth graders in South Carolina were proficient or advanced in reading. There was also no significant difference in eighth grade. The national average was 266, while the state average was 261. Even though there was not a significant difference, there is still room for improvement. Approximately 30 percent of eighth grade South Carolina students were proficient or advanced in reading (National Center for Education Statistics, 2015b). Testing occurs in fourth and eighth grade, as these grades are vital to college and career readiness. If students can become more prepared in fourth and eighth grade, they will be at an advantage for the rest of their academic careers and will have a better chance of being successful upon entering college or the workforce. In fact, according to an ACT study of almost 800,000 eighth-grade students nationwide, “large numbers of disadvantaged students enter kindergarten, behind in early reading and math skills, oral language development, vocabulary and general knowledge. These gaps are likely to widen over time.” As a result, only 10 percent of “Far Off Track” eighth-graders in the study ended up reaching the College Readiness Benchmark for Grade 12 reading (ACT, 2012a).

### ***College Board Advanced Placement Program (AP)***

Since 1984, state regulations in SC require that all secondary schools whose organizational structure includes grades 11 or 12 to offer AP course(s). Students enrolled in AP courses can earn high school credit as well as college credit with a score of “3” or above on the corresponding subject test developed by the College Board. Among all SC students taking AP examinations in 2014, 57% obtained scores of “3” or higher. In 2014, 25,526 students in SC took AP exams in 31 areas with English Language and Composition, United States History, English Literature and Composition, Human Geography, Calculus AB, and Psychology being the courses in which students most frequently enrolled (South Carolina Department of Education, 2014a).

### ***International Baccalaureate (IB)***

International Baccalaureate (IB) Program is another program offered to high school students in SC to prepare them for success in postsecondary education and the workforce. IB provides an academically challenging education for high school students with the aim of preparing them for the rigors of college or university study. A total of 1,395 students at 24 public high schools in SC participated in IB in the 2013-2014 academic year (South Carolina Department of Education, 2014b). The overall percentage of tests with scores of 4 or higher (considered a passing mark) in the subject areas for the state was 67.2%. However, success varied widely by schools as the percentage of tests with scores of 4 or higher in the subject areas ranged from 19.2% to 92.3%. Of the 24 high schools offering IB, 17 (70.8%) had passing rates of 60 percent or higher.

## **Attainment and Authentication Measures**

Attainment and authentication measures focus on validating the on-track indicators by looking at outcomes related to CCR. These measures at the end of the K-12 process are important in describing the extent to which educational efforts have been effective. This section will describe the measures related to the End-of-Course Examination Program, the High School Assessment Program, report cards for high schools in SC, and college enrollment, retention, and completion rates for SC high school graduates.

### ***End-of-Course Examination Program (EOCEP)***

As required by the Education Accountability Act of 1998, SC develops and implements end-of-course examination in benchmark courses through a program named End-of-Course-Examination Program (EOCEP; Southern Regional Education Board, 2014). This test is administered to all public middle school, high school, alternative school, virtual school, adult education, and home school students who are taught the academic standards corresponding to the EOCEP tests. The results of the tests count for 20% of the students' final grade in each benchmark. The following EOCEP tests are currently administered in SC: Algebra 1/Mathematics for the Technologies 2, English 1, U.S. History and the Constitution, and Biology 1/Applied Biology 2 (South Carolina Department of Education, n.d.). The exams are



given a letter grade, A (93-100%), B (85-92%), C (77-84%), D (70-76%), and F (0-69%). In 2014, the highest scores were in Algebra 1/Mathematics for the Technologies with an average score of 82.1 percent (Southern Regional Education Board, 2014). The lowest score was in U.S. History and the Constitution with an average of 74.9 percent. These scores serve as important indicators of college and career readiness as they assess student progress in key benchmark courses and function as accountability measures for educators following state policies on college and career readiness.

### ***High School Assessment Program***

The High School Assessment Program (HSAP) was a state assessment tool formerly used to gauge the level of comprehension among high school students in content areas English and math. The HSAP scores were categorized into four levels: exceptional skills, proficient skills, competent skills, and has not demonstrated competence. In order to pass the exam and get their diplomas, students were required to score in exceptional, proficient, or competent achievement levels. Yet according to the latest data collected in 2014, merely 89.8 percent of students met the standards for the math portion of the exam, and only 78.7 percent met the standards for English (Adcox, 2014). According to Education Oversight Committee director, Melanie Barton, “The HSAP doesn’t give students any information to move forward. It’s a bare minimum criteria to get a diploma. The bar has been raised. The diploma is no longer enough” (Adcox, 2014). South Carolina Governor Nikki Haley agreed. Due to significant deficiencies within the program, policymakers passed Act 155 in 2014, eliminating the requirement for all students to take the HSAP. Act 155 stipulates that the HSAP must be replaced with more successful programs like ACT WorkKeys and the SAT. These programs are more appropriate ways to assess college and career readiness among students, while helping them prepare for the future.

### ***High School Report Cards***

Further, South Carolina, schools and districts are held accountable by the South Carolina Department of Education through report cards. These report cards contain information on assessment results and graduation rates at each school. The reports cards are based on letter grades that determine how well the schools are meeting state requirements and expectations. In 2014, the overall grade for the state was a “B,” with 85.4 points. In the state overall, schools exceeded the state’s expectations. When looking at the data in the 2014 report card, there was a noteworthy increase in performance compared to 2009. In the 2014 report, 42 school districts received an “excellent” rating compared to one in 2009 (South Carolina Education Oversight Committee, 2014). In 2014, the on-time graduation rate was at 80.1 percent, which increased from 77.5 percent in 2013. There were differences in rural and urban school districts. For example, in 2014, most urban school districts scored average or higher, while many rural districts did not meet or were substantially below the state’s expectations (South Carolina Education Oversight Committee, 2014). These data imply that educators and the state are investing more in student success and preparedness but there is still a room for improvement in rural communities. It is important that educators and state policymakers continue to focus on improving the quality of education in rural districts.

### ***College Enrollment, Retention, and Completion Rates***

College enrollment is an important indicator of CCR as it helps determine if students have been given the correct resources to navigate the pathways to college. Minority students in South Carolina are enrolling at a lesser rate than the national average, while White students in SC enroll at a higher rate than the national average. In 2013, only 40.3% of 18-24-year olds in South Carolina were enrolled in a college or university, compared to the national average, 42.7%. The number of 18-24-year-olds in SC enrolled in postsecondary education in 2013 was only 33.6% for Black students, compared to 45.7% for White students, a gap of 12% (NCES, 2015a). A Black-White college attendance gap of 12% or more among 18-24-year-olds was only found in three other places in America: Connecticut, Wisconsin, and the District of Columbia. An even larger gap can be seen among Hispanic 18-24-year olds in SC, who only attended college at roughly half the rate of White students, at 24.5% (NCES, 2015a).

While it is important to consider college enrollment, it is even more important to understand college completion and attainment. Educators have worked hard over the years to ensure pathways to college for their students, but that is not enough. As is the case for many states, college completion continues to be a struggle for South Carolina. In 2013,

approximately 36.8 percent of South Carolina's working age population (25-64) had obtained an associate's degree or higher (Lumina Foundation, 2015). This is below the national average, which was 40.0 percent in 2013. Looking at counties across South Carolina, there is a significant difference in the percentage of South Carolinians who have at least an associate's degree. For example, in more rural counties, like Marlboro County, only 13.7 percent of residents have an associate's degree or higher. This points to a stark contrast with more metropolitan counties like Charleston County, where up to 49.5 percent of the county residents have an associate's degree or higher (Lumina Foundation, 2015).

### **Accountability and Improvement Feedback**

The Education Commission of the States (2014) found that in the 2014-2015 school year, 46 states, and the District of Columbia, planned to administer two, or more, types of college and career assessments to high school students, with South Carolina being among these states to do so. While the types of assessments vary by state, SAT, ACT, and ACT WorkKeys® are required for students in South Carolina. The administration of the ACT has been used as an indicator of college and career readiness throughout the state of South Carolina and is now a part of the SC state standards. "South Carolina will end the exit exam requirements for the class of 2015. Students in grades three through eight will take ACT Aspire. Students in grade eleven will take a college- and career-readiness assessment and ACT WorkKeys" (SREB, 2014). To increase the likelihood of student success in postsecondary education and beyond, educators can use ACT's assessment and data to create frameworks for interventions. Studies show that student success is informed by these factors: standardized test scores, academic behaviors, informed career planning, and experience with core curriculum courses. Students who took rigorous core courses tested much higher in terms of college and career readiness, compared to students not enrolled in core courses (ACT, 2014). The expectations for South Carolina students taking the ACT, are to take rigorous core courses, and meet the ACT Benchmarks for college and career readiness in ELA and math. "ACT research has shown those students meeting three or four ACT College Readiness Benchmarks—39% of the 2014 ACT-tested graduates—have a strong likelihood of experiencing success in first-year college courses (ACT, 2014). South Carolina educators and school leaders are working closely with the ACT and ACT WorkKeys to increase the number of students meeting college and career readiness benchmarks in the state.

### **ACT**

The ACT, a college entrance exam that covers English, reading, math, and science, is another assessment used in SC to determine students' college and career readiness. SC registered an increase in the percentage of graduates (17%) taking the ACT since 2010, coming close to the national level (18%) (ACT, 2014). The ACT's annual report for the school year of 2013-14 indicates that SC tested 58% of the graduating students (ACT, 2014). From those taking the ACT, the percentage of the students meeting the college readiness benchmarks were the following: 61% in English, 41% in reading, 39% in math, 33% in science, and 23% in all four subjects (ACT, 2014).

### **ACT WorkKeys**

Prior to 2014, South Carolina students had the option of taking ACT WorkKeys, an assessment designed to identify job skills that employers can further use to select, hire, train, develop, and retain a high-qualified workforce (ACT, n.d). Beginning in 2014, South Carolina required all students to take the exam. In 2013, only 22 percent of South Carolina students met the benchmark for all subjects, while the national average was 26 percent (ACT, 2014). The most significant difference between the state and the national average was in math. Only 39 percent of South Carolina students met the benchmark in math, while 44 percent of the nation met the benchmark. In 2014, the results were similar; however, math and science were both significantly lower than the national average. More research is needed to understand if the required testing policy will help improve the scores in the state. These data are important because they help educators assess how well students are doing compared to the nation. They also give insight into the areas where students need improvement most. Finally, they allow educators to develop even more tools that can help students be more prepared for college.

## **SAT**

Finally, the SAT benchmark is another assessment used in SC to determine students' college and career readiness. Of the projected 37,439 graduating students in South Carolina schools for the year 2014, 60% took the SAT. Yet, from the South Carolina SAT-takers only 33% achieved the benchmark indicating the likelihood of success in the first year of college (College Board, 2014). Specifically, of South Carolina SAT-takers, only 44% achieved the Content Area benchmark in critical reading, 45% reached the Mathematics benchmark, and 34% achieved the benchmark in Writing (College Board, 2014). Educators and school leaders in South Carolina utilize the SAT along with the ACT to prepare their students for college and beyond.

# Goals and Expectations for College and Career Readiness

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South Carolina has made strides in identifying the aspirational outcomes for a citizenry that is both educated and prepared to enter the 21<sup>st</sup> century workforce. Several agencies in the state have taken the lead in creating a vision for the educational outcomes that will identify success in meeting the goals and expectations for college and career readiness in the state. This section discusses three areas in which objectives for SC have been set, first the SC Education Oversight Committee's 2020 Vision, the CCR Standards developed by the SC Department of Education, and finally the Profile of the SC Graduate.

## SC Education Oversight Committee 2020 Vision

To prepare students for success in a global economy, SC developed the 2020 vision, that "all students will graduate with the knowledge and skills necessary to compete successfully in the global economy, participate in a democratic society, and contribute positively as members of families and communities" by the year 2020. (South Carolina Education Oversight Committee, 2013). A main goal of this vision is to have 85% of all high school graduates, performing at a level consistent with college and career readiness standards by that same deadline. In order to achieve this goal, SC state officials used data-driven research to define several areas where SC students need improvement. For example, in SC, 41% of students attending two-year community colleges require remediation courses in English and math, which indicates that these students are not college-ready, according to Conley's definition (2008, 2012). In addition to its effect on students, "The estimated cost to states and students to provide remedial college courses to underprepared high school graduates is \$3 billion annually" (Amelga, 2012).

Additionally, in 2013, 47 schools in SC scored at the lowest performance level on the annual school report card, and officials hope that no schools will continue to score at this level by 2020 (South Carolina Education Oversight Committee, 2013). Furthermore, the SC objective is to increase the percentage of students who graduated on time from 77.5% registered in 2013 to 88.3% by 2020. At the national level, SC ranks 39<sup>th</sup> in reading proficiency. Therefore, SC aims that 95% of students will score at the proficient reading level by 2020 from 28% (SC 4<sup>th</sup> graders) and 29% (SC 8<sup>th</sup> graders) registered in 2013 (South Carolina Education Oversight Committee, 2013).

## SC College and Career Readiness Standards

In terms of SC College & Career Readiness Standards, the South Carolina Department of Education developed new college and career standards for math and English language arts (ELA) in place for the school year of 2015-2016. Currently, most states are complying with Common Core State Standards (CCSS), implementing core coursework and helping students become college and career ready. Although, SC has withdrawn from the Common Core, most of their new state standards are drawn verbatim from CCSS, showing strong alignment. Minor changes have been made to some standards, such as, lowering the rigor of ELA coursework and not requiring specific math courses for gradu-

ation (Achieve, 2015). College and career ready standards (SCCCRS) were adopted by the SC Board of education in 2015 to replace the Common Core (CCSS). In South Carolina, “The Common Core State Standards for mathematics and ELA remain in place for the 2014-15 school year. The South Carolina Department of Education is developing new standards for adoption beginning in the 2015-16 school year for mathematics and ELA. South Carolina withdrew from the Smarter Balanced Assessment Consortium in April 2014” (SREB, 2014).

In place of CCSS, South Carolina has created its own set of CCR standards. According to the SC Department of Education, CCR standards are divided between math and English Language Arts (ELA). The South Carolina ELA standards for CCR state that, “A South Carolina student who is College- and Career-Ready in English Language Arts will demonstrate academic success and employability; interdependent thinking and collaborative spirit; intellectual integrity and curiosity; logical reasoning; self-reliance and autonomy; and effective communication” (SC EOC, 2015). For mathematics, South Carolina CCR Standards state that, “knowledge is supported by the rigorous K-12 grade level and course content standards; skills are identified in the SCCCRC Mathematical Process Standards; and life and career characteristics are identified in the *South Carolina Portrait of a College- and Career-Ready Mathematics Student*” (SC EOC, 2015).

## Profile of the SC Graduate

In order for South Carolina to establish a goal for college and career readiness, the South Carolina Association of School Administrators created the Profile of the South Carolina Graduate. The profile also prefaces the South Carolina College and Career Readiness Standards. In both the math and ELA college and career readiness standards, the profile is highlighted. While South Carolina has not officially adopted a definition for college and career readiness, the Profile of the South Carolina Graduate has been adopted by various stakeholders (e.g. SC Council on Competitiveness, SC Department of Education, SC State Board of Education) in the state, and currently serves the de facto definition for key organizations in the state. Additionally, the SC Education Oversight Committee and the South Carolina Chamber of Commerce employ the *Profile of an SC Graduate* to assist educators and school leaders in preparing students for today’s competitive workforce. A South Carolina Graduate demonstrates: “world class knowledge (rigorous standards in language arts and math for career and college readiness, multiple languages, science, technology, engineering, mathematics (STEM), arts and social sciences); world class skills (creativity and innovation; critical thinking and problem solving; collaboration and teamwork; communication, information, media and technology; knowing how to learn); and life and career characteristics (integrity, self-direction, global perspective, perseverance, work ethic, and interpersonal skills)” (SC EOC, 2015). Educators, school leaders, and counselors in South Carolina have provided a wealth of support to their students using the *SC Profile of a Graduate* as a benchmark for assessment and framework for curricular alignment with state standards.

## Pathways and Supports for College and Career Readiness

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A variety of programs and resources are available at the K-12 level throughout South Carolina aimed at helping students become college and career ready. In addition, post-secondary education institutions provide resources and programs for students. These resources can come in the form of dual enrollment and programs. This section will discuss what programs are available before students reach their college or career destination. These programs come from three groups of stakeholders: high schools, state policies, and higher education institutions.

### **High School Policies & Programs**

High schools are the primary delivery mechanism for CCR, and as such, these institutions of secondary education have been important sites for programs that provide the pathways and supports to prepare students for college and careers. Specific initiatives that provide pathways and supports for CCR include: the South Carolina Course Alignment Project and Individual Graduation Plans (IGP).

#### ***SC Course Alignment Project (SC CAP)***

The South Carolina Course Alignment Project (SC CAP) is a statewide collaborative effort created to bridge the widening curriculum gap between high school and postsecondary institutions (Houp, 2014). Partnered with the South Carolina Technical College System and the South Carolina Department of Education, the South Carolina Commission on Higher Education designed this initiative in support of the Education and Economic Development Act of 2005. The four main goals of SC CAP are to: (a) reduce curricular redundancy by reforming institutional alignment; (b) support local institutions with a statewide structure; (c) create regional collaborative networks of professional educators; and (d) heighten the number of high school graduates, high school graduates who enter college directly and students who are “college-ready” to succeed in credit-bearing courses. SC CAP places specific emphasis on South Carolina’s larger than average population of economically disadvantaged students.

#### ***Individual Graduation Plan (IGP)***

In line with the Education and Economic Development Act of 2005, all middle school students must finish career interest assessments and then construct a detailed IGP (Southern Regional Education Board, 2014). Although South Carolina students have made educational progress with IGPs, more work must be done to ensure that SC residents have the necessary postsecondary credentials to enter and succeed in the workforce. In terms of achievement for South Carolina, eighth-graders’ scores on the National Assessment of Educational Progress (NAEP) was higher than the national average at the Basic and Proficient levels; the college enrollment rate for recent high school graduates was higher than national and regional averages; and all middle school students were required to develop IGPs and discover career



possibilities. However, there is room for improvement in eliminating achievement gaps for students classified as minority or low-income (Southern Regional Education Board, 2014). Since 2007, the number of students living in poverty increased by six percent (Southern Regional Education Board, 2014). Combined with school enrollment increases, there is a considerable need for states to focus on these at-risk students beyond the implementation of an IGP.

## **Higher Education Policies and Programs**

As stakeholders across all levels of education work together to improve access and success for postsecondary training, education, and careers, college and career readiness is influenced by related higher education policies. Among the higher education policies and programs that exist to support students in this transition are the state College Preparatory Course Prerequisite Requirements, dual and concurrent enrollment, financial aid and scholarships, programs at institutions of higher education, TRIO programs, and developmental and remedial education programs.

### ***College Preparatory Course Prerequisite Requirements***

The South Carolina Commission on Higher Education (CHE) and representatives from the public institutions of higher education in the state comprising the Advisory Committee on Academic Programs (ACAP) have outlined the minimum set of high school courses necessary for college readiness. The *College Preparatory Course Prerequisite Requirements* define the curriculum needed to prepare students for college-level coursework. The College Preparatory Course Prerequisite Requirements were most recently adopted in 2006 and implemented in the 2011-12 academic year and include : (a) four units of English, (b) four units of mathematics, (c) three units of laboratory science, (d) two units of the same foreign language, (e) three units of social science, (f) one unit of elective, (g) one unit of physical education or ROTC, and (h) one unit of fine arts (South Carolina Commission on Higher Education, 2015). A list of approved courses that will meet the college preparation curriculum requirements has been added as well. The College Preparatory Course Prerequisite Requirements can serve as an indicator of college readiness at school, district, and state levels.

### ***Dual & Concurrent Enrollment***

Dual enrollment and Early College projects were created to accelerate student learning and bridge the transition between high school and college. They serve to address low graduation rates for minority and low-income students; the high dropout rate in freshman year; low on-time graduation rates; and college completion rates. Although impact studies point to positive success rates among students, studies show that more teacher training could improve these programs. A main issue with dual enrollment courses is that high school teachers do not always run their courses with the academic rigor outlined as a goal of college readiness. Despite these setbacks, dual enrollment programs have had tremendous success devising course sequences and structures to support college readiness among Early College students (National High School Center, 2007).

In 2013, a total of 58,710 students in South Carolina were enrolled in college credit bearing courses in high school (South Carolina Commission on Higher Education, 2014). Additionally, students earned an average of 9.9 credits through dual enrollment (South Carolina Commission on Higher Education, 2014), a number separate from the credit they may have earned through AP or IB tests.

### ***Financial Aid and Scholarships***

In addition to the GEAR UP SC program, which offers informal sessions on financial aid for postsecondary education, students have access to a variety of financial aid programs. These programs include: SC CAN GO, SC TRAC, Early College High School Initiative, Palmetto Fellows scholarships, LIFE scholarships, South Carolina HOPE scholarships, South Carolina Student Higher Education Tuition Grants Commission, South Carolina Need-based grants, Lottery Tuition Assistance and the SC National Guard College Assistance Program.

### ***Programs at SC Colleges and Universities***

Programs have been developed at colleges and universities in SC to help address the articulation gap between high school and postsecondary education. These include initiatives such as immersive educational experiences and bridge

programs. One example is the *Clemson Summer Scholars Program*, an academic summer experience for students preparing to enter the 7<sup>th</sup> through 12<sup>th</sup> grades. It is aimed at gifted middle and high school students to provide them with an experience that introduces them to the scholarly and social aspects of collegiate life at Clemson. Students enrolled in courses are introduced to campus facilities and traditions. Courses run for a week and early application tuition costs \$875 for most subjects.

### ***TRIO Programs: Upward Bound and Educational Talent Search***

TRIO programs were created under the Higher Education Act of 1965 to help low-income Americans enter and graduate from college. Two of the TRIO programs focused on college preparation, including Upward Bound and Educational Talent Search, are federally funded.

Upward Bound is a college preparatory program designed to inculcate the skills and motivation necessary for success in education beyond high school. This program provides academic, cultural, and mentoring opportunities for a limited number of first-generation high school students who have demonstrated the potential and interest to succeed in post-secondary education. Upward Bound includes support services such as academic, career, and personal counseling; financial aid counseling and workshops; assistance with college selection and admission; and career exploration workshops and career fairs. Currently 17 public and private colleges and universities sponsor Upward Bound programs throughout the state of South Carolina.

Educational Talent Search (ETS) works with youth beginning in eighth grade through college enrollment who meet income guidelines or may be the first in their families to attend college. Through ETS, staff from institutions of higher education partner with nearby middle and high schools to provide early-intervention programs to help young people have a better understanding of their educational opportunities. This program provides information to students and their families about preparing for and applying to college as well as providing information about financial aid and scholarships. ETS programs are currently in operation on campuses across South Carolina, including several technical colleges, four-year public universities, and private colleges.

### ***Developmental and Remedial Education***

Further, college readiness influences higher education policy, particularly around developmental and remedial education. Previous findings have linked remedial and developmental courses with failure to obtain a college degree (Adelman, 1999; Adelman, 2004; Bettinger & Long, 2004); as a result, students who take such courses are not considered college-ready (Education Trust, 2001; Moore, Slate, Edmonson, Combs, Bustamante, & Onwuegbuzie, 2010). Research emphasizes the challenges and opportunities facing high school students after graduation. Especially for at-risk, special education, and minority students, high school coursework does not sufficiently prepare them for postsecondary education. High school teachers estimate that 63% of their students are college and career ready, and guess that 51% of those students will actually graduate from college. However, the degree of college readiness varies widely among students at four-year and two-year institutions. Only 20% of incoming freshmen at four-year institutions needed remediation coursework in their first year, compared to 52% for community college students (Amelga 2012).

## CCR Initiatives/Programs/Supports Across South Carolina

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To take a proactive stance on the college and career readiness challenge, the state has created a variety of initiatives to help students become college and career ready. These initiatives work with high schools, businesses, and post-secondary institutions. They provide resources, partnerships, and opportunities for college and career readiness. This section will discuss programs that work with both college and career readiness. It will also discuss how these programs function.

### SC CAN GO

SC CAN GO is a campaign designed to promote a college-going culture for South Carolina students (SC CAN GO, n.d.). The main goal of the initiative is to encourage South Carolina students and families to pursue higher education, and help school counselors and other interested educators promote a college-going culture for all students across the state. SC CAN GO provides a repository of resources that includes information about preparation for, financing of, application to, and enrolling in college. SC CAN GO is a primary vehicle for promoting College Application Month sponsored by the South Carolina Commission on Higher Education. Additionally, SC CAN GO supports College Goal South Carolina, a volunteer program that provides free assistance to all students and their parents or guardians completing and submitting the Free Application for Federal Student Aid.

### GEAR UP

Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) is a grant program from the US Department of Education aimed at supporting academic achievement and providing early awareness of higher education opportunities among low-income students. This program is offered at selected SC middle and high schools. SC GEAR UP works with 22 high schools in 15 counties (SC GEAR UP, n.d.). For a high school to meet the criteria to participate in GEAR UP, at least 50% of the students must receive free and reduced lunch and at least 75% of the students must come from households at or below the poverty rate. GEAR UP partners with colleges and universities throughout the state to provide early awareness programs and activities.

Looking at the measures of success of GEAR UP, it is evident that the initiative has had a positive impact on the lives of students. The number of students with a 3.0 GPA in the 10th grade increased by 38% during the 5-year reporting period (Rawl, 2014). In addition, in 2011, 87.5% of SC GEAR UP participants passed the Math and English Language Arts High School Assessments. Perhaps most telling of the success of efforts of GEAR UP to improve postsecondary awareness in South Carolina is in the increased number of students and parents who reported having conversations about college preparation requirements and options after high school. Students reporting having a conversation with someone about postsecondary options increased from 82% to 93% over the first five years of GEAR UP in the state.

## Personal Pathways to Success

The Personal Pathways to Success program was created through the Education and Economic Development Act in 2005 (South Carolina Chamber of Commerce, n.d.). Personal Pathways to Success was implemented to involve students in the planning of their educational and career aspirations. Students worked in concert with parents and counselors to develop IGP around 16 clusters designed to connect and align a student's high school activities, course of study, and post-secondary goals. A unique feature of this program was that it was developed to be delivered to all students, not only those enrolled in career and technical education (CTE) courses.

A study of the effectiveness of Personal Pathways to Success and the EEDA revealed that the desired outcomes were not present for all students (Withington, Hammond, Mobley, Stipanovic, Sharp, Stringfield, & Drew, 2012); increases in student participation in work-based learning and career identification activities were correlated with participation in CTE courses. The IGP played a central role in facilitating interactions between students and school counselors and counselors reported increased engagement in career-focused activities. Withington et al. (2012) concluded that EEDA and Personal Pathways to Success had increased awareness of CTE courses and programs and reduced stigmas associated with participation in CTE courses or programs.

## Know2 Program

The Know2 Program was created by the South Carolina Higher Education Foundation (SC-HEF) to spread awareness on the importance of a growth mindset for educational attainment. Research has shown that students with a growth mindset have much higher chances of academic success than students who show skepticism about the value of education (South Carolina Higher Education Foundation, n.d.). Unlike other developed countries that share a culture that values education and the often difficult process needed to succeed as learners, American culture often has not overtly promoted a growth mindset among students. Due to this culture, America has fallen in educational attainment and learning in several areas. Changing a mindset is a difficult and complex task, so the Know2 program has a three-pronged approach to be implemented on different levels. Level One focuses on generating top-level support by getting backing from opinion leaders in the community; Level Two focuses on initiatives and goals on the community level; and Level Three focuses on a stronger cultivation of the growth mindset to foster a more positive attitude towards education.

The program is implemented at three levels: state, community, and individual level and includes partnerships with communities, business, and institutions of higher education (South Carolina Higher Education Foundation, n.d.). There are three counties in SC currently implementing pilot projects: Marlboro, Cherokee, and Beaufort Counties. All three counties are focusing on the following key impact areas: early childhood education, transition from high school to college, and adult education.

Marlboro County has worked with local two-year colleges to develop a 5-year program through which students will graduate with a high school diploma as well as a technical certificate. Cherokee county has partnered with Spartanburg Community College on a scholarship program called "last dollar in" that covers tuition after state and federal grants for students entering technical programs connected to the needs identified by employers in the area. This effort will soon be replicated in Marlboro and Beaufort Counties.

## TransformSC

TransformSC, sponsored by the South Carolina Council on Competitiveness, is an education initiative formed by a collaboration of business leaders, educators, students, parents, and policymakers aimed at CCR that was launched in spring of 2013 (South Carolina Council on Competitiveness, n.d.). Currently 37 schools across South Carolina participate in the TransformSC network. The program seeks to create graduates with world-class knowledge and skills combined with a set of life and career characteristics such as integrity, work ethic, and global perspective. This is achieved through four practices: (a) real-world learning, (b) anytime, anywhere instruction, (c) real-time assessment of student progress, and (d) student advancement based on individual readiness. Early results of program effectiveness have demonstrated positive results, such as increased test performance, improved academic engagement, and decreased behavioral issues.

## **SC TRAC**

The South Carolina Transfer and Articulation Center (SC TRAC) is a resource offered to currently enrolled and college bound students to access information to enroll and transfer between and among the state higher education institutions (South Carolina Transfer and Articulation Center, n.d.). SC TRAC is a resource clearinghouse based on a collaboration between the South Carolina CHE and representatives from the public colleges and universities in the state. Students who wish to transfer credits between public institutions, including those earned through dual enrollment, can make use of the information contained on the SC TRAC website to better understand transfer course equivalencies, to review transfer profiles for participating institutions, to search databases of courses offered at institutions, and to make plans for advising and guidance related to course transfer.

## **Center of Excellence for College and Career Readiness**

In 2014, the South Carolina Commission on Higher Education awarded a grant to start the Center of Excellence for College and Career Readiness for South Carolina. The primary role of the Center is to provide professional development for those educators in South Carolina who work with P-20 initiatives throughout the state. To accomplish this, the Center has engaged in delivering workshops, gathering information, and creating other events to facilitate collaborations and improve practices related to CCR in South Carolina.

## Career Readiness

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Employers, businesses, and government agencies in South Carolina play a significant role in career readiness. Their relationships with schools and desires for certain skillsets set the tone and expectations in primary and secondary education. Without the influence of employers, career readiness would not be as prevalent in schools. Many employers have relationships with primary and secondary schools in various forms. For example, some businesses offer internships for high school students. There are also opportunities for cooperative educational experiences (co-op) and job shadowing. Employers also play a significant role in the skills that are taught in primary and secondary schools. Employers in South Carolina desire certain skills from graduates. Employers expect graduates to be able to connect information in classes, like math, to occupational needs. Employers, colleges, and universities expect similar skill sets, including critical thinking, problem solving, computer literacy, and global perspectives. They also expect skills and traits that are more common in the workforce like self-direction, work ethic, and interpersonal skills (South Carolina Council on Competitiveness, n.d.). Businesses aid in career planning by offering mentoring, youth apprenticeships, and registered apprenticeships (Apprenticeship Carolina, n.d.). Businesses reach out to students in elementary and middle schools by bringing in guest speakers and having work-based learning experiences. These programs help engage students in career opportunities before they graduate. It also provides students with opportunities to think about workforce careers, rather than careers that require extensive education. This allows employers to recruit employees directly from high schools and provides jobs for residents of South Carolina, rather than outsourcing labor.

In addition to employers and businesses, several government agencies facilitate career readiness. For example, Apprenticeship Carolina helps connect students with businesses in the area. This allows students the ability to get hands-on experience. The South Carolina Technical College System offers a variety of programs to help students prepare for careers. Not only does it offer programs for students, it also offers incentives for businesses to participate. This section will discuss how businesses, government, and higher education in South Carolina are involved in career readiness. It will discuss how college and career readiness occurs in primary, middle, and high school. It will also discuss career readiness programs that are provided by the state. To conclude, a survey of employers' wants from graduates will be discussed.

### Phases of Career Development

#### ***Primary School Career Awareness***

Primary school is a time for children to be exposed to a variety of careers. Children at this age are beginning to learn about career options through direct interactions with parents and other professionals, like doctors and emergency professionals. According to the Online College and Career Readiness Resource Center (OCCRRRC), primary school is the perfect time for career awareness (Online College and Career Readiness Resource Center, n.d.-a). This is the time where children learn about different career options. This can best be accomplished by field trips to various employers, such as local factories, and governmental agencies, such as the post office. Children also become exposed to careers through career days, where parents and other businesses come to the school and talk about their career.



### ***Middle School Career Exploration***

Middle school is also a time for children to engage in career options. According to the OCCRRRC (n.d.-b), middle school is a time when children explore their direct interests and careers at a more in-depth level. This is a valuable time for students to take career assessments and to learn which careers fit their interests best. After students learn which careers fit their interests, it is important for them to explore these career options. Job shadowing and mentoring from businesses begins to play a significant role in their development (OCCRRRC, n.d.-b). Once students enter eighth grade, they create Individual Graduation Plans (IGPs) with their guidance or career counselors. In these IGPs, students begin to explore cluster choices, majors, postsecondary goals, high school courses, and out of class learning experiences (South Carolina Education and Economic Development Act, 2005). Cluster choices are a group of careers that share common features. These cluster choices breakdown into career pathways, which are groups of jobs within career clusters that require similar skills (Minnesota State Colleges and Universities, 2010). In career pathways, people start in lower positions on the pathway and work their way up to higher positions. For example, in the cluster of business, an individual could begin as a receptionist and work up to an office clerk, and eventually become an office manager. In eighth grade, students also explore postsecondary majors that may be of interest. They learn which classes they need to take in high school to reach their career and educational goals. Finally, students learn about opportunities for out-of-class learning experiences, such as internships and co-op experiences. The eighth grade year is a stepping-stone into high school, which is where ongoing career preparation takes place.

### ***High School Career Preparation***

The years leading up to high school engage students in thinking about which career paths they want to focus on. The high school years are dedicated to preparing students for their chosen career fields. This is done through various methods, depending on the student. According to the South Carolina Education and Economic Development Act (2005), school districts must offer career-exploration opportunities. These opportunities can fit into two categories: (a) observing and (b) doing. The first category includes mentoring and shadowing. These opportunities do not offer hands-on experiences, but they connect students with professionals in their desired careers. Students learn more about the career of interest, like what training is needed to work in that field. The second category offers many more opportunities. To begin, students may participate in a service learning opportunity. Students work on service projects at a business or agency and learn life and work skills. Another experience is cooperative education (co-op), which combines classroom education with working experiences. Students are given more time to work in a field of their interest. Cooperative education is similar to internships, whereas they both have a set contract that outlines the expectations and requirements for the student. Students work directly in the career field of their choices and gain necessary skills for career advancement. Youth apprenticeships are also a hands-on career experience. Youth apprenticeships can last anywhere between one and two years, which differs from shorter-term hands-on experiences like internships and cooperative education experiences. During youth apprenticeships, students learn on the job skills and eventually earn certification of mastery of work-based skills. Students may go on to work at the apprenticeship for two more years after their secondary education is complete.

## **State Career Readiness Policies and Programs**

### ***Education and Economic Development Act of 2006***

In 2005 Governor Mark Sanford signed the South Carolina Education and Economic Development Act (EEDA) into law. The state government realized that the state needed a change to compete with the globalizing world. The act created Personal Pathways to Success to help students become college and career ready. The act also created a variety of policies and procedures that must be met at secondary schools. The EEDA requires that the Department of Education develop curriculum aligned with state content standards. The act also requires that the Department of Education develop state models and prototypes for IGPs in sixteen career clusters. In addition, the act details regulations for identifying and taking action to assist at-risk students. The act also lays out articulation agreements between school districts and higher education institutions. The EEDA aims to have parents involved in the college and career readiness process by having them meet with guidance counselors and play an active role in their child's college and career readiness plan.

The EEDA takes into consideration the training of teachers and career specialists. It requires college education for administrators, guidance counselors, and teachers to receive training in seven topics of college and career readiness. Some example of these areas includes career guidance, clusters, and cooperative learning. The EEDA sets specific training requirements for those who work in secondary education to help improve the college and career readiness resources.

Overall, the EEDA has created legal action for college and career readiness. It specifically lays out how schools and businesses should be helping create a culture of college and career readiness. There are some limitations to the act. For example, the act does not apply to private and home schools. Also, each phase of the act is contingent upon funding. If there are not adequate funds, the implementation of these guidelines cannot occur. The act has helped increase college and career readiness standards but has not solved the dilemma. Much work is still needed before college and career readiness can be met.

### ***readySC***

readySC is a career readiness program that partners directly with industries and businesses in the state to provide training for potential employees (readySC, n.d.). readySC is a division of the South Carolina Technical College System. readySC was created in the 1960s to solve a very serious problem. During the 1950s and 60s young people were leaving the state to find industry jobs in other parts of the country. This prompted the state to create an initiative that would give the opportunity for businesses to hire specially trained workers. readySC works to help train potential employees for new and existing businesses in the state. They have a three-dimensional model that focus on three areas: Discovery, Design, and Delivery. They work to discover what skills and knowledge businesses want their employees to have. They then work to design training that meets the needs and wants of the businesses. Finally, they deliver the information to potential employees in the most effective manner possible. For example, readySC structures training anywhere from computer-based learning to one-on-one mentoring. The program has gained a national reputation and has helped South Carolina gain many employees and employers. In 2013-2014, approximately 4,700 people were trained through the program and 81 companies were served. In 2014, Chief Executive Magazine listed South Carolina among the top five states in which to conduct business (Donlon, 2014). The ongoing success of readySC is attributed to the fact that employers are receiving well-equipped employees. This helps increase the abilities of the workforce and provides the state with the skills that are necessary.

### ***Apprenticeship Carolina***

Similar to readySC, Apprenticeship Carolina is also a division of the SC Technical College System (Apprenticeship Carolina, n.d.). The purpose of the program is to give students an opportunity to earn money as they learn the new skills they will need for their careers. Students are given the opportunity to work directly in an industry or business that partners with the program. Students receive on-the-job training from employers as well as related technical instruction, administered through technical colleges around the state. As students learn the necessary skills and acquire more advanced skills, their wages increase. The program benefits students greatly by providing them with an opportunity to work directly in a field of their interest and gain valuable hands-on skills. The program also benefits employers and businesses. Employers benefit from increased productivity by having the ability to train students in the ways that are most beneficial to them. They also experience fewer on-the-job injuries because employers are able to train specifically on safety protocols. Finally, they benefit financially by receiving state tax credit for participating in the program. Apprenticeship Carolina has gain popularity over the last few years. In 2014, 1,504 new apprentices joined the program in South Carolina and 615 apprentices completed the program. In terms of partnerships, there were 84 new registered apprenticeships. South Carolina had the third largest number of new apprenticeship partners compared to the nation. This intimates that businesses are yearning for opportunities to hire South Carolina graduates and are actively searching for opportunities to do so. This also suggests that South Carolina graduates are looking for ways to seek employment in the state and are investing their time in businesses in the state.

While Apprenticeship Carolina tends to focus on individuals who have completed secondary education, Youth Apprenticeship Carolina gives high school students the ability to get hands on experience while in high school. Students still receive their education at secondary schools, but also receive specialized training at businesses that partner with

Youth Apprenticeship Carolina. High school students receive compensation from their work at these businesses and are able to learn more about careers in which they show interest. Upon graduation, students have the opportunity to continue with their apprenticeship and can remain enrolled in Apprenticeship Carolina.

### **Skills Businesses Desire**

Understanding the needs and wants of employers in South Carolina is vital to the development of college and career readiness. By understanding the needs in the state, policymakers and educators can better adjust teaching and training to help students develop desired employability skills. The Division of Economic Development & Workforce Competitiveness of the South Carolina Technical College System conducted a survey of employers in the state in 2014 to gain a better understanding of what skills employers want from graduates. We conducted a qualitative analysis of the employers' responses and organized four main themes outlining desired competencies of graduates: (a) cognitive skills, (b) noncognitive skills, (c) professional intelligence skills, and (d) technical skills. Cognitive skills can be exhibited as "problem formulation, research interpretation, communication precision, and accuracy" (Conley, 2012). They also require employees to analyze the information they are given. In addition to cognitive skills, noncognitive skills increase productivity and organization in the workplace. Examples of these skills include drive, motivation, conflict resolution, and leadership. Professional intelligence skills are the skills that every employee needs, regardless of occupation. They include engaging in work, being on time to work, and displaying professional behavior. These skills are expected from every employer and educator, yet are not necessarily taught in high school or higher education. Technical skills are skills that require contextual and hands-on training. They often require a certificate or degree and most of these skills require students and employees to be aware of safety and governmental regulations. Some examples of these skills include welding, blueprint reading, CDL and truck driving skills, and machinist skills.

While not all skills employers want can be taught easily, there are many skills that students can learn through meaningful experiences and by challenging students to think at a deeper level. If students can be guided to obtain these skills, more of the jobs that are available in the state could be better filled and students would be more successful in their respective paths.

## Future Directions: Practice, Policy, and Research

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In summary, there is much to take away from this synthesis of college and career definitions, indicators, and activities in South Carolina. First, having a definition of what it means for graduates to be ready for college and careers and having goals pointed in that direction are important. However, South Carolina is one of 18 states that have yet to adopt an explicit definition of college and career readiness. Despite the lack of a statewide definition of college and career readiness, it is clearly a priority for a multitude of stakeholders in the state. The report has outlined programs aimed at supporting CCR at every level and in every sector, including business, community, education, state and local government, and charitable foundations. Moreover, the *Profile of the South Carolina Graduate* provides a de facto definition of college and career readiness in the state. In addition to the adoption by nearly all key stakeholders in the state from the education and business community, the profile has been used as a preface in the newly formed and implemented state CCR standards.

The current educational profile of South Carolina graduates shows there is much work to be done to improve educational outcomes. Notwithstanding, in sum there are indicators that these efforts are improving the educational profile of the South Carolina graduate. What remains to be seen is how the recent changes in the landscape of CCR in the state, such as the SC Course Alignment Project and the requirement of all high school students to take the ACT and ACT Work Keys tests, will impact readiness indicators such as ACT and SAT scores, high school graduation rates, college attendance and completion rates.

These recent changes present an opportunity for South Carolina to engage in broad-based measurements of the impacts of these recent changes. Collecting information on student performance before fall of 2015, such as scores on tests, graduation, and enrollment rates can be a useful baseline for examining the effect of these policy changes. However, this is necessary but not sufficient to maximize the efforts of all engaged in working to support student success in the state. In addition to the measurement of gross outcomes, an understanding of the net impacts of individual programs and initiatives will allow stakeholders in the state to know how well what they are doing is working (Bangser, 2008).

Moreover, assessment and evaluation of individual programs will allow agencies, educational institutions, and community partners to fine-tune their offerings for greatest impact. A concerted approach to evaluating programs will allow their sponsors to determine the effects they will have for students of all walks of life. Rather than taking a one-size-fits-all approach, situationally high-impact programs can be developed based on the student profile of the community. This approach, however, requires a commitment to shared data collection, distribution, and analysis across multiple agencies.

The panoply of CCR resources offered in the state of South Carolina suggests that there are myriad opportunities for collaboration that would result in increased efficiency and effectiveness. Many of the efforts that are going on in the state are driven by state agencies (e.g. SC Course Alignment Project, Education Oversight Committee 2020 Vision, TransformSC). While these initiatives are not incompatible, they do not represent a unified vision or approach in the state for ways to achieve CCR goals. Further, the lack of coordination is mirrored across other sectors and levels. With many stakeholders working simultaneously at improving the state of success of CCR, coordination is incredibly important.

To facilitate coordination and achievement of CCR goals, formal avenues need to exist that will provide space for communication and collaboration. It is likely that much of the conversation space exists, though limited to specific constituencies. For example, professional organizations such as the American School Counselor Association or the Professional State School Counselor Association provide space for conversation about promising practices in the delivery of CCR initiatives. However, this limits the conversation to school counselors. It is not difficult to imagine that similar situations exist with state-level agencies. The newly formed Center of Excellence for College and Career Readiness is perfectly positioned to create spaces where all interested parties can communicate, share promising practices, discuss the challenges and successes in implementation, and give the policymakers a forum for dissemination and receiving feedback.

The challenge for implementation at the school level is increased by the multiplicity of interested parties, numerous programs that exist, and policies that have been shifting (such as EEDA, the SC CAP, and current CCR curriculum standards coming in line with Common Core State Standards). As a result, it can be overwhelming to be an educator responsible for implementing practices and developing programs supporting CCR that work. To facilitate the translation of policy to practice, creating opportunities for ongoing professional development for educators is an important function.

During the investigation of the many CCR-related offerings in South Carolina, information was scarce about the types of CCR-specific programs in middle and high schools as well as in colleges and universities. To facilitate a better understanding of the diversity and similarity of CCR initiatives in the state, a clearinghouse of programs for all sectors of educational institutions, public and private or secondary and post-secondary, should be developed. Having a better understanding of the kinds of programs being offered throughout the state is an important step in understanding what the best practices are in supporting student success.

Finally, this points to a research agenda related to CCR in South Carolina. First, an inventory of CCR programs in middle, high, and postsecondary schools will provide foundational knowledge of the activities being carried out in support of student success. Connecting the data gathered from this kind of a survey to college enrollment, attendance, and completion rates may provide additional insight into identifying the kinds of programs that are connected to improved college readiness. Additional, and more complex, research should follow that tracks cohorts of individual students in a longitudinal fashion beginning in grade 6 through graduation and into postsecondary pathways. This study would track student access and use of CCR supports and programs throughout their educational careers and involve gathering measures of important cognitive skills (e.g. critical thinking, problem solving, communication) and noncognitive traits (e.g. resilience, self-advocacy, perseverance). While this would represent a substantial investment in time and resources, it has the promise of unpacking what constitutes a successful approach to educating a college and career ready graduate.

## Conclusion

South Carolina is at the point of incredible opportunity. To achieve the social and economic potential for the citizenry of the state, many diverse groups have elevated the need for creating graduates who are college and career ready to a priority. This can be seen in the many resources and efforts that are being mobilized to improve the educational environment to ensure postsecondary success. However, to take advantage of the moment of opportunity, it is time to take the individual star programs and create a connected constellation (Keup, Greenfield, & Gardner, 2013) of focused efforts to improving indicators of college and career readiness in the state.

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