Programs of Study as a State Policy Mandate: A Longitudinal Study of the South Carolina Personal Pathways to Success Initiative: Year 3 Technical Report

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Programs of Study as a State Policy Mandate: A Longitudinal Study of the South Carolina Personal Pathways to Success Initiative: Year 3 Technical Report

Executive Summary

This interim report[1] presents selected preliminary findings from data collection and analysis conducted during the third year of a larger five-year study of South Carolina's *Personal Pathways to Success Initiative* by the National Dropout Prevention Center at Clemson University, in conjunction with colleagues from the National Research Center for Career and Technical Education (NRCCTE) at the University of Louisville. This project is one of three NRCCTE studies that are intended to increase knowledge about Perkins IV-defined Programs of Study (POS) and their development, how best to organize a POS to meet the needs of students, parents, schools, and the community, and the impact of POS on student outcomes.

South Carolina Policy Framework

South Carolina's *Personal Pathways to Success Initiative*, authorized under the state's Education and Economic Development Act (EEDA) in 2005, is a state-mandated school reform model designed to improve student achievement and better prepare students for postsecondary education and high-skill, high-wage jobs. EEDA was designed to achieve these results through a focus on career awareness and exploration at all school levels and through the creation of locally relevant career pathways and programs of study for all students.

EEDA preceded Perkins IV, but it required South Carolina schools to implement reforms that incorporate nearly all of the core and supporting components needed for the successful development of a Perkins IV-funded POS, as well as additional elements that could support and sustain the implementation of POS. For example, EEDA components include the organization of high school curricula around at least three career clusters per school, an enhanced role for school counselors, and extra assistance for high-risk students. Further, the law mandates evidence-based high school reform, regional education centers charged with facilitating business-education partnerships, and greater articulation between secondary and postsecondary education.

Study Design

This five-year study is investigating the extent to which a statewide reform mandate like the EEDA facilitates the creation of career pathways and POS (as defined in Perkins IV) in various high school contexts and whether these POS lead to improved student high school and post-graduation outcomes. This study also explores the influence of the availability of school and community resources and future employment opportunities —whether substantial or limited—on the development of POS and the outcomes of students enrolled in them.

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[1] This report expands on the discussion of our study and findings to date included in the *Programs of Study: Year 3 Joint Technical Report*, by the Programs of Study Joint Technical Working Group (2011) (which can be found at www.nrccte.org) and some portions have been presented at the 2010 ACTE national conference and the 2011 AERA annual conference presentation and paper: Symposium: Programs of Study: Multiple Approaches Examining the Implementation of a Federal Policy on Career Preparation. Paper #3: *A Longitudinal Study of the South Carolina Personal Pathways to Success Initiative* by Hammond et al. (2011).

Because all high schools in South Carolina are operating under the same state law, it was not feasible to randomly assign schools to experimental and control groups. Rather, the study employed a quasi-experimental design with a mixed-methods, triangulated approach (Tashakkori & Teddlie, 2002), following three student cohorts from a sample of eight high schools from economically and culturally diverse regions of South Carolina over a five-year period.

The school sample was carefully drawn through a four-stage sampling process and selected to vary on critical study factors: (1) employment opportunities and industrial mix, (2) local school and community economic conditions, and (3) initial levels of EEDA implementation. Data are being collected from three cohorts of students selected because of their varying levels of exposure to the reforms mandated by EEDA: those who graduated in 2009 (who had little to no exposure to EEDA), and those whose on-time graduation will be in 2011 (with moderate exposure to EEDA) and 2014 (with exposure to EEDA since middle school).

The study is structured around the following four research questions:

(1) To what extent does South Carolina's EEDA facilitate the development of POS?
(2) What impact does the level of local economic resources have on the implementation of EEDA and the development and implementation of POS?
(3) What impact does the implementation of EEDA have on (a) student high school outcomes and (b) student post-graduation employment and education and training outcomes? and
(4) What impact do POS, as defined in Perkins IV, have on (a) student high school outcomes and (b) student post-graduation employment and education and training outcomes?

Both quantitative and qualitative data at the school and individual student levels are being collected from study sites and analyzed, to create a broader understanding of EEDA's influence on schools, teachers, students, and the creation of POS. We will combine results from student and guidance personnel surveys; archival data from the three student cohorts, such as grades, attendance, and dropout rates; content analysis of catalogs and career-related materials; and perspectives gleaned from interviews and focus groups with school guidance personnel, teachers, administrators, and students at the high schools as well as administrators at partner postsecondary institutions.

Year 3 Overview

At the end of the third project year, we have collected both quantitative and qualitative data from all of the sample schools. Two of the three student cohorts (Class of 2009 and Class of 2011) have been surveyed once about their experiences with career-focused activities, career planning, and school engagement. We will administer the survey again in Year 4 to one of these cohorts (Class of 2011) prior to graduation and in Year 5 to the third cohort (Class of 2014). We have also surveyed guidance personnel about their involvement in career-focused education and the development of student Individual Graduation Plans (IGPs) and about changes in their assigned duties since EEDA. Two site visits have been conducted at sample schools and partner postsecondary institutions to interview school personnel about implementation of the reform

policy, the progress made in career-focused education, the development of POS at their schools, and the characteristics of these POS.

Preliminary Year 3 Observations Across Study Sites

The information presented in this report represents only a portion of the data we have gathered during this third study year. In addition, since a large amount of data still remains to be collected and analyzed over Years 4 and 5, any findings or observations described here are tentative and subject to further examination. We can, however, offer some preliminary observations and findings across schools related to three of our four research questions.

EEDA Policy Implementation Levels at Sample High Schools. By the end of the 2009-2010 school year, the third year of our study, implementation of EEDA activities in high schools was in its fourth year. Although EEDA was not expected to be fully implemented until the end of the 2010-2011 school year, data collected after two and a half years in the field indicate that EEDA has already increased the amount and variety of career planning activities and guidance that students are receiving in our sample high schools and changed the roles of many guidance counselors in these schools. Early data indicate that a variety of career-focused activities are being offered as a result of the reform policy, with school counselors playing key roles in providing these activities. The types of activities were found to vary across sample schools, like the nature of the events and the types of career experiences they provided for students.

Research Question 1: To what extent does South Carolina's EEDA facilitate the development of POS?

Early evidence suggests that components of EEDA are helping to build some of the foundations and framework for the development and successful implementation of Perkins IV-defined POS. One component that is influencing academic-CTE integration is the IGP process that has become a viable vehicle in many of the sample schools to facilitate academic-CTE discussions, reduce the stigma of taking CTE courses, and increase the knowledge of CTE among school staff.

We found that EEDA has affected the role of counselors and the depth and breadth of information that students receive about their educational and career opportunities in career and technical fields. EEDA emphasizes the need of students to engage in career development activities such as exploration, interest assessments, and talking about career issues and career options with knowledgeable adults, thus making school counseling an essential service. This emphasis in EEDA and the requirements of the IGP process have led to an increase in the amount of time counselors spend engaging in one-on-one career-based counseling with students, with an increased effort toward meeting with every student on an annual basis. Further, there has been a greater effort towards engaging parents in the course and career planning of their children.

A key to much of the change in sample schools is the development and maintenance of students' four-year IGPs. A central purpose of these plans is to provide students with an academic blueprint toward graduation and beyond, based on their career goals and within the context of their selected career pathway. From comparisons to findings in the other NRCCTE POS studies,

it appears that when an increased emphasis is placed on these types of plans, as is the case under EEDA, students are likely to receive more academic and career guidance services.

The demands of EEDA-mandated duties, such as developing IGPs, have also caused work overloads for counselors, with these new duties being added onto old ones. IGPs were reported by counselors as being a major factor in adding to work loads. Counselors also reported continuing involvement in "inappropriate activities," as defined by EEDA guidelines (e.g., testing and course scheduling), which contributed to work overloads. Despite challenges, counselors were perceived as being enthusiastic about many aspects of the state policy and reported feeling prepared to carry out the new duties required by EEDA; some reported finding creative ways to manage work loads.

There is also evidence of changes in participation in CTE resulting from EEDA implementation. CTE teachers at a number of schools reported not only an increase in the numbers of students being directed into their courses but also more appropriate placement of students in CTE courses and programs. The students "want to be there" and "want to do the work." In addition, it is clear at several schools that any stigma associated with taking CTE courses or attending a career center has been reduced in recent years, although it remains present at some of the study schools.

One barrier to POS development at sample schools is the challenges that students face with CTE course-taking and scheduling, and tradeoffs between CTE, Advanced Placement (AP), and dual credit courses. There is often limited space for students in CTE courses and limited time offerings for these courses, making it difficult for students to schedule CTE courses around the required core academic courses or difficult to get into desired classes. In addition, some students may not take CTE courses because these courses rarely carry honors, AP credit, or dual credit, which are more heavily weighted than most CTE courses in calculations of high school GPAs. College-bound students interested in CTE courses have to balance CTE with other courses to maintain their GPAs. These challenges may hamper efforts to integrate CTE and academic programs into seamless POS pathways.

As mandated by both Perkins IV and EEDA, there has been progress in developing and/or strengthening articulation agreements among schools and districts, community colleges, and four-year colleges and universities, with increases in dual credit and credit transferability options for students at many sample schools.

Research Question 2: What impact does the level of local economic resources have on the implementation of EEDA and the development and implementation of POS?

The levels of EEDA implementation at the eight high school sites have been affected by a variety of variables, including the presence or absence of jobs and job shadowing opportunities in the specific communities, resources available within the school districts, declining state funding for EEDA and other educational services, and increased demands placed on school personnel. For example, building on existing CTE programs or whole-school reform models such as High Schools That Work facilitated early implementation of career pathways and POS. Not surprisingly, access to a wide variety of resources facilitated policy implementation, such as having staff with prior knowledge of and experience with various policy areas or being located in

a community with diverse local businesses willing to provide resources and educational opportunities for students. Several of the schools lacked some of the basic resources necessary to design and implement POS, and there appears to be little potential for this situation to improve in the near future.

Research Question 3: What impact does the implementation of EEDA have on student high school outcomes?

For the most part, members of the Class of 2011 cohort in the eight sample high schools who responded to our student survey reported that they were involved in a range of career-focused activities by the end of their tenth-grade year in high school. A majority of the members of this cohort who indicated on the survey that they had selected a high school major and career cluster also reported that having a major and career cluster had made them more likely to take courses needed for the future, helped them to make connections between their studies and the type of career they want, helped them to get better grades, made them feel less likely to want to drop out of school, made them feel more likely to want to come to school, and made it more likely that their parents got involved in the selection of their courses.

In contrast to findings in the other two NRCCTE POS studies, students in our sample schools most frequently identified school guidance counselors as being the most helpful in the development of their IGPs, selecting them over parents, teachers, and friends. The higher percentages of students naming counselors in our schools suggest that state policy specifically targeting the role of counselors can enhance their influence on career choices and possibly provide a more systematic process for career planning. We hope to find out more about student perceptions of and satisfaction with the IGP planning process and meetings with counselors during the Year 4 focus groups with members of the Class of 2011 cohort.

Although EEDA mandates career-focused education for all students, according to Class of 2011 student survey reports, greater proportions of CTE participants reported participation in job or career identification and planning activities as well as work-based learning experiences than non-CTE participants. These reports, however, are based on students' experiences through the tenth grade, and the experience of students in this cohort may change as they enter their final years in high school. The spring 2011 student survey will follow up with this cohort as of the end of their twelfth grade year, so we will be able to see if these experiences have changed as the cohort has progressed through two more years of high school.

Future reports will explore in more depth the influence that EEDA policy may have in sample schools on the development and direction of Perkins IV-style POS. We will also explore differences in student outcomes among cohorts with varying levels of exposure to EEDA and to POS, using archival data such as grades, attendance, and dropout.

Looking Ahead to Year 4

Tasks in Year 4 will center on the continuation of analysis of previously collected data and collection of additional archival, survey, and focus group data on student cohorts and schools. Focus groups will be conducted with members of the Class of 2011 at the end of their senior year

during site visits to schools. The *Student Engagement/POS Experiences Survey* will be administered to the Class of 2011 for a second time in the spring semester before graduation, and analysis of previously collected survey response data from the Class of 2009 and Class of 2011 will continue. Analysis of interview, focus group, and survey data from school personnel from the Year 2 and Year 3 site visits and phone interviews will continue into Year 4 to further assess POS implementation levels at sample schools and the relationship between POS and state policy implementation. Efforts to collect relevant archival data for the longitudinal student cohort database from various datasets will continue through contacts with various departments at the South Carolina State Department of Education (SDE). Efforts to disseminate information on study findings to date through conferences and publications will also continue.

About This Report

After a short introduction, the report summarizes some of the literature that provides context for this analysis and then offers a brief overview of the South Carolina policy framework. The design of the study and the study sites are then described, followed by a discussion of selected preliminary findings. Finally, plans for data collection and analysis for the fourth year of the study are also summarized.

Programs of Study as a State Policy Mandate: A Longitudinal Study of the South Carolina Personal Pathways to Success Initiative: Year 3 Technical Report

This interim report presents preliminary findings from data collection and analysis conducted during the third year of a larger five-year study of South Carolina's *Personal Pathways to Success Initiative* conducted by the National Dropout Prevention Center at Clemson University, in conjunction with colleagues from the National Research Center for Career and Technical Education (NRCCTE) at the University of Louisville. This initiative, authorized under the state's Education and Economic Development Act (EEDA) in 2005, is a career-focused school reform model intended to improve student achievement and preparedness for postsecondary education and high-skill, high-wage, and high demand jobs. It was designed to achieve these results through a focus on career awareness and exploration at all school levels and through the creation of locally relevant career pathways and programs of study.

The five-year study is designed to assess the extent to which a statewide reform mandate like the EEDA facilitates the creation of quality POS (as defined in Perkins IV) in various high school contexts and whether these POS influence students' engagement, achievement, and transition to post-graduation education and/or employment in eight sample high schools. This study also explores the influence of the availability of school and community resources and future employment opportunities —whether substantial or limited—on the development of POS and the outcomes of students enrolled in them. This project is one of three NRCCTE studies that are intended to increase knowledge about POS and their development, how best to organize a POS to meet the needs of students, parents, schools, and the community, and the impact of POS on student outcomes. This study's objectives and research design were developed to complement analyses of the other two studies.

This research provides a unique opportunity to explore the impact of a statewide, mandated reform policy that is similar to the national Perkins IV legislation. EEDA preceded Perkins IV, but it required South Carolina schools to implement reforms that incorporate nearly all of the basic and supporting components considered necessary for the successful development of a Perkins IV-funded POS as well as additional elements that could support and sustain the implementation of POS. For example, EEDA components include the organization of high school curricula around at least three career clusters per school, an enhanced role for school counselors, and extra assistance for high-risk students. Further, the law mandates evidence-based high school reform, regional education centers charged with facilitating business-education partnerships, and greater articulation between secondary and postsecondary education.

Project researchers are studying how eight high schools are implementing EEDA and the influence of its provisions on students and the development of POS. The sample schools were selected to include diversity in local economic conditions and industries, the degree of initial levels of policy implementation, and levels of school and community resources. Diversity in school size, location, and demographic characteristics of students were also taken into consideration in site selection. Data are being collected from three cohorts of students with different levels of exposure to the reforms mandated by EEDA: those who graduated in 2009 (who had little exposure to EEDA), and those whose on-time graduation will be in 2011 (with moderate exposure to EEDA) and 2014 (with exposure to EEDA since middle school).

By the end of the third project year, we have collected both quantitative and qualitative data from all of the sample schools. Two of the three student cohorts (Class of 2009 and Class of 2011) have been surveyed once about their experiences with career-focused activities, career planning, and school engagement. We will be administering the survey again in Year 4 to one of these cohorts (Class of 2011) prior to graduation and in Year 5 to the third cohort (Class of 2014). We have also surveyed guidance personnel about their involvement in career-focused education and the development of student Individual Graduation Plans (IGPs) and about changes in their assigned duties since EEDA. Two site visits have been conducted at sample schools and partner postsecondary institutions to interview school personnel about implementation of the reform policy and the progress made in career-focused education, the development of POS at their schools, and the characteristics of these POS.

This report focuses on preliminary third-year observations and findings across sample schools. The information presented represents only a portion of the data we have gathered to date. Preliminary findings are discussed in relation to their relevance to addressing our research questions. Prior to discussion of preliminary findings, the report first provides some background that provides context for this analysis, a brief overview of the South Carolina policy framework, and a summary of sample school characteristics.

Background

The world is increasingly shifting to a global economy, which has the potential to increase efficiencies of production and therefore the standard of living of people around the world. The benefits of this global economy, however, are often overshadowed by local difficulties experienced due to a changing industrial base. For example, the textiles, textile products, and apparel manufacturing industry sector was once dominant in South Carolina, giving many opportunities for lifelong employment with good wages. Since 1996, 44% of all U.S. textile jobs have been lost to overseas competition (DuPlessis, 2006) and the U.S. Department of Labor's Bureau of Labor Statistics predicts that employment in this industry sector is expected to decline by another 35% through 2016 (U.S. Department of Labor, Bureau of Labor Statistics, 2008a). This contrasts with a projected increase of 11% between 2006 and 2016 for all industries combined (U.S. Department of Labor, Bureau of Labor Statistics, 2008a). Clearly, there have been and will be "winners" and "losers" in the changing economy. For many South Carolinians who have depended on employment through the textile industry or agriculture, the changes are proving to be particularly difficult.

Key to thriving in a changing economy is having the skills necessary to compete in that economy. Comprehensive school reform, particularly high school reform through career and technical education (CTE) that leads to meaningful postsecondary options, is critical to successful education and training for those who compete in a global economy. Most of today's workforce must undertake some kind of postsecondary training or education to be prepared to fill an array of emerging high- skill-level jobs of the future workforce. Both students and society benefit when students make the transition from high school to two- and four-year postsecondary programs or to work as smoothly and as quickly as possible and without the need for remediation. Early, individualized exposure to career and training information, opportunities for

dual enrollment and dual credit, and statewide or regional articulation agreements help serve this purpose.

Career-Focused Education, Career Planning, and Development

Research indicates that students can benefit from career-focused education offered through programs of study, career clusters, and CTE. Such programs provide opportunities for students to engage in career exploration and development, to establish short-term and long-term goals, to learn about a variety of career options, to increase academic knowledge and skills, to establish a career identity, to test career preferences in applied settings, and to make links between coursework and postsecondary careers and education (Kalchick & Oertle, 2010; Lewis & Kosine, 2008; Gray, 2004; Gysbers, 2008; Rojewksi and Kim, 2003). There is strong evidence that engaging in POS facilitates students' participation in career planning and development and ultimately results in greater career awareness, a stronger career identity, and more explicit career goals (Lewis & Kosine, 2008; Perry, Liu, & Pabian, 2010).

A recent report released by the Harvard Graduate School of Education recommends broader, improved school reform with high-quality CTE as a key element (Symonds, Schwartz, & Ferguson, 2011). The authors outline three current challenges for achieving this goal: (a) the existence of the "forgotten half" (referring back to a 1988 William T. Grant Foundation report that millions of non-college-bound youth are in danger of being denied full participation in society); (b) a more demanding labor market, where it is estimated that nearly two-thirds of new jobs that will be created in the next seven years will require some postsecondary education (associates degree, certification, etc.); and (c) widening skills and opportunity gaps, because a "focus on college readiness alone does not equip young people with all of the skills and abilities they will need in the workplace, or to successfully complete the transition from adolescence to adulthood" (Symonds et al., 2011, p. 4).

The three-point solution offered in the Symonds et al. (2011) report is similar in many ways to what may be part of a high quality CTE POS policy. These include the development of: (a) a broader vision of school reform that incorporates multiple pathways to carry young people from high school to adulthood, (b) a much expanded role for employers in supporting these new pathways, and (c) a new social compact between society and its young people. The authors point to some cutting-edge CTE pathways-type programs existing in many American states and communities that are having positive effects on dropout and graduation rates, school engagement, and workforce salaries. According to the authors, the following elements are essential to the successful implementation of career pathways: improved career counseling in both secondary and postsecondary schools, improved consistency in quality of CTE programs so that programs are available to all students and can be aligned across school levels, and a reduction of cultural barriers and stigma associated with CTE.

Hull (2005) claims that integrating career counseling in the context of career pathways encourages students to initiate career planning at the beginning of high school and facilitates smoother transitions to postsecondary work and education options. As a result, students are better prepared to reach their career goals and aspirations (p. 225). In a similar respect, POS connect coursework to work-based learning and allow students to access support structures (e.g.,

CTE student organizations, skill-based competitions, real-world classroom projects, and work-based learning) that can facilitate their career planning (McCharen & High, 2010).

By making career exploration and planning central to CTE and school-based reform, career development efforts can become intentional, in contrast to previous programs where career development seemed to be a "byproduct" of curriculum efforts (Lewis & Kosine, 2008, p. 48). As a result, guidance counselors can serve as a "catalyst" for facilitating career pathway partnerships (Hull, 2005, p. 193). For career development to be successful, however, competing demands for the time of guidance counselors need to be addressed, so that they have time for assisting students with career planning (Association for Career and Technical Education, 2008; Hughes & Karp, 2006).

Additional research suggests that CTE influences participation in career planning and development. High school students who take CTE courses feel more certain about their career direction and goals (Lekes et al., 2007; Offenstein, Moore, & Shulock, 2009) and feel more prepared for their occupational futures than do non-CTE students (Bennett, 2007). Also, in comparison to non-CTE students, CTE students feel more prepared to transition to college, to believe that their high school POS had provided them with relevant information about college programs and courses, and felt more confident about and satisfied with their college and career choices. These students were also more likely than non-CTE participants to report that they had developed a number of personal and professional skills important to workplace success, such as problem-solving, project completion, communication, time management, and critical thinking (Lekes et al., 2007). Such soft skills are often the target of school-based reform efforts such as EEDA.

Plank (2001) found that students who take CTE classes in a certain proportion to academic classes were less likely to drop out of school. However, he also found that there needs to be a balance of CTE and other classes. Even at the risk of slight reductions in overall academic achievement, Plank found that a balanced combination of CTE and academic courses may reduce the probability of dropout. For lower-ability youth, he concluded that a little more than half of the total high school coursework should be invested in CTE to maximize the likelihood of staying in school. The potential for students to strike a balance between CTE and academic courses is being tested, however, in the context of the No Child Left Behind (NCLB) legislation. Fletcher (2006) argues that so much (for both individuals and schools) is riding on performance in core curriculum areas for NCLB, that other areas, such as CTE, may be falling by the wayside.

In the context of CTE and career pathways models, individual career plans (ICPs) and work-based learning opportunities are particularly important elements of career planning and development. Perkins IV encourages schools to develop ICPs as a part of a comprehensive approach to CTE; the American School Counselors Association has endorsed these plans as well. As a student-centered career plan, an ICP is more than a checklist; it teaches students "how to use their [plans] to guide their actions and actualize their education and career aspirations" (Kalchick & Oertle, 2011, p. 6). The literature also highlights positive outcomes for ICPs and work-based learning. Individual learning plans (such as ICPs) contribute to increased student self-sufficiency, self-efficacy, and self determination in career development and planning (Kalchick & Oertle, 2011) and increased academic achievement and school engagement

(Gysbers, 2008). This kind of comprehensive approach makes career pathways more apparent to students, involves them proactively in the career planning process, and supports student planning for both academic curriculum choices and careers (Grubb, 1996; Stern, Raby, & Dayton, 1992).

Many programs of study include explicit opportunities for students to obtain real-world work experiences through job shadowing, internships, school-based enterprises, and cooperative (co-op) educational experiences. These opportunities expose students to a variety of career options, help students to clarify career goals, increase their confidence in their occupational identities and choices, and improve their capacity to engage in career planning that best suits their goals and aspirations (Bailey, Hughes, & Moore, 2004; Zeldin & Charner, 1996). Students also have the opportunity to develop positive relationships with adults other than their parents and teachers (Bailey, et al., 2004).

Ryken (2004) identifies several benefits of work-based learning, including higher levels of student engagement in school, increased school retention and graduation rates and greater success in the labor market. Bennett's (2007) research on work-based learning reveals that CTE students benefitted more than non-CTE students from the social support that was offered through work-based learning. Lynch (2000) asserts that such programs should be included for students in all high school majors (e.g., performing arts or math and science) and not just CTE students.

Influence of CTE Reform on Perceptions of CTE

Traditionally, vocational education has been viewed and structured as alternative education, separate from the "regular" educational programs, for students who are not interested in or able to go to college, who are not able to sit through regular classroom lectures, and who need a curriculum that is more hands on and in some opinions "less demanding." Castellano, Stringfield, and Stone (2003) found that traditionally counselors and other adults have felt that those students who are "at risk of not finishing high school" and who would "not go on to any postsecondary education" should be in CTE programs, so that they could "earn a decent living after high school" (p. 243). Wonacott (2000) found that educators in general have seen CTE as a place for the non-college bound, potential dropouts, and special needs students. At the beginning of the 21st century, the term "vocational education" still carries a negative connotation, where "parents, students and employers hold stereotypes about career and technical education" (Brown, 2003, p. 1).

The language and mandates of the latest iterations of Perkins legislation were designed to redefine vocational education. Included in Perkins IV is the name change to Career and Technical Education (CTE). CTE now emphasizes the integration of rigorous and traditional academic content into traditional CTE programs and focuses on preparation for viable and rewarding postsecondary options including advanced degrees. Effective CTE programs prepare students for further postsecondary education and careers, include more academic content in their curricula, and demonstrate more clearly how academic concepts are applied to technical or occupational settings (American Youth Policy Forum, 2009). As a result, several researchers assert that vocational education is no longer segregated from academic education, as CTE students are now being prepared for both careers and postsecondary education (DeLuca, Plank, & Estacion, 2006; Gordon, 2008), CTE is also becoming a significant part of students'

educations. A study of Class of 2005 graduates found that nearly 97% of high school graduates took a CTE course during high school (Levesque et al., 2008, p. 27).

Counseling and Guidance in CTE and Programs of Study

Finding stable and profitable employment in today's global economy requires not only education and proficient work skills, but also career know-how. In a highly competitive market with few jobs available, students need an edge in finding the right career fit, one that meets both their personal needs and a demand within their community. In order for students to make effective educational and career choices, they need guidance from knowledgeable and experienced adults who can provide them with information regarding careers, help them to engage in self-exploration, and provide opportunities for work-based experiences.

Although career and vocational guidance in K-12 is rooted in school counseling services (Pope, 2009), major limitations have been identified in the delivery of comprehensive career counseling services provided by school counselors. For example, *Public Agenda* surveyed 600 young adults about their experiences with school counselors. These participants rated school counselors poorly on their efforts to help them think about careers, to advise them on ways to pay for college, and to aid them with the college application process (Johnson, Rochkind, Ott, & DuPont, 2010). Focus groups conducted as part of the study found that students who weren't considered "college material" characterized their meetings with counselors as "dispiriting and unhelpful" (Johnson et al., 2010, p. 7). In addition, poor career and educational guidance has been linked with at-risk students' reluctance to pursue postsecondary education and training (Plank & Jordan, 2001).

Other studies have found that school counselors do not spend sufficient time providing career and postsecondary guidance services to students (Osborn & Baggerly, 2004; Plank & Jordan, 2001). Although school counselors report that they would like to spend more time engaging in career counseling activities (Osborn & Baggerly, 2004), unmanageable caseloads and high demands on their time have been identified as the major reasons for their inability to do so, affecting not only career counseling but other counseling services as well (McCarthy et al., 2010). A large number of school counselors report engaging in non-counseling or inappropriate duties and that these duties interfere with their ability to provide appropriate counseling services (Pérusse et al., 2004). These issues have greatly contributed to the inadequate career and educational planning now evident in many schools (Trusty, Niles, & Carney, 2005).

In response to students' need for reliable career information about post-high school opportunities, including postsecondary education (both two- and four-year), training and certificate programs, and employment options, there has been a growing call to increase the amount and specialization of career counseling and guidance services to students through school counseling programs (e.g., Association for Career and Technical Education, 2008; Carnevale & Desrochers, 2003; Feller, 2003; Huss & Banks, 2001; Rosenbaum & Person, 2003). The inclusion of guidance counseling and advisement in the Office of Vocational and Adult Education's (OVAE's) *Career and Technical Programs of Study Design Framework* (U.S. Department of Education, 2010) as a major component of high quality POS reflects this increased emphasis on career counseling and guidance

In order to provide students with comprehensive counseling services, efforts have been made toward developing school counseling programs that directly affect student outcomes (Dahir, Burnham, & Stone, 2009). For example, the American School Counselor Association (ASCA) National Model (2005) has placed a greater emphasis on the role of school counselors in providing comprehensive career guidance. The ASCA National Model endorses the delivery of career development services through multiple avenues including the school guidance curriculum, individual student planning, responsive services, and system support. In addition, the model promotes school counselors providing aid to students in several areas, including developing career awareness, developing employment readiness skills, acquiring career information, identifying career goals, acquiring knowledge to achieve career goals, and applying skills to achieve career goals.

The OVAE's *Career and Technical Programs of Study Design Framework* (U.S. Department of Education, 2010) is another means by which school counselors provide comprehensive career guidance to students. Based on the National Career Development (NCD) Guidelines (National Career Development Association, n.d.), the framework promotes the role of counseling professionals in such areas as aiding students in career decision-making, providing students with tools and information about postsecondary and career options, and providing students with career assessment data. These goals align strongly with those of the ASCA National Model, which is also based on NCD Guidelines. Further, in schools with a POS framework, there is a strong alignment between school goals and counseling program goals, such as offering career majors that provide a framework for organizing courses, faculty, and work-based learning activities upon specific career clusters and that provide a pathway to postsecondary education and training (Stone & Aliaga, 2003). Counselors in these settings provide students with focused comprehensive career counseling services in an effort to aid them in making career-based decisions that lead to a seamless transition from high school to postsecondary education, training, or work.

Finally, evidence shows that providing students with comprehensive career guidance services helps them in career planning and leads to better career outcomes (e.g., Lapan, Gysbers, & Sun, 1997; Utah State Office of Education, 2000). For example, Lapan, Aoyagi, and Kayson (2007) found that students who received career development services reported greater career awareness and higher levels of career exploration and planning than those who did not receive such services. The study also described several long-term effects of career counseling, including higher levels of success in transitioning into life roles, a better sense of direction in careers, and higher levels of overall life satisfaction. In addition, Nelson, Gardner, and Fox (1998), using a measurement scale based on the state of Utah's Comprehensive Guidance Program, found that students in highly implemented guidance programs felt better prepared for employment and in furthering their education.

Relevance of the Study to the Field of CTE

CTE reform and implementation of career-pathways models are taking place across the nation, particularly with the passage of Perkins IV. The few studies conducted on the effectiveness of Perkins-related programs and reforms, however, have presented mostly mixed results on their

impact on student dropout (Bergeson, 2006; Castellano et al., 2008b; Plank, DeLuca, & Estacion, 2005; Stone, 2004), academic performance (Bergeson, 2006), and postsecondary transition. Some still find evidence that POS and career-focused education show promise in improving student outcomes (Kemple & Snipes, 2000; Lewis & Kosine, 2008; Stone, Alfeld, & Pearson, 2008). For example, Plank (2001) found that students who take CTE classes in a certain proportion to academic classes were less likely to drop out of school. However, he also found that there needs to be a balance of CTE to other classes. Even at the risk of slight reductions in overall academic achievement, Plank found that having a balanced combination of CTE and academic courses may reduce the probability of dropout. For lower-ability youth, he concluded that a ratio of a little more than half of the total high school coursework should be invested in CTE to maximize the likelihood of staying in school.

Implementation of the type of education reform outlined in EEDA has varied widely. Castellano, Harrison, and Schneider (2008a) found that across states, CTE standards were being implemented in an often patchwork way. This piecemeal approach to reform may help to explain the mixed results found by previous studies on CTE reform and implementation. EEDA is a very ambitious piece of legislation and is unique among otherwise similar state legislation for its comprehensiveness. Castellano et al. (2008a) investigated state secondary technical standards for CTE and found a wide and varied distribution of legislation across secondary schools in the United States. This "steady stream" (Castellano et al., 2008a, p. 1) of standards-based legislation has apparently developed into a river since the 2006 enactment of Perkins IV, which required CTE POS to "include coherent and rigorous content aligned with challenging academic standards and relevant career and technical content in a coordinated, non-duplicative progression of courses that align secondary education with postsecondary education to adequately prepare students to succeed in postsecondary education" (Perkins IV Act of 2006, § 122(c)(A)(ii)). However, in their research on state policies, Castellano et al. (2008a) found that, although educational administrators continue defining these CTE content standards, most states' plans for CTE reform were more a patchwork of bits and pieces of programs, in contrast to South Carolina's comprehensive legislation, which attempts to address all of the basic requirements found in Perkins IV in addition to many of the support structures.

A study of this unique and comprehensive legislation is significant for a number of reasons. One of the most important is that it provides an in-depth look at whether a clear statewide mandate to provide coherent POS-based educational opportunities is more effective in producing desired student outcomes than the patchwork POS approaches adopted by other states. The South Carolina policy is comprehensive and closely matches many of the basic requirements of Perkins IV. In fact, the South Carolina EEDA policy may be the only one in the nation that includes all practices recommended by the National Governors Association's Center for Best Practices (2007) as well as all of those in Perkins IV. Indeed, it goes beyond Perkins IV in many ways, such as the addition of more than 400 certified career counselors to support this mandated statewide initiative. Can such a state mandate effectively develop career-focused POS based on the Perkins IV model? Will there be a direct link between the two? Will certain elements of the policy be more effective than others?

The project assesses the overall impact of this statewide intervention on the development of POS across a variety of schools and conditions. We are conducting a statewide examination of this

policy and have developed a sampling plan and methodology that will allow analyses on specific subgroups of schools and student populations and some of the conditions that may moderate the impact of the legislation. The policies mandated by the EEDA legislation are so significantly different from the patchwork approach described by Castellano et al. (2008a) that, should it prove successful for increasing the number of career-focused POS and substantially increasing students' successes in high school and beyond, this legislation may serve as a model for states as they grapple with the vital issues of how to improve secondary students' success rates.

Because the South Carolina policy brings CTE to all students to a certain degree, we can investigate how EEDA may counter what Fletcher (2006) calls "curriculum left behind," while maintaining NCLB's goals of providing students with increasing rigorous curricula and preparation for postsecondary education. At the same time, we can explore what happens to dropout and other student secondary outcomes when a state mandates that all students begin to think about career paths in elementary school, identify career goals and pathways in high school, and take a combination of CTE and academic courses in these pathways to achieve their goals.

The varying levels of state policy implementation could also prove to be an important factor in the development of POS at schools. The identified facets of EEDA that our project measures are similar to federally recommended components for POS development. Analyzing how the policy is implemented in a variety of situations and the resulting development of POS in those situations could prove valuable to educators nationwide when they consider what best supports the development of POS in various local economic and school organizational settings.

Finally, the results of this in-depth study will provide information for other state legislatures and education departments that might, over time, consider similar policies. It will explore the perils and promise of implementing a comprehensive, multifaceted system and the potential impact of such systems on schools and students. A study of this nature can educate policymakers and practitioners on ways in which legislation of this kind might affect the whole of curriculum reform. In addition, these results are also relevant to districts and schools because many facets of this type of policy can be applied in local and regional contexts. Even before passage of the EEDA, two of our schools began to implement key aspects of the policy, particularly the development of career pathways and the revamping of curriculum, an increase in guidance involvement in career-focused education, and an emphasis on the development of IGPs for students. Other schools or districts could take the lessons learned in these schools and apply them to their own school contexts.

The comprehensive nature of the South Carolina career-focused school reform will be described in the next section.

South Carolina Policy Framework

South Carolina has a history of low student achievement, high dropout rates, and a modest number of adults holding university, community college, and technical degrees and certifications. In 2005, with the strong backing of the state's business community, the state's legislature passed a school reform package, the Education and Economic Development Act (EEDA), that is intended to increase student achievement and graduation rates and improve

college and career readiness. The EEDA was designed to achieve these results through a focus on high academic standards, career awareness and exploration at all school levels, and the creation of locally relevant career pathways and programs of study in high schools.

The South Carolina EEDA legislation was created to cope with the changing demands of the workplace. EEDA was passed in 2005 and implementation from kindergarten through postsecondary education began in the 2006-2007 school year (South Carolina Technical College System, 2006a). The legislation was designed to "set high standards for all students and include courses that prepare all for postsecondary education at some level, as well as provide preparation for satisfying professions" (South Carolina Technical College System, 2006a, p. 3). A primary goal was to lay a broad foundation in career planning across school levels through a variety of supporting initiatives at all school levels, from kindergarten through postsecondary education. All components of the legislation are to be fully implemented by July 1, 2011 (South Carolina Technical College System, 2006a).

Based on guidelines provided to school personnel,[1] the study team identified the most salient initiatives for high schools (our focus in this study) and grouped them into six key facets to construct our conceptualization of EEDA. The six identified facets are:

1. *Identification of and assistance for high-risk students*. All schools are required to identify students at risk of dropping out of school using the criteria defined by the State Board of Education, and to adopt one or more of the evidence-based strategies identified by the Board to assist identified students.

2. *Integration of rigorous academic and career-focused curricula, organized into career clusters and majors*. High schools must implement at least three of the 16 federally defined career clusters, organize curricula around these three clusters, and create majors within them. All students are required to take 17 core academic courses. Students should meet these requirements with courses that best fit their selected major/career cluster. Every eighth grader will design an Individual Graduation Plan (IGP) that will serve as a guide for academic, career, and post-graduation transition planning. The IGP will be developed with input from guidance personnel, parents, and students.

3. *Increased counselor role in education and career planning*. School counselors are seen as key players in the implementation of EEDA. All middle and high schools must have either a counselor with a Global Career Development Facilitator (GCDF) certification or a career specialist with a bachelor's degree and GDCF certification on staff to help students select majors, develop and revise their IGPs, and arrange out-of-classroom learning experiences. The student-to-guidance personnel ratio at every middle and high school cannot exceed 300 to 1. Professional development related to career development must be provided for all

[1]South Carolina Technical College System series, *How EEDA Works for South Carolina*, including: *An Educator's Guide to Develop and Implement the EEDA Curriculum Framework and Individual Graduation Plan* (2006a) and *An Educator's Orientation Guide to the Education and Economic Development Act* (2006b); and South Carolina Department of Education, *South Carolina Education and Economic Development Act Guidelines* (2006a).

school counselors.

4. *Implementation of evidence-based high school reform*. High schools must organize their programs around the ten key practices outlined in the High Schools That Work model or another similar model approved by the South Carolina Department of Education (SDE).

5. *Facilitation of local business-education partnerships and resource dissemination*. Regional Education Centers (RECs) are configured in accordance with the Local Workforce Investment Areas of the South Carolina Workforce Investment Act. They will serve as the focal point for each region's training and education resources, helping to facilitate business-education partnerships, coordinate workforce education programs, and promote community involvement.

6. *Articulation between K-12 and higher education and industry/employment*. Articulation agreements, guidelines, and policies for dual enrollment coursework will be reviewed at the state level and recommendations made for providing seamless pathways for students from high school into postsecondary education.

This legislation was designed to be implemented in stages across several years starting in 2006-2007 and ending with full implementation in 2010-2011. The recent budget crisis in South Carolina has affected the amount of funding and resources available to schools and districts to implement the various facets of EEDA, and some state perspectives on the resulting implementation challenges appear in Appendix A.

Comparisons of EEDA and Perkins IV

The six facets, along with additional elements of EEDA, help support and sustain the implementation of POS and closely match many of the basic requirements of the Perkins IV legislation (a table with this comparison is included in the study's *Year 2 Technical Report*, by Smink et al., 2010). Predating Perkins IV by one year, EEDA also focuses on the integration of academic and career and technical content and emphasizes academic rigor across all coursework. Both EEDA and Perkins emphasize the development of POS for students to help them plan for their future careers and to assist with seamless transitions between secondary and postsecondary education. To assist with this transition, both require an alignment between secondary and postsecondary elements.

Programs of study under EEDA are referred to as "career majors." While career majors and the Perkins IV-defined POS share several characteristics, they also differ in several ways. In the South Carolina policy, career majors are considered areas of academic focus and include "a sequence of four elective courses leading to a specified career goal" (South Carolina Department of Education, 2006a, p.3). Elective courses for career majors can include both CTE and academic courses. In contrast, POS, as defined in the Perkins IV legislation, include a sequence of three related CTE courses. Perkins IV has a greater emphasis on a structured sequence of courses and requires a direct link to a postsecondary level credential. EEDA does not emphasize the direct link to a credential, only that the career major courses must help to prepare students for success in postsecondary education or a particular field.

EEDA is a much broader, more all encompassing reform of high school curricula than Perkins IV, because it goes beyond traditional CTE courses and programs. The policy differs from Perkins IV in that it (1) attempts to implement a system spanning all schooling, from kindergarten through college, postsecondary career preparation and entry into and advancement in the labor force; (2) includes CTE for all students, not just those taking traditional CTE courses; (3) focuses on dropout prevention; (4) attempts whole school reform, where career pathways can potentially shape the entire high school curriculum, not just CTE, by enhancing contextualized learning; (5) increases the role of school guidance counselors in career planning; (6) increases business community involvement in development and implementation; and (7) emphasizes the role of parents in educational planning.

Special emphasis on career and counseling services

A key component of EEDA is our third facet, described above, which centers on the role of guidance in policy implementation. EEDA includes a comprehensive and sequential school guidance and counseling program designed to support career-focused education, including career awareness at the elementary school level, career exploration at the middle school level, and career preparation at the high school level (South Carolina Technical College System, 2006a). Guidance personnel are required to limit their school duties to guidance and counseling and should no longer perform many administrative tasks, such as administering standardized tests or developing the master class schedule.

Guidance staff must help all middle and high school students to select majors, develop and revise their IGPs, and arrange out-of-classroom learning experiences. Each high school is required to implement a career guidance program model that includes annual career guidance counseling for each student to help further define career goals; review and update an individualized IGP; and, during tenth grade, declare a major (i.e., an academic focus) within a cluster of study. Both middle and high schools are required to reduce their student-to-guidance personnel ratio to 300-to-1 or lower (South Carolina Technical College System, 2006b).

To help foster a connection between what students are learning in school and their future career plans, all middle and high schools are required to have either a counselor with a special career development certification or to gain access to services of a career specialist with that certification (South Carolina Technical College System, 2006b). These specialists are to deliver career awareness, development, and exploration activities to students and teachers, and to assist students in setting up work-based learning (WBL) experiences (South Carolina Department of Education, 2006a).

The development of IGPs is a key component of the EEDA. IGPs are designed to be organizing tools that show links between a student's high school coursework and plans for the future and "list courses required for graduation, electives that focus on students' individual interests, their post-graduation plans, and their professional goals" (South Carolina Technical College System, 2006b, p. 3). Every eighth grader is required to develop an IGP during a conference with a counselor and parents or guardians (South Carolina Technical College System, 2006a). As part

of IGP development, each student selects a cluster of study to explore, and course schedules are then built around the choice of cluster.

OVAE's Career and Technical Programs of Study Design Framework and EEDA

To help states and local recipients meet the requirements of Perkins IV, OVAE worked with a number of national associations, organizations, and states to develop a framework of supporting components and subcomponents that form a "career and technical programs of study design framework" (U.S. Department of Education, 2010, see Appendix B). This framework includes "a system of 10 components that, taken together, support the development and implementation of effective programs of study. Although all 10 components are important, they are neither independent nor of equal priority: State and local program developers must identify the most pressing components for state or local adoption, taking into consideration their relative need within their educational context" (U.S. Department of Education, 2010, p.1).

The ten components that comprise the framework include: Legislation and Policies; Partnerships; Professional Development; Accountability and Evaluation Systems; College and Career Readiness Standards; Course Sequences; Credit Transfer Agreements; Guidance Counseling and Academic Advisement; Teaching and Learning Strategies; and Technical Skills Assessments.

The elements of the EEDA include nearly all of these supporting components, and are particularly strong in the areas of legislation and policies, credit transfer agreements, and guidance counseling and academic advisement.

Study Design

Because all public high schools in South Carolina are operating under the same law, it was not feasible to randomly assign schools to experimental and control groups. Instead, this study uses a quasi-experimental design (Shadish, Cook, & Campbell, 2002) with a mixed-methods, triangulated approach (Tashakkori & Teddlie, 2002) to follow three student cohorts from a sample of eight public high schools. The study tests the hypothesis that not only does a statewide mandate like the EEDA increase the number of POS in schools, but also the number of POS, in combination with various political, economic, and social characteristics, influences selected outcomes for South Carolina's secondary students and the schools they attend. This hypothesis is tested through the following research questions, and this report focuses on preliminary data relating to aspects of the research questions that appear in **bold**:

1. **To what extent does South Carolina's Education and Economic Development Act facilitate the development of programs of study (POS)?**
2. **What impact does the level of local economic resources have on the implementation of EEDA and the development and implementation of POS?**
3. **What impact does the implementation of EEDA have on:**
   a. **Student high school outcomes?**
   b. Student post-graduation employment and education and training outcomes?
4. What impact do POS as defined in Perkins IV have on:
   a. Student high school outcomes?

b. Student post-graduation employment and education and training outcomes?

To address these research questions, both quantitative and qualitative data are being collected, which will help to create a broader understanding of EEDA's influence on schools, teachers, and students as well as on the creation of POS. Quantitative data include student outcome data, such as grades and attendance, from three student cohorts and responses from surveys of students (both in-school and after graduation). Qualitative data include course catalogs and career-related materials, Individual Graduation Plans (IGPs), and perspectives gleaned from interviews and focus groups conducted with school principals, guidance personnel, teachers, and students as well as community college administrators.

School and Student Samples

To best address our research questions, a four-stage purposive, mixed-methods sampling strategy was used (Teddlie & Yu, 2007) to carefully draw a sample from several regions of the state, with controls introduced for the following three factors critical to our research questions: (1) economic conditions and industries; (2) levels of school and community resources; and (3) initial levels of EEDA policy implementation. As outlined in Table 1, schools were chosen to vary not only on these factors but also on the size of the student population, school performance outcomes, ethnic diversity, and locale (urban, suburban, or rural). For further details on the sampling process used, see Sharp et al. (in press).

Table 1
Selected Demographics of Sample Schools

School	School size[a,b]	Urbanicity[c]	Percent minority enrollment[a]	School poverty index[a,d]	On-time graduation rate[a,e]	Percent passing 2 subtests of HSAP[a,f]	2008 report card NCLB rating[g]
3F	Small	Town	10	45	85	80	Good
22F	Large	Rural	55	45	75	85	Excellent
2F	Medium	Suburb	25	55	80	85	Good
17S	Large	Suburb	60	40	80	80	Excellent
	Lower Poverty Schools		35	45	80	80	
7F	Small	Rural	85	85	85	75	Average
12F	Large	Town	60	70	75	70	Good
11F	Medium	Rural	95	90	70	60	At-Risk
39SN	Large	Rural	90	70	65	55	Below Average
	Higher Poverty Schools		80	80	75	65	

Note. All figures are rounded to the nearest five.

[a]Data from the South Carolina Department of Education, Office of Data Management & Analysis (personal communication, April 4, 2008) was averaged over the years 2005, 2006, and 2007 (unless the school was new and didn't have three years of data, in which case the most recent one or two years of data were used). [b]School size is

student count, averaged over three years (2005, 2006, 2007). ≤ 600 = Small; 601-999 = Medium; ≥ 1000 = Large. [c]NCES school locale codes from Institute of Educational Sciences: National Center for Educational Statistics (NCES), *Common Core of Data (CCD) – Public Elementary/Secondary School Universe Survey, 2006-07, v.1c.* Only the broadest locale codes are used here. Available at http://nces.ed.gov/ccd. [d]School poverty index is a school specific variable indicating the percent of students who qualify for Medicaid or who are eligible for free or reduced price lunches. It is found on the yearly school report cards. [e]The graduation rate in South Carolina (reported in state school report cards) is a four-year cohort graduation rate using locally collected data. It divides four-year graduates earning regular diplomas by first-time ninth graders four years earlier, adjusted for transfers. The cohort is based on only those students high schools are able to track. The definition is evolving over time to allow for better reporting. Definition found at http://www.afqe.org/schoolsystem (Alliance for Quality Education, 2008). [f]The South Carolina High School Assessment Program (HSAP) is a state set of tests administered to South Carolina high school students to meet the requirements of state and federal laws. HSAP assesses South Carolina academic standards in English language arts (ELA) and mathematics that students have had the opportunity to learn by the end of the tenth grade. The ELA and mathematics tests each have four achievement-level scores: Levels 1, 2, 3, and 4. A student must score Level 2 or higher on each test in order to meet the graduation requirement. The data presented is the HSAP passage rate for second year students (passing both the ELA and math subtests in their first try). Students first take the test as second-year high school students and have multiple opportunities to pass both tests. Definition found at http://www.afqe.org/schoolsystem, Alliance for Quality Education, 2008. [g]These are No Child Left Behind (NCLB) absolute ratings, reported for each school on school report cards. Each school and district in South Carolina receives an Absolute rating based on student test scores from one of five categories – Excellent, Good, Average, Below Average or Unsatisfactory. The ratings are based on mathematical formulas set by the South Carolina Education Oversight Committee (EOC), which was created by the General Assembly to guide the implementation of the Education Accountability Act (EAA). Definition found at the state Department of Education website (South Carolina Department of Education, 2002).

We chose to follow three student cohorts from the eight selected high schools because of their varying levels of exposure to the state policy. The Class of 2009 received very little to no exposure to the policy, whereas the Class of 2011 has been exposed to the policy since eighth grade. By contrast, the Class of 2014 has been exposed to the policy since before middle school.

Data Collection and Analysis

Given the complexity of the implementation of the school reform and its intended impact at both the school and student levels, it is imperative to collect data from a variety of sources using a mixed-methods approach, integrating qualitative and quantitative data sources (Luo & Dappen, 2005; Miles & Huberman, 1994; Tashakkori & Teddlie, 2002). This will allow us to capitalize on the mixed-methods data collection strategies to aid in unpacking nuances of the policy implementation and help to create a broader understanding of EEDA's impact on schools, teachers, and students, and on the creation of POS.

Quantitative and qualitative data are being collected at the school and individual student levels and are being analyzed through a variety of methods. Quantitative data include student outcome data, such as grades and attendance, from three student cohorts and responses from in-school surveys of students. Qualitative data include course catalogs and career-related materials and perspectives gleaned from interviews and focus groups conducted with school principals, counselors, teachers, and students, as well as community college administrators.

For further information on all aspects of study design, measures, data collection methods, and variables, please refer to the study's Year 2 technical report, *Programs of Study as a State Policy Mandate: A Longitudinal Study of the South Carolina Personal Pathways to Success Initiative.*

Year 2 Technical Report (2008-09) (Smink et al., 2010). A timeline of study data collection as it coincides with EEDA implementation stages is included in Appendix C. Further detail on the sources of data used and methods of data collection and analysis resulting in the preliminary findings described in this interim report appears below.

On-Site Visits and Interviews with School Personnel. In the second year of the study, site visits were made to potential sample high schools to aid in sample selection. During the third study year, the eight sample schools received a second on-site visit. The nature of these visits, protocols used, and groups interviewed are described below.

Initial site selection visits. The primary goal of these initial visits, conducted in mid 2008-2009, was to understand the level of ongoing EEDA activities at the school during the 2008-09 school year and to determine if each school would be suitable for inclusion in the study sample. During these visits, information was collected on 2008-2009 EEDA policy activities to add to the information collected through archival data about the current level of state policy implementation at schools. Interviews and focus groups were conducted with a variety of school personnel to verify and supplement data already collected. Interview protocols were developed to address each of the six policy facets identified as being most relevant to high schools and this study, and to assess qualities of the school that would make it appropriate for inclusion in the final sample. The resulting interview protocols were included in Appendix F of the study's *Year 2 Technical Report (2008-09)* (Smink et al., 2010).

Interviews were conducted with all school principals and guidance directors, and focus groups were conducted with at least two assistant principals at each of the targeted schools. These personnel were asked to describe how their schools were implementing EEDA and its components, the level of progress of implementation, including the stage of development of the high school's majors and career pathways, and the operational details of the IGP development process. Guidance directors were also asked to describe their specific roles in implementing the policy, the ways in which they work with students, teachers, and parents on career development, and the amount of time they are able to devote to these activities.

Two focus groups with diverse groups of ninth and tenth grade teachers were conducted at each school, with three to six teachers in each group. Groups included teachers in different subject and area levels, including math, English, social studies, science, and career and technical education, and honors/AP-, college prep-, basic- and special education-level courses. Teachers were selected from course schedule lists in consultation with our contact person at each school, based on teacher planning periods and availability. Teachers were asked to discuss how their school was implementing the various components of the EEDA, including career-focused activities and curricula, the progress made in implementation, and how any changes had affected them and their teaching.

In addition to interviewing guidance directors, focus groups were conducted with other guidance personnel at schools, including school guidance counselors and career specialists. Similar to guidance directors, these personnel were asked to describe their specific roles in implementing the policy, the ways in which they have been working with students, teachers, and parents on career development, and the amount of time they are able to devote to these activities.

Interviews were conducted using a structured format from a protocol developed for each personnel group. Notes were taken by several members of the interview team, typed up, and combined for analysis purposes into a single set of notes for each group of personnel at each school. Interview questions were grouped into the six policy facets outlined earlier and relevant responses pulled from the notes for each group of personnel and put into a single matrix for each school, to facilitate within-site analysis across personnel groups. A search for key words in the text and an open coding process were used to note the appearance of concepts or topics relevant to the study in each facet as they appeared in responses for each school. Cross-site matrices on each facet and key topics were developed to facilitate analysis across school sites to identify major variables and themes across schools (Miles and Huberman, 1994).

POS implementation measurement tool and POS site visits. Since our research interests include measuring the impact of EEDA on the development of Perkins IV-defined POS, a count of POS at the sample schools meeting Perkins criteria was necessary. To discern the number of these types of POS at each sample school, two data collection procedures were used: (1) a POS measurement tool to assess the number of career majors at each sample school that met a list of minimal POS requirements, based on Perkins IV (see U.S. Department of Education, 2010); and (2) follow-up site visits to address gaps in information provided on the measurement tool and to collect more in-depth information on potential POS.

POS implementation measurement tool. To begin the process of discerning the number of Perkins IV-defined POS at each sample school, a POS measurement tool was developed in the fall of 2009 to assess the number of POS at each sample school that met a list of minimal POS requirements, based on the following Perkins IV POS core elements:

1. Incorporate and align secondary and postsecondary education elements,
2. Include academic and CTE content in a coordinated, non-duplicative progression of courses,
3. Offer the opportunity, where appropriate, for secondary students to acquire postsecondary credits, and
4. Lead to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree (U.S. Department of Education, 2010).

This tool was developed in collaboration with the other two POS studies and other NRCCTE and OVAE staff. A copy of this measurement tool is contained in Appendix D. Structured questions were developed for each of the four elements to ascertain whether certain aspects of each element were in place for each major at the sample school or partner career center. Response categories for questions were "Yes," "No," or "N/A." Several questions asked school personnel to give the names of organization and contact people for any articulation agreements. Each school received an individualized POS implementation measurement tool in October 2009, based on the career majors and clusters appearing in their school registration materials for the 2008-2009 school year. Schools were asked to complete the chart with the personnel at their school or district most familiar with each of the school's career majors and then to email or fax the chart back to the study team.

POS site visits. Based on responses to the POS implementation measurement tool, interview questions were developed for site visits to address gaps in information provided and to collect more in-depth information on career majors that were potential Perkins IV-defined POS at each school site during on-site visits. Topic areas and questions used for follow-up during school site visits on majors and POS are included in Appendix D. One-and-a-half-day site visits were conducted at all eight sample schools in November and December of 2009 to follow up on information schools provided on the POS measurement tool and to collect more in-depth information on potential POS from each school site, career center partner (where relevant), and a primary technical or community college partner. Questions covered the level of alignment of the school's career majors with industry standards and/or with postsecondary programs, whether there were articulation agreements in place and with what institutions, and the types of credentials and/or degrees to which each of the majors could lead. The team then identified the career majors with the strongest potential to be Perkins IV-defined POS and met with faculty in those majors to collect more information about postsecondary alignment, how closely the high school faculty worked with postsecondary staff at local institutions, articulation agreements in place, availability of dual credit courses, how prepared students were for their courses, the degree of academic and technical information in their courses, and whether their program or courses had changed since the beginning of implementation of EEDA.

To collect this information, individual and focus group interviews were conducted using a semi-structured format with guidance personnel, curriculum coordinators, CTE coordinators and faculty, career center staff (where relevant), and college administrators and faculty. Interviews and focus groups were audio-taped and tapes were used to augment notes taken by interviewers. Interviewers' notes were typed up and merged into single documents for each school and augmented or revised based on review of the interview audiotapes. Based on interview response data, updates were made to each school's POS implementation measurement tool. Relevant responses were pulled from the interview and focus group notes and POS measurement charts and put into a single matrix for each school to facilitate within-site analysis. A search for key words in the text and an open coding process were used to note the appearance of concepts or topics relevant to each of the four POS core elements and the 10 supporting components in responses for each school. Cross-site matrices on elements and supporting components were developed to facilitate analysis across school sites to identify major variables and themes across schools (Miles and Huberman, 1994).

Surveys and Follow-up Interviews with School Guidance Personnel

During the POS site visits in the fall of 2009, we also explored in more depth the impact of the policy on guidance counseling, the roles of counselors in students' career planning and development of IGPs, the development of POS at their schools, and whether and how their duties may have changed since the beginning of implementation of EEDA at their school. To explore these areas with guidance personnel at sample schools, we used two approaches: (1) surveys of school guidance counselors and career specialists, and (2) follow-up interviews with counselors at sample schools.

School guidance personnel surveys. Two surveys were developed, one for school guidance counselors and one for career specialists. Their purpose was to identify changes in the duties of

guidance personnel since the implementation of EEDA. Each survey included a list of possible school counseling duties, adapted from the School Counselor Activity Rating Scale (Scarborough, 2005). They included duties related to curriculum development and counseling and classroom guidance for students in the areas of career, academic, and social development; consulting with other school staff or parents; coordination activities related to special events and professional development; and "inappropriate" duties (based on EEDA guidelines), such as administering standardized tests and developing the master class schedule. The two surveys are included in Appendix E.

The surveys were distributed to guidance personnel during the POS site visits to sample schools in November and December 2009. Responses were either collected during the visit or returned by mail to the research team. Twenty-five of the 29 counselors from our eight sample high schools responded to the survey, for an 86% response rate. Five of the eight sample schools reported employing one or more career specialists. Seven of the eight career specialists employed at four of these schools responded to the survey. The career specialist from the fifth school did not respond.

Responses to the surveys were then analyzed. The list of duties included on the surveys for school counselors and for career specialists were almost identical, but response categories differed. School counselors were asked to select the response that best represented how their participation in the listed duties had or had not changed since the beginning of implementation of the EEDA at their school. The scale ranged from "5" (duties have increased greatly) to "1" (duties have decreased greatly). If a duty did not apply to their position, counselors had the option of selecting "0," "not applicable, this has never been a part of my duties." Since career specialist positions were created for EEDA, it didn't make sense to ask career specialists for changes since EEDA implementation. Instead, the survey asked them to report "Yes" or "No" as to whether a duty listed was assigned as part of their duties. Means were calculated on school counselor responses and compared across duties across and between schools. Frequencies were computed for the career specialist responses and comparisons made across duties across and between schools.

School counselor follow-up phone interviews. The interview protocol was developed using data from interviews and surveys previously collected from guidance personnel during both the initial and POS visits to the eight school sites. The developed protocol is included in Appendix F. These data were analyzed for themes using a matrix display method. The data were coded and categorized into a matrix and then cross-case analyzed for major themes (Miles & Huberman, 1994). The cross-case analysis and results from survey data revealed four major content areas for interview questions: (a) changes in their job duties and roles since EEDA implementation; (b) changes in their school's counseling program services for students since EEDA implementation; (c) degree of alignment between services provided for EEDA and the American School Counselor Association (ASCA) National Model; and (d) the type of training needed by school counselors for advising students about career pathways, majors, and postsecondary options.

A semi-structured interview format was developed in these areas and phone interviews conducted with counselors at seven of the eight sample schools during the spring of 2010. We were unable to arrange an interview with any counselors at the eighth sample school during the

interview timeframe. One to three counselors at each of the seven schools agreed to be interviewed, for a total of 12. All were certified school guidance counselors who had worked at their schools for 2 to 17 years, and all but one carried student caseloads.

Each interview was tape-recorded, transcribed, coded, and analyzed using NVivo QSR 8 qualitative research software. A constant comparative approach was employed to code the resulting data into emergent themes (Morgan, 1993). Data were reviewed after initial coding to ensure that all relevant themes were identified. A secondary coder was used to assess inter-rater reliability. Raters identified similar themes with minor differences. These differences were discussed and resolved through a reevaluation of the data and a process of consensus building.

Student High School Survey

To obtain a student perspective on career development and planning activities and policy and POS implementation while in high school, a student survey was developed in collaboration with the other two NRCCTE longitudinal POS studies. Questions for the *Student Engagement/POS Experiences Survey* were developed from an extensive literature review on CTE, career development and planning, and school engagement and also from previous nationally administered surveys. The survey was first piloted with a sample of students from two local high schools; the results were used to edit questions for clarity and to remove questions due to redundancy and to shorten the survey. The final survey consisted of approximately 70 questions on a range of topics, including questions regarding career clusters, career planning and development, the development of IGPs, majors, coursework, school engagement, and demographic characteristics. The survey and relative frequencies of responses for each question are included in Appendix G.

School personnel are allowed flexibility in the timing of survey administration so that the survey can be administered to as many members of the targeted student cohort as possible. Survey packets are provided to identified teachers and staff and include: a cover letter that describes the goals of the study and thanks teachers and staff members for participating; parent and student information letters; a survey script; and the actual surveys. Teachers and staff members are asked to pass out the information letters to students in identified courses, along with the letter they are to take home for their parents, at least a few days prior to survey administration. The completed surveys are either mailed back to the project team or picked up by a team member from the school.

Since the cohorts have had different levels of exposure to the policy, the plan is to administer the survey to the three cohorts at similar times in their high school careers to explore differences in reports of their experiences, given their amount of exposure to EEDA policy. Survey results from the Class of 2009 as seniors, who had little to no exposure to EEDA, will be compared to results of the Class of 2011 as seniors, who have been exposed to EEDA since eighth grade. Class of 2011 survey responses as sophomores will be compared to responses of that cohort as seniors as well as to responses of the Class of 2014 as sophomores, who have had the most exposure to EEDA.

By the end of this third year, the *Student Engagement/POS Experiences Survey* has been administered twice, to the Class of 2009 at the end of their senior year and to the Class of 2011 after tenth grade. The student survey data summarized in this analysis is from the latter group, administered to this cohort at the eight sample high schools in late August or early September of 2009, just after tenth grade. A total of 1,458 surveys across the eight schools were completed and returned, and three surveys were removed from subsequent analyses due to patterns observed in responses, reducing the total number of analyzed surveys to 1,455. The final overall response rate was 67%, with response rates for individual schools ranging from 45% to 95%.

To analyze survey responses, we generated descriptive statistics (i.e., frequencies and relative frequencies) for each survey question. For comparisons of responses of CTE participants to non-CTE participants, Chi-square analyses were conducted to determine if the distribution of responses was similar between CTE participants and non-CTE participants for the survey questions related to career clusters and career planning and development and to school engagement. A significance level of 0.05 was used for all tests of significance.

Career Specialists/Guidance Personnel Accountability Report

Data are also being acquired from the SDE from their semi-annual online survey, *Career Specialists/Guidance Personnel Accountability Report* (*GP Accountability Reports*). The SDE mandates that schools respond to these surveys after each semester to report on the types of career development and planning activities provided to students, parents, and educators by guidance personnel. For example, the survey for the fall and spring semesters of the 2008-2009 school year included questions on the number of career development activities offered for educators and the number who participate in these activities, and the number of students completing career skills assessments during that time period. It also included questions on the number of students and parents attending IGP meetings.

Data reviewed for the present analysis are from the fall and spring semester reports for the 2008-2009 school year and from the spring semester report for the 2009-2010 school year. The forms used for these school years are included in Appendix H. Survey responses were entered into tables by school on each question for each semester and then cross-tabulated for comparisons across schools. For the 2008-2009 reports, data were then summed across semesters obtaining a total served in each activity during the entire school year. It was not clear, however, if data reported were solely for a single semester or if the spring semester report from some schools represented a cumulative, duplicated count across both semesters. This became an issue when researchers tried to estimate the percentage of students served at each grade level in specific activities by adding the count of students given for each semester for that grade level and then dividing the total by the reported enrollment for that grade level for that year. For a number of schools, the percentages on several questions totaled over 100%.

Preliminary Observations Across Study Sites

By the end of the third project year, we have collected and analyzed a variety of quantitative and qualitative data from sample high schools. Two of the three student cohorts (Class of 2009 and Class of 2011) have been surveyed once about their experiences with career-focused activities and career planning and about school engagement. We have also surveyed guidance personnel

about their involvement in career-focused education and the development of student Individual Graduation Plans (IGPs), as well as about changes in their assigned duties since EEDA. School personnel have been interviewed about the impact of EEDA on career-focused education and the development of POS at their schools and the characteristics of these POS. A POS implementation measurement tool was developed and used to collect data on POS from sample schools. Statewide data on EEDA and CTE POS policy implementation have been acquired and analyzed.

In this section we offer preliminary third-year observations and findings across sample schools. The information presented represents only a portion of the data we have gathered to date. Preliminary findings are organized around aspects of our research questions that can be addressed with these data. Before we turn to findings specific to these questions, however, it is important to summarize the level of EEDA implementation in schools during the two and half years in which the data presented here were collected.

EEDA Policy Implementation Levels at Sample High Schools

Part of our purposive sampling strategy was to include information on level of policy implementation at the time of sample selection, to be able to maximize differences between schools on policy implementation. As discussed earlier, EEDA was to be phased in over time with some infrastructure activities beginning in the 2005-2006 school year, and school-based activities beginning in the 2006-2007 school year. EEDA is to be completely implemented by the end of the 2010-2011 school year. At the time of these visits, 2008-2009, implementation of EEDA activities directly affecting our high schools was in its third year (see the timeline in Appendix C).

Initial differences in levels of implementation were built into sample selection to ensure a sample with a range in levels of implementation of EEDA. At the time of site selection visits in the middle of the 2008-2009 school year, two of the sample schools had a relatively low level of policy implementation, three schools had moderate levels of policy implementation, and three schools had relatively high levels of policy implementation (for more information on sample selection and collection of data and findings on policy implementation, please see Sharp et al., in press, and Smink et al., 2010). In addition, selected schools varied in implementation along all of the six relevant facets of the South Carolina policy (described in the Methods section). Below is a brief summary of the level of policy implementation at sample schools by the time of the initial site selection visits in 2008-2009.

1. *Identification of and assistance for high-risk students*. Schools varied in the extent to which they have implemented reform models for high-risk schools. Some were in the early stages of tracking the performance and outcomes for high-risk students and others were further along in their efforts.

2. *Integration of rigorous academic and career-focused curricula, organized into career clusters and majors*. Several schools were well along in their implementation and use of IGP documents, the IGP process and annual guidance-student-parent meetings, and the electronic IGP (eIGP) system, while others were in their first year of implementation of the eIGP

system. All schools had established at least preliminary career majors, with a range from 14 up to 44 career majors offered and an average of 26 majors across schools. All but one of the sample schools had organized these majors into career clusters. The numbers of clusters at these seven high schools ranged from 11 to 14. The eighth school that was in the process of organizing their career majors into clusters during our first site visit had completed that process by the following school year and listed 16 career clusters in that year's registration materials.

3. *Increased counselor role in education and career planning*. All high schools had access to the services of career specialists by the time of our first site visit, and all schools reported having student-to-guidance personnel ratios of 300 to 1 or less, as required by EEDA. School guidance personnel were found to be key players in policy implementation. Most counselors reported engaging in more career-focused activities and academic guidance because of EEDA, as well as spending less time on personal guidance, but the extent of engagement in these activities varied across schools. The amount, nature of the events, and the types of career experiences they provided for students varied across sample schools.

4. *Implementation of evidence-based high school reform*. All eight sample high schools indicated that they had implemented at least some of the key elements of the High Schools That Work (HSTW) reform model by the time of our first site visit. Two schools had begun implementing HSTW prior to passage of EEDA (2005) while two others began implementation at the same time or shortly after EEDA's passage. The remaining four schools began implementation later but still were in compliance with EEDA's requirement of whole school reform implementation prior to 2009-2010.

5. *Facilitation of local business-education partnerships and resource dissemination*. Some schools were much further along than others in the formation of partnerships with the business community. Nearly all of the schools had little to no contact with their Regional Education Centers, although these centers are supposed to be assisting schools in recruiting business partners, training teachers and staff, and identifying work-based learning experiences for students. We did find that all schools were disseminating to students, parents, and school staff at least some information on CTE, career planning and IGPs, the career majors and clusters, and to some extent on work-based learning experiences.

6. *Articulation between K-12 and higher education and industry/employment*. The articulation structures and processes varied widely across the schools, with most schools offering at least some opportunities to students for dual credit and/or dual enrollment.

Increase in career-focused activities in sample high schools since initial site visits. By the end of the 2009-2010 school year, the third year of our study, implementation of EEDA activities in high schools was in its fourth year. Although not expected to be fully implemented until the end of the 2010-2011 school year, data collected after two and a half years in the field indicate that EEDA has already increased the amount of career planning activities and guidance that students are receiving in our sample high schools and changed the roles of many guidance counselors in these schools. Early data indicate that a variety of career-focused activities are being offered as a result of the reform policy, with the amount and type of activities varying widely across our

sample schools. The variation in these activities is described below.

In surveys and interviews, school counselors reported engaging in more policy-mandated, career-focused guidance activities across all schools. On the survey, counselors were asked to indicate the extent to which their level of effort had changed since EEDA implementation on a range of duties primarily in the areas of personal/social, career, and academic issues. Responses ranged from "1" (the duty has decreased greatly) to "5" (the duty has increased greatly"), with an option for "0" (not applicable). The mean reported changes for selected assigned duties are summarized in Table 2. The top three duties for which counselors reported the highest increase in involvement were assisting students with the development of their career plans and IGPs, meeting with parents about career issues, and counseling students on career issues. More moderate increases were reported in identifying and coordinating work-based or extended learning opportunities for students and conducting professional development workshops in career development and guidance for teachers and school counselors. Although all counselors were involved in coordinating special events and programs for the school on career issues and conducting classroom guidance on career issues, the level of their involvement in these activities varied widely across schools.

Table 2
Mean Change in Assigned Duties Since EEDA Implementation as Reported by School Counselors, 2009-2010

School Counseling Duties	Mean[a]
Policy-Mandated Career-Focused Activities	
Assisting students with the development of their career plans and IGPs	4.6
Meeting with parents about career issues	4.3
Counseling students on career issues	4.2
Coordinating special events/programs for the school regarding career issues	3.9
Identifying and coordinating work-based/extended learning opportunities for students	3.8
Conducting professional development workshops in career development and guidance for teachers and counselors	3.6
Classroom guidance on career issues	3.4
Inappropriate Counselor Activities Under EEDA	
Coordinating special services referrals	3.2
Administering standardized tests	3.4
Performing hall, bus/car pick-up, cafeteria duty	3.4
Coordinating the standardized testing program	3.5
Maintaining/Completing educational records/reports (cumulative files, test scores, attendance and dropout reports)	3.8

School Counseling Duties	Mean[a]
Developing the master class schedule	3.9
Registering and scheduling students for classes	4.0

Note. Responses are from the *School Counseling Duties* survey administered to school counselors during school site visits in the fall of 2009. *N* = 25.

[a]The mean value is based on a scale of 1 to 5, with 1 = "duty has decreased greatly" and 5 = "duty has increased greatly." Mean values do not include the responses of counselors who reported that this duty did not apply to them because it had never been a part of their duties (NA). *N* sizes for mean calculations range from 9 to 25, with *n* sizes of 24 or 25 for 7 of the 14 questions. For the remaining seven questions, *n* sizes vary from 9 to 20, which reflect the percentage of NA responses to these questions and the removal of these NA responses from the calculation of the means.

Respondents also reported continued participation in activities considered to be "inappropriate" under EEDA guidelines. These included registering and scheduling students for classes, developing the master schedule, and maintaining educational records/reports. For nearly all of these "inappropriate" activities (for six of the seven listed), the mean was above or equal to the lowest mean recorded for the "appropriate" activities. These inappropriate duties will be discussed further in the Guidance Counseling and Academic Advisement section.

The data collected during the in-depth phone interviews reflected these survey findings. During these interviews, counselors at six of the seven schools reported that their duties related to career services had increased as a result of EEDA. Counselors at the seventh school reported that they had already been highly focused on career services for students prior to EEDA, but that the policy resulted in an increased focus on IGPs. Interview reports indicate that much of the counselors' time is spent on IGP-related tasks, including an increase in one-on-one meetings with students and parents about career exploration and planning and an increase in career counseling to larger groups in classroom guidance activities and career day assemblies.

In 2008-2009, across the state, 96% of both ninth and tenth graders, the only two grades required to develop IGPs that school year, had completed electronic IGPs (South Carolina Department of Education, 2009a). School-level data from the 2008-2009 *GP Accountability Reports* indicate that a majority of ninth and tenth graders in our sample high schools attended an IGP conference during that school year, and at seven of the eight high schools, attendance was over 94% for both grade levels. At the eighth school, slightly less than three-fourths of ninth graders and a little less than two-thirds of tenth graders attended IGP conferences during that school year.

Other data from the *GP Accountability Reports* indicate that guidance personnel presented a total of 36 career development and guidance workshops to around 1,000 teachers, school counselors, and work-based constituents over the course of the year, with an average of 125 participants per workshop. The number of workshops per school ranged from 0 to 9. Guidance personnel across the eight schools were also responsible for 254 one-time career events, classes, or programs, ranging from 6 events at one school to 89 events reported at another school.

EEDA mandated a variety of career exploration and assistance activities for ninth and tenth graders during the 2008-2009 school year. A total of around 200 on-going career events and

activities were reported by sample schools, ranging from 3 to 97 events or activities across the eight schools. Guidance personnel reported the numbers of students participating in these activities. To make comparisons possible across schools, we estimated the percentage of students served at each grade level by adding the unduplicated count of students given for each reporting period for that grade level and then dividing the total by the reported enrollment for that grade level for that year. For seven schools, it appears that nearly 100% of their ninth and tenth graders received assistance in identifying and accessing career information pertaining to various career clusters during the school year. We were unable to calculate the percentage for the eighth school due to missing data. The percentage of ninth and tenth grade students who completed at least one career assessment during the school year was also nearly 100% at four of the schools, and between 93% and 100% for at least one of the grade levels at three other schools. Again, we were unable to calculate the percentage for the eighth school due to missing data. At all but one of the sample schools, 95% or more of the ninth and tenth graders appeared to have used computer-assisted career guidance systems (e.g., SCOIS, KUDER, or virtual job shadowing) to explore careers. At the remaining sample school, we were unable to calculate the percentage due to missing data.

Research Question 1: To what extent does South Carolina's EEDA facilitate the development of POS?

In this section, we examine preliminary findings on whether EEDA is helping to facilitate the development of Perkins-defined POS. These findings stem from analysis of observations and interviews conducted with school personnel during the two onsite visits, from analysis of the two guidance personnel surveys and follow-up interviews with school counselors, from survey responses of the Class of 2011 after their tenth grade year, and from the SDE's *GP Accountability Reports*.

Findings will first be discussed relative to observations of how EEDA may help to lay groundwork for some of the core elements of POS established in the Perkins IV legislation. Although our study preceded and thus was not originally designed to examine the 10 components of the POS Design Framework developed by OVAE (U.S. Department of Education, 2010) that was described earlier, we report here relevant preliminary observations on as many of these components as possible.

Core Elements of Perkins IV POS

As described earlier, Perkins IV outlined three mandated core elements for Perkins-IV funded POS and one optional element. Here we provide findings on the ways in which EEDA may facilitate the development of POS at our eight sample schools through these four core elements.

1. Incorporate and align secondary and postsecondary educational elements.

Study researchers found that increased attention was paid to aligning secondary and postsecondary programs at the state level as well as at many of the sample schools, but it is unclear whether this is due to Perkins IV, EEDA, or some combination of factors. EEDA legislation facilitates alignment between secondary and postsecondary education in several ways.

One of the goals of the development of IGPs, mandated by EEDA, is to help students link their secondary coursework with postsecondary training and education. The state has also called on industry-specific advisory committees to help develop curricula and there is an active statewide course alignment project. Sample schools in our study with strong CTE programs and experienced CTE faculty were more likely to have better alignment between secondary and postsecondary instruction than those with weaker CTE programs.

2. Include coherent and rigorous academic and relevant CTE content in a coordinated, non-duplicative progression of courses.

EEDA legislation requires that academic and CTE content be integrated and that resources and instructional materials for all courses be aligned with the state's content standards. EEDA requires the state to provide training in contextual teaching to all middle and high school educators; this training must emphasize methodologies that focus on hands-on instruction and content presentation with an emphasis on real-world application and problem solving. Study researchers did find some efforts at integration of academic and CTE content, often due to efforts by individual teachers. Integration came in the form of the integration of academic standards and content into CTE courses, introduction of real-world experiences into academic courses, through efforts to integrate literacy and/or reading or math across the curriculum or into CTE courses, and some career-focused instruction.

The organization of schools into Smaller Learning Communities (SLCs) at three of the study sample high schools appears to have increased collaboration between academic and CTE teachers, especially in the school that organizes its learning communities around career clusters. As part of the SLCs' curriculum and instruction efforts, core academic teachers are integrated with CTE and other teachers. Teachers find that being located on the same hall, having common planning periods, working in learning community teams, and advising a cross-section of students all help to stimulate efforts towards integration and collaboration.

Increase in student interaction with counselors about careers and career planning through the IGP process

The IGP process has increased both one-on-one counselor-initiated interactions with students and student-initiated interactions with counselors, with interactions mainly centered around career and course-related issues. Eight of the 12 counselors interviewed reported that the requirements involved in implementing IGPs with students have increased one-on-one counseling sessions centered on career issues and postsecondary options and plans. As one counselor noted: "I think the Act has put us more in the role of working on career exploration and meeting with and counseling students, and the registration process is a cooperative effort" (Counselor 3). Two of the four counselors not reporting an increase in one-on-one sessions with students felt that they had already provided these types of comprehensive career counseling sessions prior to policy implementation.

In counselor-initiated one-on-one sessions with students, a variety of career- and postsecondary-related topics were discussed, including giving information on the different career pathways, helping with identification of career goals, and providing guidance on the selection of a major

and appropriate coursework to help students achieve their identified goals. The goals of these sessions were similar across schools: to help students choose a career pathway that can meet their goals and to help students understand and consider their postsecondary options. As expressed by one counselor: "We share with them what their options are if they want to go directly into the workforce, if they want to go and get a technical degree or two-year degree or four-year degree. And, we make sure they understand what the requirements are on admissions in higher ed [education] so they could be accepted into those programs" (Counselor 12).

Five of the 12 counselors interviewed reported an increase in student-initiated interactions. These tended to be focused on personal, social, and career-based issues. In career-related sessions, students often wanted further information on various career pathways or on course requirements for majors, advice on choosing electives, or assistance with getting into courses or changing majors. When asked to describe what students sought from career guidance, one counselor commented, "…I think they need us more. There are so many choices out there. I think it can be overwhelming and confusing to them. Just to jump off into the world -- 'What am I doing? Where am I going? I just don't know! Help me!' I think that what we do is vital and very important and I feel like we are doing more with EEDA and it's very needed and beneficial" (Counselor 5).

Inconsistent impact of EEDA and IGP process on the amount of contact between parents and counselors about career planning and development. EEDA requires that schools provide parents with information each year about career clusters, IGPs, and available career development opportunities for their child and to schedule annual student-parent-counselor IGP meetings. The IGP process has the potential to increase parent contact with school counselors and increase parent engagement in the course and career planning of their children. Guidance personnel at sample schools reported using a variety of strategies each year to inform parents about career clusters and the IGP process and to motivate them to get involved in IGP meetings. For example, they use parent newsletters, post information on school and district Web sites, send automated phone messages, mail information handouts with report cards, mail letters and registration guides to parents, disseminate information at PTA/PTO meetings, and offer career nights, morning coffees, or special all-day IGP open houses, allowing parents the opportunity to drop in without an appointment to talk about their child's IGP.

Despite these efforts, interviews and *GP Accountability Reports* data indicate inconsistent levels of parental involvement in the IGP process. Counselors at several schools reported an increase in parent contact due to their involvement in the IGP process, whereas counselors at other schools reported no meaningful change. *GP Accountability Reports* data for 2008-2009 revealed that the presence of parents at the annual IGP meeting varied widely that year across schools. Across sample schools, a parent or guardian was reported to have been present at an average of about 60% of IGP meetings for both ninth and tenth graders. By way of comparison, statewide for that same school year, the SDE reported that in slightly over 50% of IGP conferences for ninth and tenth graders, a parent or guardian was present (South Carolina Department of Education, 2009a).

There was a wide range, however, in attendance levels of parents and guardians (between 24% and 95%) or presence of designees (between 0 and 20%) across schools; at four sample schools,

more than half of ninth and tenth grade IGP meetings were held without a parent or designee. The average percentage of ninth and tenth grade IGP meetings held without a parent, guardian, or parental designee present ranged from 0% at one sample school to 74% at another sample school.

Although the option to have a parental designee attend the annual IGP meeting with a student was available at all sample schools, the figures above reflect the rare use of this option. Only one sample school consistently employed this option, where a designee was present in 20% of conferences with tenth graders. Guidance personnel at the schools that used this option informed us that students' teachers typically served in the role of designee at their schools.

During interviews, guidance personnel offered a variety of explanations for the low or inconsistent level of parental involvement. Parents were reported to be much more likely to attend the eighth grade IGP meeting than later meetings. Counselors at several schools reported that some parents told them that they saw no need to attend a meeting each year after that first meeting. Counselors at one school reported that parent involvement picked up when children reached twelfth grade and were preparing to graduate. Guidance personnel at one of the schools with low levels of school and community resources noted that parents in lower income and rural communities had transportation problems or difficulty taking time off work to attend meetings. There were also reports from several schools that information on IGP meetings and the process was not consistently reaching all parents. During a focus group interview at one school, guidance personnel reported feeling that some parents were not getting involved in the planning process because they did not feel it was important for their child to be involved in career planning or because they did not understand why they should be involved in the process with their child.

Influence of the Reform Policy on CTE Awareness and Participation

Ensuring coordination of academic and relevant CTE content and appropriate progression of courses requires communication at schools between school counselors and academic and CTE teachers. It also may require some changes in awareness and perceptions of CTE courses and programs by students, parents, and school staff, to reduce barriers to participation in these programs. In recent years, CTE policy leaders and educators have been making efforts to revise the instruction provided in CTE courses and programs while at the same time changing perceptions of these courses and programs. We were interested in finding out if an emphasis on career planning and the required development of IGPs and selection of career pathways in our sample schools had changed the level of awareness of CTE, perceptions of CTE, and patterns in CTE course-taking at these schools. During interviews with school staff at the high schools and several partner career centers, these issues were often raised by staff when asked about changes in their schools since implementation of EEDA. These issues were also raised by researchers during interviews. The following are highlights of findings from these discussions.

Increase in counselor awareness and knowledge of CTE courses and programs and dissemination of that information through IGP process. During Year 3 POS site visits, guidance personnel reported learning more about CTE offerings at their schools. Counselors commented that, because of EEDA and the IGP process, they were required to learn about available CTE courses and programs in their schools to better assist students in developing IGPs.

CTE teachers at six of the eight sample schools reported that the IGP process helped them to identify students for their programs and that more, and/or more focused, students were being directed to their programs. One CTE teacher noted that the "career focus on IGPs has made CATE [CTE courses] more useful to students." This increase in awareness and information sharing resulted in reports at some schools of an increase in the number of students taking CTE courses.

The impact of EEDA requirements and the IGP process on guidance personnel's knowledge of CTE programs was particularly apparent during discussions with guidance personnel at two high schools that use career centers to provide CTE courses and programs. These personnel commented that they now know much more about the offerings of the career center. They reported an increase in interaction and information sharing with career center staff. They noted that center staff representatives now meet annually with ninth-grade classes to provide information on center programs. An administrator at one of these schools noted that "EEDA has pushed us to talk more with the career center, and in different ways…Before, the career center did its own thing and we did ours…We know now we must tie this closer together." At the other high school, one of the administrators said that her school is "depending on the career center more now; the four-year plan brings the career center more into play now than before EEDA."

Reports from the two 2008-2009 *GP Accountability Reports* support interview comments that CTE information is being disseminated to educators, parents, and students in at least seven of the eight sample schools. Guidance personnel were asked to provide the number of educators, parents, and students who had been provided with information on their district's CTE programs during that school year. It is unclear which personnel schools considered to be in the category of "educators" at their school, since it was not specified on the form, but we assumed that teachers and guidance personnel at the sample high schools, and possibly guidance personnel at feeder middle schools, were included in this category along with any other high school program staff. Based on the numbers of teachers and guidance personnel reported in the *2009 School Report Card* for each school (South Carolina Department of Education, 2009b), the numbers of educators reported appear to indicate that the vast majority of school program staff at seven of the eight sample high schools received CTE program information at least once during the school year. These reports also indicate that the vast majority of ninth and tenth graders at these seven schools were provided CTE program information. At the remaining sample school, only small numbers of parents and educators relative to staffing and enrollment at the school were reported to have received information on available district CTE programs during that school year. It was unclear if none of the ninth or tenth graders received information at this school or whether the data were missing on this variable for students.

Increase in numbers of students being directed into CTE and more appropriate CTE placement. CTE teachers at several schools not only reported an increase in numbers of students being directed into their courses but also more appropriate placement of students in their CTE courses and programs. Use of the IGP at some sample schools as a screening device helped students and parents have more realistic expectations for their career and academic goals and resulted in more careful placement of students into academic and CTE courses. Rather than assign academically struggling or misbehaving students to any open CTE courses, counselors have been encouraged by the IGP process to review students' past performance and career goals

and try to relate these goals and abilities to appropriate courses and programs. This resulted in reports from a number of CTE teachers that they were getting students in their courses who were better prepared academically and "who want to be there," because the course fits their career goals. One of the career centers where staff conducted interviews reported increased enrollment. Staff at the other center reported that high school guidance personnel were helping with recruitment while the IGPs were helping them to identify students for programs.

In addition, as a result of implementing a model focused on career pathways, a number of school administrators were rethinking how best to prepare students for graduation and the future. Some administrators commented to researchers that the model has caused them to think about finding ways to make sure that all students have some practical skills to prepare them for the work world after graduation, whether by getting a certification of some kind or by participating in an apprenticeship or internship before graduation.

Reduction in stigma of CTE courses at some schools. Inclusion of CTE courses in IGP discussions and career clusters and increased awareness and information sharing about CTE programs and courses by guidance personnel and CTE faculty may have contributed to changes in perceptions of CTE. At several schools, any stigma associated with taking CTE courses or attending a career center had been reduced in recent years. During the fall 2009 interviews at five of the sample schools, we asked staff specifically about whether any stigma was associated with participation in CTE programs. Staff at three of these schools reported a reduction in negative views toward CTE that they attributed to their efforts to better inform students, parents, and the community about what CTE courses and programs can offer. At one of these schools, employability was mentioned as a draw. Staff at the other two schools pointed to IGPs, clusters, and majors along with integration of CTE into core classrooms as being key factors in reducing stigma. At the fourth school, staff reported that a negative connotation of CTE programs persisted among students and parents, although they were making some effort to address it. For example, this school was conducting a campaign to showcase high-paying career options for CTE majors and working to increase the number of higher GPA-weighted CTE courses, by, for example, assigning honors or AP credit to CTE courses. But students at this school received mixed messages about CTE courses. Despite a campaign to heighten awareness of CTE at this school in some high-paying areas, some faculty and administrators at this school indicated that they still felt that some students are more "suited" for CTE while others are more "suited" for college. Finally, at the fifth school, staff commented that the problem with some students enrolling in CTE courses lay in the fact that CTE courses often carry a lower weight and result in a lower GPA that can hinder college entry, rather than any stigma associated with taking CTE courses.

The research team hypothesized that part of the reduction in stigma may be related to the greater interaction occurring at some schools between CTE and non-CTE teachers. Historically in our sample schools, CTE and "academic" programs had been somewhat isolated from each other. Three of the five schools asked about stigma were organized into Smaller Learning Communities (SLCs). In these schools, groups of core academic and CTE teachers are housed together in SLCs, reducing the physical isolation between CTE and academic faculty that is common on comprehensive high school campuses. SLC groupings have the potential to reduce isolation and offer opportunities for core academic teachers to become more familiar with available CTE

programs, to observe CTE teachers planning and teaching, and to better understand that CTE programs do have rigor, as well as to increase interaction between CTE faculty and non-CTE students.

This opportunity for consistent interaction between CTE and non-CTE faculty and students in SLCs has the potential to reduce the stigma attached to CTE programs. However, only one of the SLC schools visited reported reductions in CTE stigma, and that was a school that was newly organizing their SLCs around career clusters. Another school that randomly placed students into SLCs reported that CTE was still not as attractive to students as it would be if more CTE courses carried higher GPA weighting. And researchers noted that at the third SLC school, being housed together did not appear to have helped to reduce the stigma attached to CTE, which was still being perpetuated by students, parents, and administrators at the school.

3. May include the opportunity for secondary students to participate in dual or concurrent enrollment programs or other ways to acquire postsecondary education credits.

As part of the development of strong career pathways and mandates of both Perkins IV and EEDA, there has been progress in South Carolina in developing and strengthening articulation agreements between schools and districts, community colleges, and four-year colleges and universities, with increases in dual credit and credit transferability options for students at many of our sample schools. Students at our sample schools, as well as schools across South Carolina, however, face several challenges with regard to dual credit courses. One theme heard in nearly every school was that when postsecondary plans are considered, students, parents, and counselors often have to weigh the tradeoffs for students in choosing CTE courses over core academic courses, honors, Advanced Placement (AP), or dual-credit academic courses. One challenge of choosing CTE courses over other courses is that CTE courses only count for elective credit. In order to graduate from high school in South Carolina, a student must earn 24 units of credits, 17 units in core academic courses and 7 in elective courses. For those planning to go to a four-year postsecondary institution, 1 unit of the 7 elective units must be spent in another year of foreign language. Students may find it difficult to fit in the exact electives they desire. In addition, even if students have room in their schedules to take a CTE elective course, they may face problems getting into the course because of limited space or limited time offerings of CTE courses.

Another major challenge for students in taking CTE courses is the impact that CTE courses can have on a student's GPA. Students with goals to attend four-year colleges, particularly those that are more highly selective, work to get their GPAs as high as possible to help improve their prospects for college admission and scholarships. In addition, several of the state scholarships available in South Carolina require a 3.0 GPA or higher (LIFE and South Carolina HOPE scholarships) or, depending on SAT or ACT scores, either a 3.5 or 4.0 GPA (Palmetto Fellows Scholarships) to be eligible (South Carolina Commission on Higher Education, n.d.). Because AP classes carry greater weight than CTE classes, a student may find it more advantageous for their GPA to take an AP course. Dual credit courses also help to boost GPAs, because in most districts, AP and dual credit courses carry the same weight. Students would not face GPA penalties if these options were consistently available for CTE courses. We found at sample schools, however, that options for dual credit or AP credit in CTE courses were often limited and

did not provide a viable option for many students. Although 57% of students in the Class of 2011 cohort responding to a survey about their POS experiences reported that they planned to take at least one dual credit course before graduating, most opportunities for dual credit in sample schools were in core courses. A similar problem occurs with honors credit, where some schools reported that only recently had some CTE courses received honors level credit. These course options were not consistently available across all schools.

4. ***Lead to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree.***

Every Perkins IV defined POS identified in sample schools was reported to have a postsecondary component culminating in a credential, certificate, or degree at the postsecondary level. In addition, all of the sample high schools or their partner career centers offered opportunities for students to earn industry-recognized credentials while in high school in at least one of their POS. Administrators interviewed at several schools wished more certificate programs were available to high school students. A lack of industry-qualified teachers to provide the instruction for certification in some areas was often cited as an obstacle. The schools in our study also work with local employers to learn what skills and credentials are needed, and then design their programs around these.

During interviews with CTE faculty, concerns were raised about the requirement that the attainment of a postsecondary credential be used as an indicator of the success of POS. We were told that many high school students who performed well in internships or cooperative placements were being offered full- or part-time employment when, or sometimes even before, they graduated. Not counting such offers as proof of success of POS, because they do not meet the criterion of postsecondary degree or credential attainment, ignores the benefit of high school credential-based programs in helping graduates successfully move into career-related employment.

OVAE Design Framework

OVAE's Career and Technical Programs of Study Design Framework for POS, as described previously, was developed to provide policy guidance to states regarding the development of POS. Along with the other four NRCCTE POS studies, we agreed to incorporate observations on these 10 components in our data collection, and preliminary observations relative to many of these components are summarized here.

Guidance Counseling and Academic Advisement

As described in more detail earlier in this report, career guidance and counseling services are critical to the EEDA reform policy, with school guidance and counseling programs playing a key role in students' career development and career planning. Under EEDA, students are exposed to career development efforts in elementary school with the exploration of career pathways and career interests. This process of exploration continues throughout later grades. In eighth grade, each student, along with parents or guardians, works with a counselor to develop an IGP, which includes courses required for graduation and appropriate electives that align with the student's

interests, postsecondary plans, and professional goals. The process of working with counselors continues into high school where, on an annual basis, students meet with school counselors to review and revise their IGPs. Further, school counselors with career development facilitator certification or other school personnel with such training provide students with career awareness and career exploration activities and work-based learning (WBL) experiences.

Due to this centrality of counseling in the implementation of EEDA and to the development and implementation of high quality POS, we examined the role of guidance in policy implementation in the sample schools to learn whether and how guidance personnel duties changed since the implementation of EEDA. To conduct this examination, we collected and analyzed guidance personnel data from a variety of sources. These sources include data collected for the purposes of this study and data that were collected by the South Carolina Department of Education (SDE) for accountability purposes for EEDA; each source was described earlier in the Methods section of this report. The sources include data from: (1) initial site selection visits and second POS site visits; (2) two guidance personnel surveys; (3) additional in-depth interviews with guidance personnel; (4) semi-annual SDE online *GP Accountability Reports*; and (5) responses from the first administration of the *Student Engagement/POS Experiences Survey* to the Class of 2011. Some of the findings from these analyses were reported in previous sections of the report. Remaining preliminary findings are described below.

Reports of work overloads for school counselors due to increase in career-focused activities. EEDA mandates that school counselors participate in a number of new career-focused duties. As noted, counselors and students report that these types of activities occur. Although funding is available to hire career specialists to assist with the new duties, counselors generally felt that funding was inadequate for implementing the new policy requirements. Staff in all of the schools visited, regardless of local economic conditions, were struggling to carry out the policy without being able to hire more staff.

Some schools were very creative in reorganizing their guidance staff to try to accommodate these new expectations and responsibilities. We did not find a complete change in roles for guidance personnel at any of the schools, however. Counselors reported increased workloads that they felt were due to large caseload sizes and the amount of time required to implement EEDA-related duties. Many spoke of being "overwhelmed" by the increased workload and duties expected of them and that, rather than replacing the old responsibilities, the new ones required by the state policy were being "piled on top" of the old ones. Increased workloads resulted in counselors reporting feeling rushed, unable to go into detail about career issues and concerns, and unable to adequately conduct academic interventions with students. This problem is also reflected in counselors' survey responses about assigned duties, as highlighted previously in Table 2.

One workload issue is the fact that a school may technically meet the EEDA-mandated 300:1 student-to-guidance ratio but this may not mean that each counselor has a caseload of 300 or fewer students. Based on *GP Accountability Reports* submitted by sample schools, all schools met the required 300:1 student-to-guidance ratio. These counts are based on the reported school enrollment divided by the number of guidance personnel, including both certified school guidance counselors and career specialists who are not certified counselors, that were reported as employed at the school for the 2009-10 school year. Based on these reports, we calculated

student-to-guidance "official" ratios for each school that ranged from a low of 148:1 up to 299:1 (Table 3). The average official ratio across the eight schools was 249:1.

Table 3
Numbers of Guidance Personnel at Sample Schools and Reported Student-to-Guidance Ratios and Caseloads, 2009-2010

	Total number guidance personnel	Mean	Range
Number of certified school guidance counselors	29	3.5	1 - 6
Number of career specialists, not certified school guidance counselors	8	1	0 - 3
"Official" Student-to-Guidance Personnel[a] Ratio	--	249:1	148:1 - 299:1
"Actual" Student-to-Guidance Counselor[b] Ratio	--	304:1	220:1 - 497:1

Note. Data are from the SDE semi-annual online Career Specialists/Guidance Personnel Accountability Report (*GP Accountability Reports*) for Spring 2010 and were provided to us by the South Carolina Department of Education. Data were reported for that semester by all 8 sample schools.
[a]Because schools are allowed to include both career specialists and school counselors in the school's "official" reported student-to-guidance ratio, we included both in the calculation of this ratio. The ratios presented in this table were calculated by the study team from data reported by schools on the Spring 2010 *GP Accountability Report*, by dividing the total student enrollment reported for the school by the number of school guidance counselors and career specialists reported as being employed at the school during that school year. [b]Actual caseloads were those reported by guidance personnel during interviews from seven of the eight sample schools in the spring of 2010. Mean actual student-to-guidance counselor ratios were calculated by totaling reported caseloads and dividing by the number of counselors reporting caseloads.

Counselor reports of their actual caseloads, however, varied widely. Although the average of actual ratios reported by counselors during interviews was around 300:1, ratios ranged from around 200:1 up to ratios of almost 500:1. The reason for the contrast between reported and actual caseloads is the inclusion of career specialists along with school counselors in the calculation of the official ratio. Interviews confirmed that, although career specialists helped with some aspects of the workload, they could not help to reduce caseload size due to EEDA mandates restricting their responsibilities. For the most part, the student caseloads for most counselors were relatively unchanged since EEDA implementation. Workloads increased for many counselors, with new duties layered on top of old duties, resulting in counselors reporting feeling rushed, unable to go into detail with students about career issues and concerns, and unable to adequately conduct academic interventions with students.

Demands of IGPs and other EEDA duties changing roles and increasing workloads of school counselors. IGPs are the organizing factor for career-focused activities and planning because they outline a student's career goals and postsecondary plans as well as selection of a career cluster, major, and coursework to lead toward those goals. To be effective, IGP development requires at least some discussion between counselors and students about career exploration and planning. Counselors reported that most of their efforts are now centered on the development and renewal of IGPs and the career services that go along with them. They reported spending much of their time on some aspect of the process; counselors with caseloads of 300 or more students reported that they spent on average 3 to 4 months of the school year engaged in the IGP process. One counselor, with a caseload of around 400 students, reported that "between January through right before spring break, every day is filled with 20 minute increment appointments to meet with students. So, our time is constrained" (Counselor 9).

The time-intensive nature of the IGP process was seen by counselors as a key factor in work overloads. At some sample schools, course scheduling and registration have been merged with the IGP process for time-management purposes. Because all of the course information is entered into the electronic IGP database (e-IGP), several schools told us that they use this database to generate their semester course schedules and register students for classes. Course offerings may thus be based on student interest as well as the need to meet graduation and major requirements.

Reports continue of involvement in "inappropriate activities," as defined by EEDA guidelines. In both surveys and interviews, school guidance counselors generally reported little change in their involvement in "inappropriate duties," with the least amount of change occurring in the coordination of special services referrals (see Table 2). For some inappropriate activities, counselors were more likely to report increased involvement, especially registering and scheduling students for classes, developing the master class schedule, and maintaining or completing educational records or reports.

Counselors at a majority of schools reported continued involvement in testing duties, limiting their ability to deliver appropriate counseling services for students because testing requires a lot of time for preparation, training of teachers, packaging and distributing tests, administration time, and providing test security. ASCA guidelines clearly specify that it is inappropriate for school guidance counselors to organize or administer cognitive, aptitude, and achievement tests (American School Counselor Association, 2005). Counselors in schools with higher student-to-counselor ratios and in which counselors continue to be in charge of testing reported the most difficulty in effectively managing their counseling duties. The IGP was also cited as a primary factor in keeping counselors involved in "inappropriate duties" because of the merging of course scheduling and registration, both deemed "inappropriate" under EEDA (South Carolina Department of Education, 2006a). With these duties merged, responsibility for student registration and developing the master course schedule was still in the hands of counselors at most sample schools.

Many counselors reported that they were still involved in these inappropriate activities because there were insufficient resources to hire additional staff to cover mandated duties. When asked during interviews how they managed to juggle all of their counseling duties when both testing

and IGP development demands were high, counselors reported that they found ways to manage their duties using teamwork, working longer hours, or working more days of the school year.

Contributions of career specialists to guidance workload restricted by EEDA guidelines. Interview and survey responses from career specialists at sample schools indicate that their duties vary widely across schools. Career specialists provide a range of activities, such as career testing, incorporating career test results into IGPs, disseminating career information to students and teachers, and helping students identify career interests. As outlined in Table 4, the majority of duties assigned to career specialists who responded to our survey related to career guidance and reflected those duties stipulated in EEDA. These duties include activities such as meeting with parents about career issues, assisting students with development of IGPs, and consulting with teachers about career issues. Although career specialists are not allowed to do the final review or approval of student IGPs, all but one of those responding reported involvement in the development of student career plans and IGPs. None reported involvement in registering and scheduling students for classes or developing the master class schedule. Career specialists at sample schools with the highest student enrollment and largest student caseloads were the most likely to report being assigned "inappropriate" duties for guidance personnel, such as assisting with testing or performing cafeteria duty.

Table 4
Assigned Duties Reported by Career Specialists, 2009-2010

Career Counseling and Guidance Duties	Yes %	No %
EEDA Specified Career Counseling and Guidance Duties		
Providing classroom guidance on career issues	100.0	
Counseling students on career issues	100.0	
Consulting with teachers and administrators about career issues	100.0	
Assisting with exceptional students on career issues	100.0	
Meeting with parents about career issues	100.0	
Coordinating special events/programs for the school regarding career issues	100.0	
Developing curriculum on career issues	83.3	16.7
Assisting students with the development of their career plans and IGPs	83.3	16.7
Conducting professional development workshops in career development and guidance for teachers and school counselors	83.3	16.7
Identifying and coordinating work-based/extended learning opportunities for students	33.3	66.7
Non-EEDA Specified Duties		
Assisting students with college planning and applications	50.0	50.0
Participating on committees within the school	50.0	50.0
Administering standardized tests	40.0	60.0
Performing hall, bus/car pick-up, cafeteria duty	40.0	60.0
Coordinating the standardized testing program	33.3	66.7

Consulting with teachers and administrators about personal/social issues	16.7	83.3
Substitute teaching and/or covering classes for teachers at your school	16.7	83.3

Note. Data are from the *School Counseling/Guidance Duties* survey of career specialists, conducted in Fall 2009. Total $n = 6$; 6 of the 7 career specialists, from 4 of the 5 sample schools reporting that they had career specialists on staff, responded to the survey. *N* sizes for calculation of percentages for each item range from 5 to 6, with only two items having an *n* of 5.

The primary EEDA administrator with the South Carolina Department of Education reported to us that in her view, without career specialists and their contributions, implementation of the EEDA policy would not be possible (S. Moore, personal communication, August 18, 2010). She described them as the connection to students as well as parents and as a primary provider of career information and career assessments for IGP development. Regardless of the contributions career specialists may make to career activities at sample schools, however, there were mixed reports among school counselors as to whether career specialists had actually helped to reduce their workload. One of the primary reasons that career specialists cannot reduce guidance counselor student caseloads related to IGPs is that the EEDA mandates that only certified school guidance counselors can legally sign off on IGPs. So, although the state allows career specialists to be factored into a school's student-to-guidance ratio, the presence of career specialists does not reduce school counselors' student caseloads for IGPs. This was a major criticism of EEDA voiced by guidance personnel across sample schools.

Reported counselor duties not in compliance with ASCA National Model guidelines. The increase in IGP development and time spent on career services was perceived by counselors to have caused an imbalance in their ability to provide comprehensive guidance services in the areas of career, academic, and personal/social, putting them out of compliance with ASCA National Model guidelines. Personal/social services were mainly limited to crisis intervention, with less time focused on programming and individual counseling. Some schools were able to continue with existing personal/social programs whereas others were forced to cut back on such programs. As one counselor commented: "We're so focused on IGPs, meeting with parents, getting career assessments done, and getting their futures planned that we don't have time to do the groups that we used to do. We don't have time to do one-on-one personal and social…We can't focus on that at all" (Counselor 5). Attending to crises also put a strain on counselors' time, requiring them to delay other tasks like IGP meetings and career assessments, often resulting in longer work hours.

Despite challenges, counselors reported feeling prepared to carry out new EEDA duties. EEDA stipulates that all school guidance counselors and career specialists must receive career development and training. All guidance personnel reported receiving some training on career pathways and IGP development but the amount and type of training and the topics covered varied. Training ranged from courses and workshops to personal research and "do-it-yourself" experiences; it covered topics such as IGP development and advising students on career pathways. Regardless of the types of training described, school counselors interviewed generally felt satisfied with the training they had received and the resources and support available to them through their districts and the state, and felt prepared to provide reliable career guidance.

Legislation and Policies

Research on educational reform has repeatedly emphasized leadership as essential to successful reform efforts. Our study offers an opportunity to explore the impact of a state-directed, comprehensive career-pathways/POS reform model on the delivery and outcomes of career-oriented education. Because the legislation affects all high schools, the study is drawing upon naturally occurring variations in implementation, community resources, and extent of exposure to the changes required by the legislation to assess the factors that influence its impact.

Early evidence from sample schools indicates that the legislation's requirements regarding guidance have increased the number and types of career-focused activities at sample high schools and the amount of influence that counselors and career specialists have on the educational and career plans of students. These increases are in large part due to the IGP process, a key to career planning for students, increasing student contact with guidance personnel about career planning, and providing a link between student interests and career goals and their high school coursework. The IGP process, in combination with other career-focused activities, has also resulted in increased awareness of CTE, reduction in some of the stigma attached to taking CTE courses, increased likelihood of more appropriate placement of students in CTE courses, and improved efforts to disseminate CTE information to students, parents, and educators.

Although the structure and content of the state policy help to streamline guidance roles and responsibilities, some schools reported that it will be difficult to implement EEDA fully without additional resources. Only some facets of the legislation have received state funding, which has made it difficult for most schools, particularly those in high-poverty communities, to fully implement the policy.

Partnerships

School administrators and CTE faculty at our study high schools mentioned local advisory teams as an integral part of program development and important for keeping schools informed on the needs of industry. Links to business and industry were also important to comply with policy mandates for increased job shadowing, mentorship, and internship training opportunities for students. But having staff available to identify, establish, and maintain partnerships is critical to the success of these efforts, as is the availability of local business partners. Few sample schools had staff that they could dedicate to developing these partnerships, and the remote or economically depressed locations of some schools posed serious challenges to creating the necessary partnerships with industries.

Despite these obstacles, several initiatives in EEDA policy help promote partnerships between local schools and districts and local businesses for CTE and non-CTE programs. EEDA created 12 Regional Education Centers (RECs) to help disseminate information about the policy to local industries and the community, to help schools to educate students and staff about career opportunities, job training, and apprenticeships, and to connect local education and businesses. Involvement with the RECs varied across sample schools, ranging from no contact to periodic contacts. Another program developed by the state and partially administered through the RECs is the Connect2Business program, which recruits businesses to be involved with local schools.

Currently, 901 businesses across the state have volunteered to have their contact information listed and to be partners with their local schools.

Professional Development

EEDA requires the South Carolina State Department of Education to provide training, professional development, and resources to K-12 school personnel in various aspects of the policy, such as the use of cluster-of-study curriculum frameworks and of IGPs. The policy mandates that all middle and high school educators receive training in contextual teaching, involving methodologies used by teachers that focus on concrete hands-on instruction and content presentation with an emphasis on real-world application and problem solving. EEDA also requires all state colleges of education to include in their training of teachers, school counselors, and administrators the following topics: career guidance, the use of the clusters of study curriculum framework and IGPs, learning styles, the elements of the South Carolina Career Guidance Model, contextual teaching, cooperative learning, and character education. The State Board of Education has developed performance-based standards for all teachers and principals in the areas of career exploration and guidance.

Teachers in our study schools reported receiving varied amounts of training related to EEDA activities from their school, their district, or the state. The state was credited with providing good virtual job shadowing and other general resources through websites such as the Personal Pathways to Success website, the college and career planning sites through Kuder, Microburst learning sites, and the REC sites. However, guidance personnel and school-based career specialists were reported to be the main providers of training for teachers. Teachers in sample schools were most likely to receive school or state-sponsored training in the early stages of policy implementation but little training as the implementation continued. Some teachers found this training too general and felt the need to supplement initial training with their own research. Some teachers commented that the best training they received on content integration and career clusters was through professional development provided by High Schools That Work (HSTW) staff.

Guidance personnel in study schools reported receiving at least some training on career pathways and IGP development, but the amount and type of training varied, as did the topics covered. This training was offered through a variety of channels, including the local school district, the state education department, and state and regional professional development meetings and workshops. School guidance counselors at one school reported receiving training through a local business alliance. Regardless of the types of training described, school counselors interviewed generally felt satisfied with the training they had received.

College and Career Readiness Standards

One of the goals of EEDA is that all of South Carolina's students will complete high school fully prepared for successful employment, further training, or postsecondary study, a goal to be achieved by requiring high academic standards across the curriculum, integration of academic and CTE content, and opportunities for work-based experiences. Each student's IGP includes postsecondary options and all students are encouraged to take the SAT or the ACT college

readiness tests. One obstacle to readiness for employment involves students' lack of engagement in work-based learning (WBL) activities. Administrators at several sample schools noted that students are often restricted from engaging in WBL activities due to age requirements (under 18 years of age), safety issues, and legal restrictions in certain occupations.

Credit Transfer Agreements

All eight of the schools participating in our study reported either dual enrollment or dual credit arrangements, or both, with local postsecondary institutions. Although not all POS terminate with a four-year college degree, some could. Therefore, in South Carolina, efforts have been made not only to increase traditional local dual credit offerings for high school students, but also to create statewide articulation agreements between the community or technical colleges (which offer two-year associate degrees) and four-year colleges and universities across the state. Currently, 86 statewide courses with approved curriculum will automatically transfer from state two-year community/technical colleges to four-year institutions of higher learning across the state.

Discussion

Early evidence suggests that components of EEDA are helping to build some of the foundation and framework for the development and successful implementation of Perkins IV-defined POS. Although integration of academic and CTE content was occurring in some instances in some sample schools, other developments discussed above can influence the academic-CTE integration process. To increase integration, academic teachers and school counselors guiding students in the development of their course schedules and IGPs need to become more knowledgeable about CTE courses and programs. The IGP process has become a viable way in many of the sample schools to facilitate these discussions, reduce the stigma of taking CTE courses, and increase school staff's knowledge of CTE.

We found that EEDA has affected the role of counselors and the depth and breadth of information that students receive about their educational and career opportunities in career and technical fields. EEDA emphasizes students' need to engage in career development activities such as exploration, interest assessments, and talking about career issues and career options with knowledgeable adults, thus making school counseling an essential service. This emphasis in EEDA and the requirements of the IGP process have increased the amount of time counselors spend with students engaging in one-on-one career-based counseling, with an increased effort to meet with every student on an annual basis. Further, there has been a greater effort to promote CTE programs to students and engage parents in the course and career planning of their children.

Key to much of the ongoing change in sample schools is the development and maintenance of students' four-year IGPs. The purpose of these plans is to provide students with an academic blueprint toward graduation and beyond, based on their career goals and within the context of their career pathway. IGPs often provide students with access to career assessment data, aiding them in matching their career interests and personality traits with career goals and postsecondary options. From comparisons to findings in the other NRCCTE POS studies, it appears that when

these types of plans are emphasized, as under EEDA, students are likely to receive more academic and career guidance services.

Preliminary evidence indicates changes in participation in CTE resulting from EEDA implementation. CTE teachers at a number of schools reported not only an increase in the numbers of students being directed into their courses but also more appropriate placement of students in CTE courses and programs; the students "want to be there" and "want to do the work." In addition, it is clear at several schools that any stigma associated with taking CTE courses or attending a career center has been reduced in recent years, although stigma remains present at some study schools.

One barrier to POS development at sample schools is the challenges that students face with CTE course-taking and scheduling. They face tradeoffs between CTE, Advanced Placement (AP), and dual credit courses. There is often limited space for students in CTE courses and limited time offerings for these courses, making it difficult to schedule CTE courses around the required core academic courses and sometimes impossible to get into certain CTE courses. In addition, some students may not take CTE courses because these courses rarely carry honors, AP credit, or dual credit, which are more heavily weighted than most CTE courses in calculations of GPAs. College-bound students interested in CTE courses have to balance CTE with other courses to maintain their GPAs. These challenges may hamper efforts to integrate CTE and academic programs into seamless POS pathways.

As both Perkins IV and EEDA mandate, there has been progress in developing and/or strengthening articulation agreements among schools and districts, community colleges, and four-year colleges and universities, with increases in dual credit and credit transfer options for students at many sample schools.

In future reports, we will explore in more depth the influence that EEDA policy may be having in sample schools on the development and direction of Perkins IV-style POS.

Research Question 2: What impact does the level of available community resources have on the implementation of EEDA and the development and implementation of POS?

To explore the influence of the availability of school and community resources on EEDA policy implementation and the development of POS, the study team analyzed information gleaned through preliminary analyses of on-site interviews and focus groups conducted during the two site visits with guidance personnel, teachers, principals, and assistant principals; from content analysis of school archival and web materials on available courses, majors, and career clusters, and on career development and planning; from analysis of school responses to a statewide EEDA survey; and from information compiled from an SDE EEDA annual report.

As noted in our study's Year 2 Technical Report and still apparent in analysis of third-year data, the levels of implementation at the eight high school sample sites have been affected by a variety of variables, many related to the level and availability of resources from the district, surrounding community, and the state. Levels of policy implementation depended on the presence or absence of jobs and job shadowing opportunities in communities, resources available within school

districts, the extent of cuts to state funding for EEDA and other educational services, and increased demands placed on school personnel due to reduction in state and local financial support. Building on existing CTE programs or whole-school reform models such as High Schools That Work appeared to facilitate early implementation of career pathways and POS. Not surprisingly, access to a wide variety of resources facilitated policy implementation, such as having staff with prior knowledge of and experience with various policy areas or being located in a community with diverse local businesses willing to provide resources and educational opportunities for students. Several schools lacked some of the basic resources necessary to design and implement POS, and there appears to be little potential for this situation to change in the near future.

Qualitative and quantitative data collection and analysis in Years 4 and 5 will continue to explore these issues in more depth.

Research Question 3: What impact does the implementation of EEDA have on student high school outcomes?

Part of our assessment of high school outcomes for students comes from students' own reports of their high school experiences through the administration of the *Student Engagement/POS Experiences Survey* at selected grade levels during high school. As described earlier, the survey includes questions about career clusters, career planning and development, majors, coursework, school engagement, and demographic characteristics. The responses discussed here are from the first administration of the survey to the Class of 2011 cohort. This cohort has had exposure to EEDA policy since the eighth grade. The survey was given to 1,455 members of this cohort who were attending our eight sample high schools. It was administered early in the fall of 2009, just after tenth grade. Schools were asked to administer the survey to as many of the members of this cohort as possible, and these responses represent 67% of the cohort's population across the eight sample schools. Percentages of the cohort taking the survey at individual schools ranged from 45% to 95%.

Because EEDA was designed to give all students, not just those in CTE, access to career-focused education, in this section we also compare student experiences of those taking CTE courses to those not taking CTE courses. On the student survey, we asked students to report how often they had been in CTE-type courses, such as culinary arts, cosmetology, construction, graphic communication, and health science, while in high school. Approximately 96.3% of respondents (1,401 students) indicated whether they had taken these types of courses; 3.7% of respondents (54 students) did not answer this question. Students who reported taking one or more CTE courses were classified as CTE participants, whereas those who reported taking none were classified as non-CTE participants. Approximately 71.4% of the students reported taking at least one CTE course by the end of the tenth grade and were classified as CTE participants, whereas 28.6% of students reported never taking a CTE course and were classified as non-CTE participants.[2]

[2]Since these students had just completed the tenth grade, some of them had not yet had the opportunity to take CTE courses or had had limited access up to that point due to grade level restrictions. We did find that at least some CTE courses at all of our sample schools or partner career centers were open to 10th graders and some were open to 9th

Demographic characteristics of Class of 2011 cohort respondents. Approximately 44.6% of the respondents were male while 55.3% of the respondents were female. The respondents ranged in age from 13 to 19, with the majority of respondents (76.9%) reporting being age 16. Approximately half (50.4%) of respondents indicated they were Black or African American, 34.8% indicated they were White, 8.2% indicated multiple races, 3.1% indicated they were Hispanic or Latino, 1.7% indicated they were Asian, 1.04% indicated they were American Indian or Alaskan Native, and less than 1% (0.76%) indicated they were Native Hawaiian or Other Pacific Islander.

Student Engagement and Career Clusters and Majors

To explore a possible connection between career planning and school engagement, the survey included a question asking students to give their level of agreement with various statements related to school engagement and to whether having a high school major and career cluster had influenced their engagement with school in these areas. A majority (85.4%) of the Class of 2011 respondents after their sophomore year indicated they had selected a career cluster, while 63.0% reported having selected a high school major. The number of students responding to each of the statements in the engagement question ranged from 954 to 962.

Among students who reported having a high school major and career cluster, 89.9% of students agreed that having a high school major and career cluster made them more likely to take courses needed for the future and 86.2% reported that they helped them to make connections between their studies and the type of career they want. Although lower percentages than these first two, still a majority of students responding agreed that having a high school major and career cluster helped them to get better grades (67.9%), made them feel less likely to want to drop out of school (67.8%), made them feel more likely to want to come to school (66.7%), and made it more likely that their parents got involved in the selection of their courses (62.7%).

Differences in reported engagement between CTE and non-CTE participants. According to student reports, having majors and clusters was more likely to improve student engagement for CTE participants than for non-CTE participants, with significant differences in level of agreement between the two groups on five of the six engagement statements. For students who reported having a high school major and career cluster, 69.5% of CTE participants agreed that they felt more likely to want to come to school, whereas 60.9% of non-CTE participants agreed with this statement ($p = .007$). Approximately 69.5% of CTE participants who reported having a high school major and career cluster agreed that they were less likely to want to drop out of school compared to 64.6% of non-CTE participants ($p = .008$). CTE participants also agreed more frequently than non-CTE participants that having a high school major and career cluster helped them to get better grades (70.5% and 62.1%, respectively, $p = .026$), and make

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graders, but CTE courses were often taken during 11th and 12th grades and some courses were restricted to students in those grades. Therefore, we decided to divide them into groups based on whether they had taken at least one CTE course. In subsequent analysis after the cohort has almost completed the twelfth grade and has had more access to CTE courses, we may use three CTE categories for comparative purposes, non-CTE (no CTE courses), 1-2 CTE courses, and 3 or more CTE courses.

connections between their studies and the type of career they want (88.1% and 82.6%, respectively, $p = .006$). Ninety-two percent (92.0%) of CTE participants agreed that having a high school major and career cluster made them more likely to take courses needed for the future, compared to 85.4% of non-CTE participants ($p = .004$). However, there were not significant differences between CTE participants and non-CTE participants in their level of agreement about whether having a high school major and career cluster made it more likely that their parents got involved in the selection of their courses.

Student Participation in Career-Focused Education

A primary objective of the EEDA is to increase students' access to career information and career counseling. One goal of the student survey was to find out in how many career-focused activities students would report being involved and how helpful they found them. Asking these questions of students would also allow comparisons of student reports to those of counselors about activities provided to students. The Class of 2011 was the first class required to adhere to EEDA guidelines about these activities; they were required to develop an IGP and select career clusters in eighth grade and select a major in tenth grade. Responses reported here were collected from this cohort early in the eleventh grade.

Overall, a majority of the Class of 2011 students, after tenth grade, report at least some involvement in career-focused activities and planning with school counselors. Reports of selection of a career cluster and major to plan, participation in the IGP process, and types of topics discussed with school counselors varied, however, and significant differences were found in reports of participation in certain types of activities between students who had taken CTE courses by the end of the tenth grade and students who had taken no CTE courses by that time.

Students report participation in the IGP process and other career-focused activities. Based on the reports of counselors, we expected that the vast majority of our Class of 2011 cohort by the end of the tenth grade would report that they had developed IGPs and selected career clusters and majors. Although a majority of students responded that they had participated in these activities, the proportion doing so was lower than expected, particularly for developing an IGP. Students were more likely to report having selected a career cluster (85.2%) than putting together a career plan or IGP (64.7%) or selecting a major within their career cluster (63.0%). Approximately 18.7% of students reported not having developed an IGP, whereas 16.6% reported that they did not know if they had developed an IGP, and 8.7% reported that they did not know whether they had selected a career cluster.

These percentages may reflect problems with the terms used in the survey to describe these activities. Despite the availability of statewide standardized materials, our pilot survey and school site visits revealed that "official" EEDA language was not used consistently across schools or even within schools. For example, IGPs at one school were called career plans, while at another they were called plans for course registration. Even though in registration and other school materials, "majors" may be delineated, they may be referred to by staff and students as programs, areas of study or concentration, or other terms. Terminology used by CTE teachers to refer to IGPs, plans, or majors often differed from that used by counselors or core academic faculty. These inconsistencies may have resulted in confusion among students in responding to

some survey questions. In spring 2011, we plan to explore this issue during focus groups with the Class of 2011 cohort to better understand and contextualize these survey results.

Students who reported having developed an IGP were asked how often they talked with specified individuals while developing their IGP. According to EEDA guidelines and guidance personnel reports, by the end of the tenth grade, each student should have talked with guidance personnel and parents about IGPs at least three times: once each in eighth, ninth, and tenth grade. Fifteen percent (15.3%) of students reported never having talked to a guidance counselor and 7.5% reported never having talked to a parent when they put together their IGPs, whereas 35.3% of students reported talking to a guidance counselor and 49.6% reported talking to a parent at least three times.

EEDA guidelines require that students take part in an annual meeting at school with a parent/guardian or parent designee and a counselor to review their plans and have parents sign them. All guidance personnel reported that these meetings were taking place. Data from the *GP Accountability Reports* for all but one sample school, indicate that 95% or more of tenth graders had attended an IGP meeting with counselors during that school year. At the eighth school, about two-thirds of tenth graders were reported to have attended an IGP meeting with counselors. Looking at student survey results, by the end of tenth grade, a majority (61.1%) of students surveyed reported participating in a meeting with a parent and counselor about their IGP at least once. However, 38.9% of students reported never having taken part in such a meeting. The problem may again be the terminology used to describe these meetings.

Although students may not have reported meeting annually with counselors, students did identify school counselors as the most helpful in developing their IGPs. As outlined in Table 5, of those students who had developed IGPs, around half reported that their guidance counselor was the most helpful, and one-third reported that a parent was the most helpful in developing these plans.

Table 5
Most Helpful Person in Development of IGP for Class of 2011 Cohort as Tenth Graders

Person	Respondents (%)
Guidance counselor	49.8
Parent	33.4
No One	7.3
Teacher	5.5
Friends	4.0
TOTAL	100.00

Note. Responses are from the *Student Engagement/POS Experiences Survey* administered to members of the Class of 2011at the eight sample schools in the fall of 2009, just after tenth grade. $N = 899$.

Student Reports of Topics Discussed with School Counselors

School counselors are required to discuss careers, jobs, and steps necessary to pursuing careers as part of the IGP planning process with students. However, not all students surveyed reported talking with counselors about these topics, as outlined in Table 6. From the start of ninth grade to the end of tenth grade, almost two-thirds of students reported talking at some point with a guidance counselor about possible jobs or careers and a similar percentage reported talking with a counselor about steps necessary to pursue their careers. This compares to over 90% of students who reported talking to counselors about courses to take that school year and almost three-fourths who reported talking about going to college. In a subsequent phase of analysis (Year 5), we hope to compare these trends in student responses between cohorts at the same grade levels and between grade levels within specific cohorts.

Table 6
Topics Class of 2011 Cohort Discussed with School Counselors While in Ninth and/or Tenth Grades

Topics	Yes %	No %
What courses to take this school year	91.4	8.6
Going to college	71.7	28.3
Possible jobs or careers when you are an adult	63.8	36.2
Steps necessary to pursue your career	63.4	36.7
Applying for college or vocational/ technical school	44.2	55.8
Finding a job after high school	35.4	64.6

Note. Responses are from the *Student Engagement/POS Experiences Survey* administered to members of the Class of 2011at the eight sample schools in the fall of 2009, just after their tenth grade year. *N* sizes for calculation of percentages range from 1,402 to 1,414.

Differences Between CTE and Non-CTE Participants in Participation in Career-Focused Activities

Although a majority of both CTE participants (86.8%) and non-CTE participants (81.7%) indicated that they had selected a career cluster, the proportion of CTE participants reporting that they had selected a career cluster was significantly different from non-CTE participants or those that did not know if they had selected a career cluster ($p = .046$).

CTE participants more consistently reported participation in job or career identification activities than non-CTE participants. As part of the requirements for EEDA, all students in South Carolina must participate in activities to help them identify jobs or careers that may interest them. Several questions in the survey were geared toward discovering more details about student participation in these types of activities. As outlined in Table 7, a majority of both CTE and non-CTE participants reported answering job- and career-related questions on a computer or filling out a questionnaire, researching different jobs and careers, and researching different

colleges, universities, or military branches. Differences between the groups were significant on two of these three activities. Higher percentages of CTE participants reported researching different jobs or careers (p = .007) or different colleges and universities (p = .006) than non-CTE participants.

Table 7
Percentage of Students Reporting Participation in Job or Career Identification Activities in Ninth and/or Tenth Grades

Job or /Career Identification Activities	CTE Participants Yes (%)	Non-CTE Participants Yes (%)
Answered questions related to jobs and careers on a computer or filled out a questionnaire.	79.6	78.0
Researched different jobs or careers.**	85.6	79.6
Researched different colleges, universities, military branches or technical/community colleges.**	80.3	73.6
Spoke with or visited someone in a career that interests me.**	57.1	48.2
Been in a class where someone from a local business talked about working at their company or in their career.	57.3	52.7
Toured a local business with a group from my school.*	24.3	18.5

Note. Responses are from the *Student Engagement/POS Experiences Survey* administered to members of the Class of 2011at the eight sample schools in the fall of 2009, just after their tenth grade year. N sizes for calculation of percentages for each item for CTE participants range from 973 to 977 and for non-CTE participants, from 386 to 391.

*p < .05, **p < .01 (based on chi-square analysis).

Some career-focused activities, such as speaking with or visiting individuals in careers of interest, have traditionally been more available through CTE courses than through non-CTE courses. EEDA was designed to offer these types of activities across the curriculum, and it is important to compare student experiences to find out how widespread these opportunities become under the state policy. As shown in Table 7, a significant difference existed between CTE and non-CTE participants on reports of having spoken with or visited someone in a career of interest to them; almost sixty percent of CTE participants as compared to slightly under half of non-CTE participants reported these types of activities (p = .003). Almost 60% of CTE participants also reported that they had been in a class where someone from a local business talked about working at their company or in their career. A smaller percentage of non-CTE participants reported having had this experience, although the difference was not significant. About one-quarter of CTE participants reported taking a school-sponsored tour of a local business compared to slightly less than 20% of non-CTE participants, a significant difference (p = .021).

Greater proportions of CTE participants than non-CTE participants reported participating in activities that helped them think about and plan for their future job. Students were asked about how much thinking and planning they had done for job-related activities. The students classified how much thinking and planning they had done into four categories: (1) I have not thought about

or done this; (2) I have thought about doing this; (3) I have made plans to do this; and (4) I have already done this. CTE participants had a significantly different distribution of responses than non-CTE participants across all four job-related activities included in the survey. Larger percentages of CTE participants than non-CTE participants reported having made plans to or having already gathered information about jobs that interest them (64.5% and 54.1%, respectively, $p = .002$), taken classes to help them decide on the kind of job they want (74.4% and 65.1%, respectively, $p = .001$), participated in school or out-of-school activities that would help them decide what kind of job they want (55.4% and 47.5%, respectively, $p = .035$), and volunteered, interned, or worked on a job to help them find out the kind of job they want to have in the future, with a greater proportion of CTE students (46.6%) reporting they had already done this or made plans to do this than non-CTE students (43.0%; $p = .050$).

Greater proportions of CTE participants than non-CTE participants reported participation in WBL experiences than non-CTE participants. Students also reported whether or not they participated in work-based learning (WBL) experiences. The number of WBL experiences in which any one student reported participating ranged from none to six, with two-thirds of students reporting having participated in at least one of these experiences. The most reported work-based learning experiences were job shadowing or work-site visits and community services and the least reported experiences were co-ops and mentoring. Table 8 summarizes the work-based learning experiences of CTE as compared to non-CTE participants. The distribution of the number of WBL experiences reported by CTE participants significantly differed from that of non-CTE participants.[3] More CTE participants reported participating in at least one WBL experience, as compared to non-CTE participants ($p = .013$). The proportion of CTE participants who participated in co-ops and school-based enterprise experiences significantly differed from the proportion of non-CTE participants who participated in these activities ($p = .012$ and $p = .000$, respectively). There were not significant differences in the proportions of CTE and non-CTE participants who participated in internships, job shadowing or work-site visits, mentoring, or community service.

Table 8
Percentage of Students Reporting Participation in Work-Based Learning Experiences in Ninth and/or Tenth Grades

Work-Based Learning Experiences	CTE Participants Yes (%)	Non-CTE Participants Yes (%)
Internship (work experience, but not necessarily part of a vocational, career, or technical class)	16.2	12.9
Co-op (work experience at a local business in your high school major or career cluster)*	9.6	5.4
Job shadowing or work-site visits (visits to work places to observe one worker or many workers)	37.7	33.3

[3] For analysis purposes, students who reported participating in more than 3 work-based learning experiences were grouped into a single category. The categories for analysis were therefore zero, one, two, three, or more than three work-based learning experiences.

Mentoring (a match with an adult in your career area for advice and support)	12.4	9.0
Community service (volunteer work to support your local community)	29.6	27.6
School-based enterprise (working in a business run by students or teachers from your school)***	15.1	6.7
None of these*	33.8	41.0

Note. Responses are from the *Student Engagement/POS Experiences Survey* administered to members of the Class of 2011 at the eight sample schools in the fall of 2009, just after their tenth-grade year. *N* sizes for calculation of percentages for each item for CTE participants range from 978 to 980 and for non-CTE participants; the *n* for all items is 389.
*$p < .05$, ***$p < .001$ (based on chi-square analysis).

Discussion

For the most part, members of the Class of 2011 cohort in the eight sample high schools that responded to our survey reported involvement in a range of career-focused activities, as required by EEDA. Based on the reports of counselors, we expected that the vast majority of this cohort, by the end of the tenth grade, would report that they had developed IGPs and selected career clusters and majors. Although a majority of students reported having participated in these activities, the proportion reporting that they had done so was lower than expected, particularly for developing an IGP. This inconsistency in reports between counselors and students, however, may have been due to the language used in the student survey to describe these activities, and this contextual factor will be explored during the fourth study year.

Although required by EEDA, one activity in which students did not consistently report being involved was an annual meeting with counselors and a parent or parental designee to talk about and update their IGP. Even though they may not all have been meeting with counselors annually about their IGP, students in our sample schools most frequently identified school guidance counselors as the most helpful in the development of their IGPs. This contrasts to reports of students surveyed by the other two NRCCTE POS longitudinal studies, where students indicated that they found their parents most helpful in plan development. The higher percentages of students naming counselors in our sample schools suggest that state policy specifically targeting the role of counselors can enhance their influence on career choices and possibly provide a more systematic process for career planning.

In general, a majority of those members of the Class of 2011 cohort responding to our survey after their tenth grade year who reported that they had selected a high school major and career cluster agreed that these had made them more likely to take courses needed for the future, helped them to make connections between their studies and the type of career they want, helped them to get better grades, made them feel less likely to want to drop out of school, made them feel more likely to want to come to school, and made it more likely that their parents got involved in the selection of their courses. It was also found that a greater percentage of CTE participants than non-CTE participants reported agreement with these statements.

Although EEDA mandates career-focused education for all students in South Carolina, differences consistently appeared between CTE and non-CTE participants in Class of 2011

cohort reports of participation in certain job or career identification and planning activities and work-based learning experiences. These reports, however, are based on students' experiences up to the end of the tenth grade, and the experience of students in this cohort may change as they enter their final years in high school. We will be surveying this cohort again at the end of the fourth study year (spring 2011) when they will be seniors, and we will be able to compare reports of their experiences at that time to these earlier reports as well as to those from seniors from an earlier cohort with little exposure to EEDA. We may find that reported experiences of CTE and non-CTE participants become more similar as students move toward graduation or as they are exposed to EEDA for a longer period.

In future reports, we will be exploring in more depth the differences in student outcomes between cohorts with varying levels of exposure to EEDA and to POS with archival data such as grades, attendance, and dropout.

Summary of Preliminary Observations

As we are still in the process of collecting and analyzing data, the summary remarks below from the preliminary findings and observations just described, are tentative and will be subject to further examination in the final years of the study.

EEDA Policy Implementation Levels at Sample High Schools

By the end of the 2009-2010 school year, the third year of our study, implementation of EEDA activities in high schools was in its fourth year. Although EEDA was not expected to be fully implemented until the end of the 2010-2011 school year, data collected after two and a half years in the field indicates that EEDA has already increased the amount and variety of career planning activities and guidance that students are receiving in our sample high schools and changed the roles of many guidance counselors in these schools. School guidance personnel are the key players in the increase in these areas. Most counselors reported engaging in more career-focused activities and academic guidance, and spending less time on personal guidance, but the extent of engagement in these activities as well as the amount and type of these activities varied across sample schools. For example, all high schools are required to hold individual meetings with parents, students, and a counselor at least once a year to discuss the students' IGP. Although all schools reported that counselors met with the vast majority of ninth and tenth grade students about their IGPs at least once during the 2008-09 school year, the percentage of sample schools reporting that these meetings occurred with all three individuals (students, counselors, and parents) present ranged from a low of 24% to a high of 95%, with an across-school average of around 60%.

The nature of the events and the types of career experiences sample schools provided for students also varied. For example, guidance personnel at two schools reported that they provided ongoing career events with local businesses, but the activities they provided varied in intensity and frequency. One sample school reported providing monthly visits from local industry representatives who talked to interested students during lunch about their professions, whereas another school reported offering an annual career fair with representatives from local businesses to discuss employment options with students. Both of these schools reported providing ongoing

career events where their students have the opportunities to talk to industry representatives, but clearly, the intensity of the experiences differ.

Research Question 1: To what extent does South Carolina's EEDA facilitate the development of POS?

Early evidence indicates that components of EEDA are helping to build some of the foundation and framework for the development and successful implementation of Perkins IV-defined POS. Although evidence of integration of academic and CTE content was limited, other developments can influence the academic-CTE integration process. One essential element of increasing integration is greater knowledge of CTE courses and programs by academic teachers and school counselors guiding students in the development of their course schedules and IGPs. The IGP process has become a viable vehicle in many sample schools to facilitate these discussions, reduce the stigma of taking CTE courses, and increase the knowledge of CTE among school staff.

We found that EEDA has affected the role of counselors and the depth and breadth of information that students receive about educational and career opportunities in career and technical fields. EEDA emphasizes students' need to engage in career development activities such as exploration, interest assessments, and talk about career issues and career options with knowledgeable adults, thus making school counseling an essential service. This emphasis in EEDA and the requirements of the IGP process have increased the amount of time counselors spend with students engaging in one-on-one career-based counseling, with an increased effort to meet with every student on an annual basis. Further, there has been a greater effort towards engaging parents in the course and career planning of their children.

A key to much ongoing change in sample schools is the development and maintenance of students' four-year IGPs. The central purpose of these plans is to provide students with an academic blueprint toward graduation and beyond, based on their career goals and within the context of their career pathway. IGPs often provide students with access to career assessment data, aiding them in matching their career interests and personality traits with career goals and postsecondary options. This process can provide students an opportunity to think about their career goals and the types of courses and programs needed to achieve those goals and was seen by school personnel as a valuable tool for career counseling and planning with students. From comparisons to findings in the other NRCCTE POS studies, it appears that when emphasis on these types of plans increases, as under EEDA, students are likely to receive more academic and career guidance services. In addition, students in our sample schools most frequently identified school guidance counselors as the most helpful in the development of their IGPs, as compared to students in the other NRCCTE POS studies, who indicated that they found their parents most helpful in plan development. The higher percentages of students naming counselors in our sample schools suggest that state policy specifically targeting the role of counselors can enhance their influence on career choices and possibly provide a more systematic process for career planning.

School guidance personnel reported engaging in more career-focused guidance, but also reported participating in "inappropriate" duties like testing and course scheduling. Rather than trading

traditional roles for new ones, many counselors reported that new duties were added on to old ones and that these new EEDA-mandated duties, like developing IGPs, are time consuming and often cause work overloads. Without adequate funding to hire more staff, counselors reported struggling to carry out mandates. Despite these challenges, counselors were perceived as enthusiastic about many aspects of the state policy and reported feeling prepared to carry out the new duties required by EEDA. Several reported that they had found ways to manage their duties using teamwork, working longer hours, or working more days of the school year. It will be important to see in future research if declining state funding and local budget crises requiring cuts in personnel and other necessary supports for EEDA influence counselor roles, as well as whether further changes in counselor roles continue or are stalled or reversed.

There are indications that EEDA, and particularly the IGP process, has increased the knowledge and awareness of guidance personnel of the CTE programs and courses available to students at their schools. There is also preliminary evidence of changes in participation in CTE resulting from EEDA implementation. CTE teachers at a number of schools reported not only more students being directed into their courses but also more appropriate placement of students in CTE courses and programs; the students "want to be there" and "want to do the work." In addition, it is clear at several schools that any stigma associated with taking CTE courses or attending a career center has been reduced in recent years, although stigma remains present at some study schools. Students face challenges, however, with CTE course-taking and scheduling and face tradeoffs between CTE, core, AP, and non-CTE dual credit courses. We will continue to follow these trends over the final two years of the study and explore whether knowledge and awareness of CTE continues to spread across schools and if there is any change in the challenges to CTE participation.

As Perkins IV and EEDA mandate, there has been progress in developing and/or strengthening articulation agreements among schools and districts, community colleges, and four-year colleges and universities, with increases in dual credit and credit transferability options for students at many sample schools.

Research Question 2: What impact does the level of local economic resources have on the implementation of EEDA and the development and implementation of POS?

Levels of EEDA implementation at the eight high school sites have been affected by a variety of factors including the presence or absence of jobs and job shadowing opportunities in the specific communities, resources available within the school districts, declining state funding for EEDA and other educational services, and increased demands placed on school personnel. For example, building on existing CTE programs or whole-school reform models such as High Schools That Work facilitated early implementation of career pathways and POS. Not surprisingly, implementation was facilitated by access to a wide variety of resources, such as staff with prior knowledge of and experience with various policy areas or location in a community with diverse local businesses willing to provide resources and educational opportunities for students. Several schools lacked some of the basic resources necessary to design and implement POS, and there appears to be little potential for this situation to change in the near future.

Research Question 3: What impact does the implementation of EEDA have on student high school outcomes?

For the most part, members of the Class of 2011 cohort in the eight sample high schools that responded to our student survey reported involvement in a range of career-focused activities during high school. Based on the reports of counselors, we expected that the vast majority of this cohort by the end of the tenth grade would report that they had developed IGPs and selected career clusters and majors. Although a majority of students reported having participated in these activities, the proportion doing so was lower than expected, particularly for developing an IGP. This inconsistency in reports between counselors and students, however, may have been due to the language used in the survey to describe these activities. This contextual factor will be explored in the fourth study year during focus groups to be conducted with members of this cohort.

Even though they may not have been meeting with counselors annually about their IGP, students in our sample schools most frequently identified school guidance counselors as the most helpful in the development of their IGPs, selecting them over parents, teachers, and friends. As noted earlier, this response is in contrast to reports of students surveyed by the other two NRCCTE POS longitudinal studies, where more students indicated that they found their parents most helpful in plan development. These factors may indicate that EEDA is altering the sources of information that students tap while developing their plans for the future. They also may signal a changing perception of school counselors as more than just advisors on college choices and admissions. We hope to find out more about student perceptions of and satisfaction with this IGP planning process and meetings with counselors during the Year 4 focus groups with members of the Class of 2011 cohort.

In general, a majority of those members of the Class of 2011 cohort responding to our survey after tenth grade who reported that they had selected a high school major and career cluster reported that these had made them more likely to take courses needed for the future, helped them to make connections between their studies and the type of career they want, helped them to get better grades, made them feel less likely to want to drop out of school, made them feel more likely to want to come to school, and made it more likely that their parents got involved in the selection of their courses.

Although EEDA mandates career-focused education for all students in South Carolina, differences consistently appear between CTE and non-CTE participants in student reports of participation in these types of activities. In our survey of members of the Class of 2011 cohort in sample schools, greater proportions of CTE participants reported improved engagement in school when they had a high school major and career cluster and participation in job or career identification and planning activities and work-based learning experiences than non-CTE participants. These reports, however, are based on students' experiences up to the end of the tenth grade, and the experience of students in this cohort may change as they enter their final years in high school. We will survey this cohort again at the end of the fourth study year (spring 2011) when they will be seniors, and we will be able to compare reports of their experiences at that time to these earlier reports as well as to those of seniors from an earlier cohort with little exposure to EEDA. We may find that reported experiences of CTE and non-CTE participants

become more similar as students move toward graduation or as they are exposed to EEDA for a longer period.

In future reports, we will explore in more depth the influence of EEDA policy in sample schools on the development and direction of Perkins IV-style POS. We will also explore differences in student outcomes between cohorts with varying levels of exposure to EEDA and to POS with archival data such as grades, attendance, and dropout.

Looking Ahead to Year 4

Tasks in Year 4 will center around the continuation of analysis of previously collected data and collection of additional archival, survey, and focus group data on student cohorts and schools. Focus groups will be conducted with members of the Class of 2011 at the end of their senior year during site visits to schools. The *Student Engagement/POS Experiences Survey* will be administered to the Class of 2011 for a second time in the spring semester before the class graduates, and analysis of previously collected survey response data from the Class of 2009 and Class of 2011 will continue. Analysis of interview, focus group, and survey data from school personnel from the Year 2 and Year 3 site visits and phone interviews will continue into Year 4 to further assess POS implementation levels at sample schools and the relationship between POS and state policy implementation. Efforts to collect relevant archival data for the longitudinal student cohort database from various datasets will continue through contacts with various departments at the South Carolina State Department of Education (SDE). Efforts to disseminate information on study findings to date through conferences and publications will also continue.

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Appendix A

Impact of Recent State Budget Crisis on EEDA Funding

Funding for the Education and Economic Development Act (EEDA) comes from allocations specifically designated for EEDA activities as well as from other state and local sources, with little funding for implementation of the various facets of the policy going directly to schools. In addition to supporting EEDA administration and support at the state level, funding specific to EEDA initiatives at the school level has been consistently provided over the past several years primarily in two areas. First, the most consistent funding has gone to support the hiring of career specialists in districts with the highest need, to help bring middle and high schools into compliance with the mandated 300:1 student:counselor ratio. And second, EEDA funding has been allocated to support the at-risk student initiative that mandates that all high schools identify a small group of the highest risk students and provide evidence-based intervention programs "designed to ensure that these students have an opportunity to graduate with a state high school diploma" (Education and Economic Development Coordinating Council (EEDCC, 2010, p.22). Funding for both of these EEDA initiatives has been provided from the 2006-2007 school year through the 2010-11 school year, with funds for both also included in the proposed 2011-12 school year budget.

Perspective from the State EEDA Coordinator
When asked about the impact of budget cuts for EEDA over the past several years and for this upcoming school year, Sabrina Moore, EEDA State Coordinator, made the following comments in personal email communications on May 6 and May 9, 2011:

> Over the past four years, the EEDA administration budget has been reduced by over $3.5 million. Reductions in the funds allocated by the Coordinating Council for at-risk initiatives and the RECs [Regional Education Centers] have accounted for the majority of the cuts. Last year was the first year that the Career Specialists line item was actually reduced, by approximately $450,000. [However,]… funds from the EEDA administration line item were used to absorb a portion of the cuts. (S. Moore, personal communication, Monday, May 9, 2011.)
>
> If the proposed 15% reduction in career specialist funding is approved [in next year's budget], a number of districts will see a decrease in funding for salaries and benefits associated with career specialist FTEs. However, the funding provided should assist districts in meeting or maintaining a 300:1 student-to-guidance personnel ratio. (S. Moore, personal communication, Friday, May 6, 2011.)

Perspective from the South Carolina Education and Economic Development Coordinating Council (EEDCC) that is charged with overseeing EEDA implementation (as outlined in recent annual reports to the Governor of South Carolina, the General Assembly, and the State Board of Education).

Progress and challenges reported for the period from December 2008 through November 2009 (from the *Fourth Annual Report on the Implementation of the Education and Economic Development Act of 2005*, EEDCC, December 1, 2009):

From the introductory letter to the governor from the EEDCC Chair and State Superintendent of Education (EEDCC, 2009):

> Much has been accomplished during 2008–09 to continue the successful implementation of the Education and Economic Development Act (EEDA) of 2005 in schools throughout South Carolina. In that light, the Education and Economic Development Coordinating Council (EEDCC) is pleased to present to you this fourth annual report.
>
> During FY 2009, the EEDCC faced many challenges as a result of an almost 29 percent reduction in funding—from $11,474,769 to $8,204,683. The most notable of these challenges center in the cancellation of our formal communications and marketing campaign, the cancellation of a number of virtual courses necessary to support a variety of career majors, the elimination of funds to provide services that gap analyses reveal as lacking in various regions in our state, and a reduction in the amount of funds available to support the continuation of evidence-based at-risk programs in high schools. Despite these losses, however, the members of the EEDCC have continued to work collaboratively to ensure that the components of the initiative implemented during previous years remain intact and that each remaining component will be implemented into our state's education system by 2011.
>
> Although we are confident that each remaining component of the EEDA will be implemented as legislated, we must express our concern about the negative impact the budget cuts have had and will continue to have on the schools' ability to maintain and continue the gains that are direct results of this most comprehensive legislation. Among these successes are the increases in the number of at-risk students who have remained in school and been promoted to the next grade level, the number of students who receive individual counseling regarding their academic and career aspirations, the number of schools with a student-to-guidance personnel ratio less than 301:1, the number of parents who participate in student conferences, and the number of business partnerships established to support the development of our state's current and future workforce. We urge you and other lawmakers, therefore, to work diligently to fund the Education and Economic Development Act to the level necessary to ensure its successful, sustained implementation. (p. ii)

Excerpted from the Executive Summary of the report (EEDCC, 2009):

> During this fourth year of implementation, the Education and Economic Development Coordinating Council (EEDCC) continued to rely on the work of five of the six committees that were appointed:
>
> - Articulation, Dual Enrollment, High School Graduation, and Postsecondary Education Alignment Committee

- At-Risk Student Committee
- Comprehensive Guidance and Counseling, Career Clusters, and Individual Graduation Plans Committee
- Information Technology Committee
- Regional Education Centers Committee

However, due to severe state budget cuts, the Communication and Marketing Committee recommended a reduction in funds allocated for the FY 2009 marketing contract with Trone Public Relations and, ultimately, the cancellation of the FY 2010 marketing contract. The EEDCC approved these recommendations, and as a result, the formal EEDA marketing efforts ceased on June 30, 2009.

In spite of the harsh reality of reduced funding, the collaboration among members of the EEDCC and its various committees has remained strong as all have endeavored to formulate guidelines and practices that will ensure the longevity of the positive impact the initiative has had on student success as well as workforce and economic development. (p. 1)

Progress and challenges reported for the period from December 2009 through November 2010 (from the *Fifth Annual Report on the Implementation of the Education and Economic Development Act of 2005*, EEDCC, December 1, 2010):

From the introductory letter to the governor from the EEDCC Chair and State Superintendent of Education (EEDCC, 2010):

> Since the passage of the Education and Economic Development Act (EEDA) of 2005, many public schools throughout South Carolina have been transformed: comprehensive school reform models organized around career clusters have been implemented, increasing numbers of students have been receiving individual attention from guidance personnel annually, an increased number of parents are involved in their children's decisions regarding college and/or career, and the transition between secondary and postsecondary education has become more seamless. Because of these and numerous other accomplishments that highlight the successful implementation of the EEDA in schools and districts statewide, the Education and Economic Development Coordinating Council (EEDCC) believes that our state's dropout rate will continue to decrease as the graduation rate continues to increase, with the result being a more capable and competitive workforce.
>
> We believe further that the achievements arising from the EEDA clearly represent the dedication and determination of educators, business representatives, and community leaders to ensure that all students in our state graduate from high school fully prepared to meet the demands of postsecondary education and/or employment. For despite the continued reduction in financial resources, and thus in human resources, each major component of the EEDA has been successfully implemented as legislated. The challenge that now looms before us is sustaining and building upon the advances that have been made. (inside cover page)

Excerpted from the Executive Summary of the report (EEDCC, 2010):

> The EEDCC's role during 2009 and 2010 became more challenging in the face of budget cuts. Prior to the cuts, significant progress had been made: the number of career specialists dedicated solely to career development increased; the number of programs implemented for students at risk of dropping out increased; and the number of business-to-education collaborations facilitated by the regional education centers increased. Further, the student-to-guidance-personnel ratios in the majority of middle and high schools improved, and the implementation of the South Carolina Course Alignment Project (South Carolina CAP) was on schedule.

As a result of the cuts, progress in these and other areas slowed. However, the EEDCC has continued to challenge all stakeholders to work diligently to implement the remaining components of the Act and to sustain those components that have been implemented in previous years. (p. 1)

Appendix B

OVAE Career and Technical Programs of Study: A Design Framework

The Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV) calls for states to offer "career and technical programs of study," which may be adopted by local educational agencies and postsecondary institutions, as an option to students (and their parents as appropriate) when planning for and completing future coursework. These programs, at a minimum, must:

- Incorporate and align secondary and postsecondary education elements,
- Include academic and CTE content in a coordinated, non-duplicative progression of courses,
- Offer the opportunity, where appropriate, for secondary students to acquire postsecondary credits, and
- Lead to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree.

Each local recipient of Perkins funds must offer at least one career and technical program of study.

To help states and local recipients meet these requirements, the Office of Vocational and Adult Education (OVAE), in collaboration with major national associations, organizations, and states, have formulated a "career and technical programs of study design framework (framework)." The framework identifies a system of 10 components that, taken together, support the development and implementation of effective programs of study. Although all 10 components are important, they are neither independent nor of equal priority: State and local program developers must identify the most pressing components for state or local adoption, taking into consideration their relative need within their educational context.

PROGRAM OF STUDY (POS) COMPONENTS AND SUBCOMPONENTS

1. LEGISLATION AND POLICIES

Federal, state, and local legislation or administrative policies promote POS development and implementation.

Effective legislation and policies should:

- Provide for state and/or local funding and other resources, such as professional development and dedicated staff time, for POS development.
- Establish formal procedures for the design, implementation, and continuous improvement of POS.
- Ensure opportunities for any secondary student to participate in a POS.
- Require secondary students to develop an individual graduation or career plan.
- Provide resources for long term sustainability of POS.

2. PARTNERSHIPS

Ongoing relationships among education, business, and other community stakeholders are central to POS design, implementation, and maintenance.

Collaborative partnerships should:

- Create written memoranda of understanding that elaborate the roles and responsibilities of partnership members.
- Conduct ongoing analyses of economic and workforce trends to identify statewide (or regional) POS to be created, expanded, or discontinued.
- Link into existing initiatives that promote workforce and economic development, such as sector strategies and other activities supported by the Workforce Investment Act.
- Identify, validate, and keep current the technical and workforce readiness skills that should be taught within a POS.

3. PROFESSIONAL DEVELOPMENT

Sustained, intensive, and focused opportunities for administrators, teachers, and faculty foster POS design, implementation, and maintenance.

Effective professional development should:

- Support the alignment of curriculum from grade to grade (9-12) and from secondary to postsecondary education (vertical curriculum alignment).
- Support the development of integrated academic and career and technical curriculum and instruction (horizontal curriculum alignment).
- Ensure that teachers and faculty have the content knowledge to align and integrate curriculum and instruction.
- Foster innovative teaching and learning strategies (see #9 below).

4. ACCOUNTABILITY AND EVALUATION SYSTEMS

Systems and strategies to gather quantitative and qualitative data on both POS components and student outcomes are crucial for ongoing efforts to development and implement POS.

Well-designed accountability and evaluation systems should:

- Include the "10 Essential Elements of A State Longitudinal Data System" identified by the Data Quality Campaign.[1]
- Provide for administrative record matching of student education and employment data (i.e., Unemployment Insurance (UI) wage records).

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[1] The 10 elements are: (1) statewide student identifier; (2) student-level enrollment data; (3) student-level test data; (4) information on untested students; (5) statewide teacher identifier with a teacher-student match; (6) student-level course completion (transcript) data; (7) student-level SAT, ACT, and Advanced Placement exam data; (8) student-level graduation and dropout data; (9) ability to match student-level P-12 and higher education data; and (10) a state data audit system.

- Yield valid and reliable data on key student outcomes (indicators) referenced in Perkins and other relevant federal and state legislation.
- Provide timely data to evaluate and improve the effectiveness of POS.

5. COLLEGE AND CAREER READINESS STANDARDS

Content standards that define what students are expected to know and be able to do to enter and advance in college and/or their careers comprise the foundation of a POS.

Rigorous college and career readiness standards should:

- Be developed and continually validated in collaboration with secondary, postsecondary, and industry partners.
- Incorporate essential knowledge and skills (i.e., academic skills, communication, and problem-solving), which students must master regardless of their chosen career area or POS.
- Provide the same rigorous knowledge and skills in English and mathematics that employers and colleges expect of high school graduates.
- Incorporate industry-recognized technical standards that are valued in the workplace.
- To the extent practicable, be internationally benchmarked so that all students are prepared to succeed in a global economy.

6. COURSE SEQUENCES

Non-duplicative sequences of secondary and postsecondary courses within a POS ensure that students transition to postsecondary education without duplicating classes or requiring remedial coursework.

Well-developed course sequences should:

- Map out the recommended academic and career and technical courses in each POS.
- Begin with introductory courses at the secondary level that teach broad foundational knowledge and skills that are common across all POS.
- Progress to more occupationally-specific courses at the postsecondary level that provide knowledge and skills required for entry into and advancement in a chosen POS.
- Offer opportunities for students to earn postsecondary credit for coursework taken during high school.

7. CREDIT TRANSFER AGREEMENTS

Credit transfer agreements provide opportunities for secondary students to be awarded transcripted postsecondary credit, supported with formal agreements among secondary and postsecondary education systems.

Well-development agreements:

- Provide a systematic, seamless process for students to earn college credit for postsecondary courses taken in high school, transfer high school credit to any two- and

four-year institution in the state that offers the POS, and transfer credit earned at a two-year college to any other two- or four-year institution in the state that offers the POS.
- College credit should be automatically transcripted at the college for high school students so that they can transfer seamlessly into the postsecondary portion of a POS without the need for additional paperwork or petitioning for credit.
- Describe the expectations and requirements for, at a minimum, teacher and faculty qualifications, course prerequisites, postsecondary entry requirements, location of courses, tuition reimbursement, and credit transfer process.

8. GUIDANCE COUNSELING AND ACADEMIC ADVISEMENT

Guidance counseling and academic advisement help students to make informed decisions about which POS to pursue.

Comprehensive guidance counseling and academic advisement systems:

- Are based on state and/or local guidance and counseling standards, such as the National Career Development Guidelines.[2]
- Ensure that guidance, counseling, and advisement professionals have access to up-to-date information about POS offerings to aid students in their decision making.
- Offer information and tools to help students learn about postsecondary education and career options, including prerequisites for particular POS.
- Offer resources for students to identify their career interests and aptitudes and to select appropriate POS.
- Provide information and resources for parents to help their children prepare for college and careers, including workshops on college and financial aid applications.
- Offer Web-based resources and tools for obtaining student financial assistance.

9. TEACHING AND LEARNING STRATEGIES

Innovative and creative instructional approaches enable teachers to integrate academic and technical instruction and students to apply academic and technical learning in their POS coursework.

Effective teaching and learning strategies should:
- Be jointly led by interdisciplinary teaching teams of academic and career and technical teachers or faculty.
- Employ contextualized work-based, project-based, and problem-based learning approaches.

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[2] See http://cte.ed.gov/acrn/ncdg/ncdg_what.htm.

- Incorporate team-building, critical thinking, problem-solving, communication skills, such as through the use of career and technical student organization (CTSO) activities.

10. TECHNICAL SKILLS ASSESSMENTS

National, state, and/or local assessments provide ongoing information on the extent to which students are attaining the necessary knowledge and skills for entry into and advancement in postsecondary education and careers in their chosen POS.

Well-developed technical skills assessments:

- Measure student attainment of technical skill proficiencies at multiple points during a POS.
- Employ industry-approved technical skill assessments based on industry standards, where available and appropriate.
- Employ State-developed and/or approved assessments, particularly where industry-approved assessments do not exist.
- Result in the awarding of secondary credit, postsecondary credit, or a special designation on a student's high school diploma.
- Incorporate performance-based assessment items, to the greatest extent possible, where students must demonstrate the application of their knowledge and skills.

Appendix C EEDA Policy Implementation and Study Timelines

Programs of Study as State Mandate: A Longitudinal Study of the South Carolina Personal Pathways to Success Initiative					
8 Sample Schools					
		Baseline EEDA stage	Baseline POS stage		End EEDA stage End POS stage
Archival school data	Archival school data	Archival school data	Archival school data	Archival school data	Archival school data
Cohort 1 – control group					
10th grade	11th grade	12th grade	1 year out		
Archival student data	Archival student data	Archival student data; Survey	Transition data		
Cohort 2 – 1st treatment group					
8th grade	9th grade	10th grade	11th grade	12th grade	1 year out
Archival student data	Archival student data	Archival student data; Survey	Archival student data	Archival student data; Survey; Focus groups	Transition data
Cohort 3 – 2nd treatment group					
5th grade	6th grade	7th grade	8th grade	9th grade	10th grade
	Archival student data	Archival student data	Archival student data	Archival student data	Archival student data; Survey
Pre-Study 2006-07	**Study Year 1 2007-08**	**Study Year 2 2008-09**	**Study Year 3 2009-10**	**Study Year 4 2010-11**	**Study Year 5 2011-2012**
Statewide EEDA Implementation Requirements					
Career awareness for 1-5th grades 8th graders develop IGP HS org curricula on 3 + career clusters	All MS & HS have 300:1 student-to guidance ratio HS implement programs for ID of high-risk students	10th graders declare major	All HS implement principles of HSTW	EEDA fully implemented 7-1-11	EEDA continued implementation

Appendix D

POS Implementation Measurement Tool and Site Visit Protocol

Table D-1
POS Implementation Measurement Tool

School# 2008-09 Clusters & Majors/Programs of Study/Completer Programs	Alignment with 2- and 4- year postsecondary education programs								Alignment with industry standards					
	Major-specific curriculum is linked between secondary & post-secondary levels			Has a major-specific written articulation agreement spelling out alignment			Institution agreement is with (Please list the institution(s))	Specific partner/ contact person/ contact information	Major-specific required courses aligned with industry standards			Program completion prepares student to pass industry exam		
	Yes	No	N/A	Yes	No	N/A	Institution(s)	Contact(s)	Yes	No	N/A	Yes	No	N/A
Agriculture, Food & Natural Resources														
Plant Systems														
Business, Management & Administration														
Administration & Information Support														
Financial Management & Accounting														
Education & Training														
Teaching & Training														
Health Science														
Health Diagnostic & Treatment Specialties														
Sports Medicine														
Hospitality & Tourism														
Culinary Arts														
Information Technology														
Programming & Software Development														
Science, Technology, Engineering, & Mathematics														
Math														
Pre-Engineering & Technology														
Manufacturing/Industrial Systems Technology														
Science														

Note. This list of majors and clusters is an example of the types of majors and clusters included on school charts. The specific list of majors and clusters included on any school's chart varied and was based on the majors and clusters outlined in the school's 2008-2009 course registration catalog.

Table D-1
POS Implementation Measurement Tool (cont.)

School# 2008-09 Clusters & Majors/Programs of Study/Completer Programs	Alignment with postsecondary apprenticeships, internships, training					Credentials											
	Has written articulation agreement spelling out alignment			Business/ organization agreement is with (Please list the business(es)/ organization(s))	Specific partner/ contact person/ contact information	Results in industry-recognized or sponsored credential -- at secondary level			Results in industry-recognized or sponsored credential -- at postsecondary level			Results in 2-year degree			Results in 4-year degree		
	Yes	No	N/A	Organization(s)	Contact(s)	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A
Agriculture, Food & Natural Resources																	
Plant Systems																	
Business, Management & Administration																	
Administration & Information Support																	
Financial Management & Accounting																	
Education & Training																	
Teaching & Training																	
Health Science																	
Health Diagnostic & Treatment Specialties																	
Sports Medicine																	
Hospitality & Tourism																	
Culinary Arts																	
Information Technology																	
Programming & Software Development																	
Science, Technology, Engineering, & Mathematics																	
Math																	
Pre-Engineering & Technology																	
Manufacturing/Industrial Systems Technology																	
Science																	

Guidance Provided to Schools on POS Measurement Tool

1. Which of the majors/programs of study/completer programs offered at your school are formally aligned or sequenced with local technical college or other postsecondary programs?

   For each major/program of study/completer program aligned or sequenced with 2 or 4-year postsecondary programs:
   a. Does the curriculum link secondary and postsecondary levels? (Yes/No)
   b. Is there a written articulation agreement that details the alignment of the high school courses with the courses at the postsecondary level? (Yes/No)
   c. What postsecondary institution(s) is this agreement with? (Name of Institution)
   d. Is there a specific contact person at this postsecondary institution that you or someone in your school or district has worked with on developing the written articulation agreement? (Yes/No)
      If yes, who is it and how can we contact them? (Name_____ phone_____ email _____)

2. Which of the majors/programs of study/completer programs offered at your school are formally aligned or sequenced with business/industry standards for certification in this area or with postsecondary apprenticeships, internships, or further training in this area?

   For each major/program of study/completer program aligned or sequenced for certification purposes:
   a. Are the required courses aligned with the state standards or national industry standards required for certification in this area? (Yes/No)
   b. If a student completes the required courses for this major/program of study/completer program while in high school, will it prepare them to pass the industry exam for certification in this area? (Yes/No)

   For each major/program of study/completer program aligned or sequenced to move into postsecondary apprenticeships, internships, or further training:
   a. Is there a written articulation agreement that details the alignment of the high school courses with the requirements of an apprenticeship, internship, or further training in that area? (Yes/No)
   b. What business(s) or organization(s) is this agreement with? (Name of Business/Organization)
   c. Is there a specific contact person at this business or organization that works with apprenticeships, internships, or further training in this major/program of study/completer program that you or someone in your school or district has worked with to develop the written articulation agreement? (Yes/No) If yes, who is it and how can we contact them? (Name_____ phone_____ email _____)

3. Which of the majors/programs of study/completer programs offered at your school lead to an industry-recognized or sponsored credential or certificate at the high school or postsecondary level, or to an associate or baccalaureate degree? (Please mark all credentials that apply for each major/program of study/completer program.)

Fall 2009 POS Site Visit Protocol

Introduction for Interviews

Topic for today's discussion

Thank you for agreeing to talk with us today.

Things to emphasize:

- We are studying the implementation of EEDA in a number of schools across SC
- Interested in how policy impacts school, programs and student outcomes
- Not here to evaluate what you are doing or monitor your school in any way
- What we are asking about is not necessarily mandated in the EEDA or in Perkins
- Just interested in how this policy is being implemented at your school and how it's playing out in the majors that you offer
- Visiting with different staff in the next few days to find out more about particular majors offered at your school that seem to have strongest ties to postsecondary certificates, further training, and degrees.
- During our discussion, we will be asking you a number of questions about this major(s) or program(s).

Permission to audio-tape interview [PLEASE TALK ABOUT THIS TO PARTICIPANTS] We would like to audio-tape this interview to make sure that we accurately portray your interview in our notes.

To ensure confidentiality and anonymity, we will:

- Use all responses recorded for research purposes only
- Will summarize your responses and not release your identity
- Will not associate your name with your responses.
- Secure the audiotape in our research facility at Clemson University for access by research team members only
- After completion of the study or three years from the date of the interview, whichever is first, the audiotape will be destroyed

Your participation in the interview is voluntary and if you do not wish to be recorded, you have the option to deny permission at any time.

Any questions before we begin?

Introductory Meetings to Go Over the Major/Cluster Matrix
(Interviews with guidance director, curriculum coordinator and/or career center director)

1. **Finalize the Majors/Clusters matrix**

   What we want to do first is to go over the majors/clusters matrix that you and others filled out and make sure that we haven't missed anything and have correctly captured the links between your majors and postsecondary education and training.

   For each major, make sure all columns are filled in where appropriate and establish whether:

   - The major is smaller than a cluster and is narrow enough to be a potential POS and considered an independent major at the school

   - (1) Is formally aligned or sequenced with business/industry standards for certification purposes or
     (2) Is formally aligned or sequenced with business/industry standards for future internship/apprenticeship purposes with written articulation agreement or
     (3) Is formally aligned or sequenced with a postsecondary education program and has a written articulation agreement describing the link [*find out how many courses are covered – all for major? Only some courses?*]

   - Leads to credential in high school or can lead to a postsecondary apprenticeship, further training, or 2- or 4-year degree program

2. **Decide which majors we will want to follow-up on and identify who we need to talk to to address questions on all four key POS elements. Get contact information.**

   Some general questions:
   1. **Have their programs changed in the past three years? What changed and why?**
   2. **Have the courses they offer changed during that time? What changed and why?**
   3. **Has implementing EEDA changed any programs and/or courses? How?**
   4. **Has implementing HSTW changed any programs and/or courses? How?**
   5. **Have they seen any impact of EEDA on staying in school? On graduation rate?**
   6. **Which has had more impact on majors and clusters – EEDA or HSTW?**

Other Majors not Meeting Minimal Criteria for POS
(interviews with guidance personnel or curriculum coordinator)

1. **We are interested in the types of linkages that there are in your majors that do not have articulation agreements with 2- or 4-year institutions or result in a credential at the high school level only. In what ways are the courses in these majors linked to education and training after high school graduation?**

   a. Does one particular major have stronger linkages than others?

   b. What types of AP courses are available?

   c. What types of dual credit courses are available in these majors?

   d. What about postsecondary links through honors courses?

   e. Are students informed about any linkages? If so, how and what do you tell them?

2. **Are any of the courses in these majors formally aligned or sequenced with <u>business/industry standards?</u>**

Majors Meeting Minimal Criteria for Programs of Study (POS)
(interviews with those knowledgeable about these POS at high school)

1st Interview

Some general questions:

1. **Have their programs changed in the past three years? What changed and why?**
2. **Have the courses they offer changed during that time? What changed and why?**
3. **Has implementing EEDA changed any programs and/or courses? How?**
4. **Has implementing HSTW changed any programs and/or courses? How?**
5. **Have they seen any impact of EEDA on staying in school? On graduation rate?**
6. **Which has had more impact on majors and clusters – EEDA or HSTW?**

1. **Incorporation of secondary and postsecondary elements**

   The first aspect of this major that we want to talk about is how the curriculum for this major may be aligned with curriculum at the postsecondary level.

   Is the curriculum of this major linked in any way to the postsecondary curriculum in this same major? If yes, how?

a. Is the curriculum for this major aligned or sequenced with a postsecondary program, where the curriculum reflects a progression from secondary courses to postsecondary courses? How are the two levels linked?

b. Is the sequence non-duplicated across levels so that students don't have to repeat any courses when they get to college or postsecondary training?

c. Is there an articulation agreement for this major/program?

   Is it with a 2-year postsecondary institution?

   Is it with a 4-year postsecondary institution?

   Is it for a postsecondary apprenticeship, internship or other training

d. In what year was the agreement originally developed? Is it renewed on a regular basis – how often?

e. What does this articulation agreement cover? For example, does it identify specific courses and the necessary content, or what teachers/faculty will teach the courses, and the necessary teacher qualifications?
   Who is the agreement with?

   How often do you meet with them?

   Can we see a copy of the agreement?

2. Credit transfer options and agreements

We would like to know about any opportunities in this major for students to earn postsecondary education credits.

What dual/concurrent enrollment options are available to students in this major?

a. Are both academic and CATE courses specific to this major available for dual credit?

b. Are these courses included in the articulation agreements that we talked about earlier?

c. What <u>kinds</u> of credit are available through these options (i.e., postsecondary online courses, dual credit/enrollment, concurrent credit/enrollment, transcripted credit, or other methods to earn postsecondary credit in high school)?
   - How/when is the credit awarded?
   - How is credit tracked/transferred? Who tracks it – the high school or the postsecondary institution or both?

3. Industry-recognized credentials, certificates or degrees

We are interested in finding out for this major the credential/certificates students can earn while in high school and the options they have to continue training or education in this major after high school graduation.

a. First, can students earn an industry-recognized credential or certificate specific to this major while in high school? If so, what would that be?

b. Can students earn an industry-recognized credential or certificate in specific to this major **after** high school graduation if completing training or an apprenticeship? If so, what would that be?

c. If students continue in this same area in postsecondary education, what certifications or degrees could they earn? Is it a 2-year or 4-year degree?

d. How do students learn about these options?

Majors Meeting Minimal Criteria for Programs of Study (POS)
(interviews with those knowledgeable about these POS at high school)

2nd Interview

1. **Overview**
   a. Please tell us a little bit about your program. How long have you offered it here at the school?

   b. Has the curriculum for this program area changed in past three years? If so, how? Why did it change?

   c. Has there been any impact of EEDA implementation on your program/courses?

   d. has there been any impact of HSTW implementation on your program/courses?

   e. Are students prepared in the basics to take your courses? Meet all prerequisites and equipped with necessary skills?

   f. Have you seen any changes in the focus of students on careers/goals after high school?

2. **Rigorous Academic and Technical Standards and Assessments**

   We want to get some information on the standards that are incorporated in both the academic and technical courses for this major and the types of assessments used.

First, for the academic courses for this major . . .

a. Are there specific academic core courses just for this major? Or do students in this major take the same core courses that students in other majors take?

b. Do you incorporate state academic standards in the academic courses for this major? Would you consider all courses to be college prep? Are honors courses available in this major?

   Are these standards aligned with those at the postsecondary level for this major?

c. How are students assessed in the academic courses for this major?

Also, for the technical/CATE courses for this major . . .

d. Are there specific career and technical education (CATE) courses just for this major?

e. Do you incorporate state CATE standards in the CATE courses for this major? Are any of these courses TAP?

   Are these standards aligned with those at the postsecondary level for this major?

f. How are students assessed in the CATE courses in this major? Are the assessments aligned with industry standards?

Academic and technical content integration

g. How have you integrated both academic and CATE content and skills into curricula for this major? Has the curriculum been modified in any way since fall 2007 (after EEDA)? If yes, please describe what has been modified.

h. Do academic and CATE teachers: [*If "yes," can you give an example of each?]*
   - Have any common planning time?
   - Make joint assignments?
   - Co-teach courses?
   - Plan joint field trips?
   - Provide real-life applications in all courses?
   - Provide opportunities to use academic and technical skills across courses?

i. Do major-specific courses prepare students for postsecondary education without the need for academic or technical remediation?

j. Does completing major-specific courses give students the ability to test out of or skip introductory courses if they continue on in this major after high school?

k. Does completing major-specific courses make students better prepared to continue into postsecondary education to a greater degree than someone who did not complete the required courses for this major??

Majors Meeting Minimal Criteria for Programs of Study (POS)
(Interviews with postsecondary personnel)

1. General questions

a. Has your relationship with local high schools changed in any way over the past three years? What about with _____ high school? If yes, how? Why the change?

b. Has the number of students taking dual credit courses at your institution from _____ high school changed in the past three years? How has it changed? Why do you think it has changed?

c. Has EEDA implementation had any impact on your relationship with high schools and dual credit options?

d. Are students coming ready for your programs without need for remediation? If needing remediation – in what areas – reading, math, science or specific program areas?

e. Are certain programs stronger at _____ high school than others in terms of their preparation for postsecondary education?

f. What types of articulation agreements do you have with _____ high school?

g. What types of dual credit options are available to those students?

h. How often do you meet with staff at that school about these articulation agreements? About curriculum or other aspects of the program?

i. Are you tracking the number of students coming in with dual credit into your institution?

2. Incorporation of secondary and postsecondary elements

We are interested in finding out the level to which the curriculum for certain high school majors/programs are linked and aligned with the same area of study in postsecondary institutions. We are interested in these particular majors [*provide list*] at this high school _____.

a. Is the curriculum for this major linked in any way to the postsecondary curriculum in this same major/program area?

b. Are courses aligned or sequenced with a postsecondary major/program, where the curriculum reflects a progression from secondary courses to postsecondary courses? How are the two levels linked?

c. Is the sequence non-duplicated across levels so that students don't have to repeat any courses when they get to college or postsecondary training?

d. Do you have an articulation agreement for this major/program area?

e. In what year was the agreement originally developed? Is it renewed on a regular basis – how often?

f. What does this articulation agreement cover? For example, does it identify specific courses and the necessary content, or what teachers/faculty will teach the courses, and the necessary teacher qualifications?
Who is the agreement with?

How often do you meet with them?

Can we see a copy of the agreement?

3. Curriculum standards and rigor in the major at the secondary and postsecondary levels

We want to get some information on the standards that are incorporated in both the academic and technical courses for this major at the high school and postsecondary levels.

a. Are the academic standards aligned between the secondary and postsecondary curriculum in this major/program area?

b. Are the technical standards aligned between the secondary and postsecondary curriculum in this major/program area?

c. Do high school courses in this major/program area prepare students for postsecondary education without the need for academic or technical remediation at your institution? What about at other institutions?

4. Credit transfer options and agreements

We would like to know about any opportunities in this major for students to earn postsecondary education credits. What dual/concurrent enrollment options are available to students in this major/program area? Are these for specific courses?

a. Are these courses included in the articulation agreements that we talked about earlier?

b. What kinds of credit are available through these options (i.e., postsecondary online courses, dual credit/enrollment, concurrent credit/enrollment, transcripted credit, or other methods to earn postsecondary credit in high school)?
   - How is credit tracked/transferred?
   - How/when is the credit awarded?

5. Industry-recognized credentials, certificates or degrees

We are interested in finding out for this major/program area the options students have to continue training or education in this major or program area after high school graduation.

a. Can students earn an industry-recognized credential or certificate in specific to this major **after** high school graduation if they complete additional training or an apprenticeship? If so, what credential could they earn?

b. If students continue in this same area in postsecondary education, what certifications or degrees could they earn? A 2-year degree? A 4-year degree?

Appendix E

School Guidance Personnel Surveys

School Identifier: _____

Survey for Career Specialists

Directions: Read each of the school counseling/guidance duties listed in the first column of the table below. Then, tell us whether this is one of your assigned duties as a career specialist at your school by checking either "YES" or "NO" in columns 2 or 3.

School Counseling/Guidance Duties	YES	NO
1a. Classroom guidance on personal/social issues		
1b. Classroom guidance on career issues		
1c. Classroom guidance on academic issues		
2a. Curriculum development on personal/social issues		
2b. Curriculum development on career issues		
2c. Curriculum development on academic issues		
3a. Counseling students on personal/social issues		
3b. Counseling students on career issues		
3c. Counseling students on academic issues		
3d. Assisting students with the development of their career plans and IGPs		
3e. Assisting students with college planning and applications		
4a. Consulting with teachers and administrators about personal/social issues		
4b. Consulting with teachers and administrators about career issues		
4c. Consulting with teachers and administrators about academic issues		
5a. Assisting with exceptional students on personal/social issues		
5b. Assisting with exceptional students on career issues		
5c. Assisting with exceptional students on academic issues		

School Counseling/Guidance Duties	YES	NO
5d. Chairing individualized education (IEP) program meetings		
5e. Chairing Section 504 of the Rehabilitation Act of 1974 meetings		
5f. Coordinating special services referrals		
6a. Meeting with parents about personal/social issues		
6b. Meeting with parents about career issues		
6c. Meeting with parents about academic issues		
7a. Coordinating special events/programs for the school regarding personal/social issues		
7b. Coordinating special events/programs for the school regarding career issues		
7c. Coordinating special events/programs for the school regarding academic issues		
7d. Conducting professional development workshops in career development and guidance for teachers and guidance counselors		
8. Identifying and coordinating work-based/extended learning opportunities for students		
9. Crisis management		
10. Participating on committees within the school		
11a. Coordinating the standardized testing program		
11b. Administering standardized tests		
12. Organizing outreach to low income families (i.e., Thanksgiving dinners, Holiday families)		
13. Responding to health issues (e.g., check for lice, eye screening, 504 coordination)		
14. Performing hall, bus/car pick-up, cafeteria duty		
15a. Registering and scheduling students for classes		
15b. Developing the master class schedule		

School Counseling/Guidance Duties	YES	NO
16. Enrolling students in and/or withdrawing students from school		
17. Maintaining/Completing educational records/reports (cumulative files, test scores, attendance reports, drop-out reports)		
18. Handling discipline of students		
19. Substitute teaching and/or covering classes for teachers at your school		
In the spaces below, indicate any other duties that have not been covered in this survey that are part of your responsibilities at your school.		

We would appreciate getting some background information on you:

Number of years as a career specialist: _____

Number of years <u>at this school</u> as a career specialist: _____

Have you completed the Global Career Development Facilitation certification?
____ yes ____no ____ in process

Are you also a school guidance counselor? ____ yes ____no

Please either return the survey to the researchers while they are at your school or mail it back in the stamped, addressed envelope provided. We appreciate your taking the time to take our survey!!

Survey for School Guidance Counselors

School Identifier: _____

Directions: Read each of the school counseling duties listed in the first column of the table below. Then, circle the number that best represents how your participation in these duties has or has not changed **since the beginning of implementation of the EEDA at your school**. The scale ranges from 5 (duties have increased greatly) to 1 (duties have decreased greatly). If there is a duty that does not apply to your position, circle 0 (not applicable, this has never been a part of my duties).

School Counseling Duties	Duties have **increased greatly**	Duties have **increased somewhat**	Duties **have not changed** in this area	Duties have **decreased somewhat**	Duties have **decreased greatly**	**Not applicable**, this has **never** been a part of my duties
1a. Classroom guidance on personal/social issues	5	4	3	2	1	0
1b. Classroom guidance on career issues	5	4	3	2	1	0
1c. Classroom guidance on academic issues	5	4	3	2	1	0
2a. Curriculum development on personal/social issues	5	4	3	2	1	0
2b. Curriculum development on career issues	5	4	3	2	1	0
2c. Curriculum development on academic issues	5	4	3	2	1	0
3a. Counseling students on personal/social issues	5	4	3	2	1	0
3b. Counseling students on career issues	5	4	3	2	1	0
3c. Counseling students on academic issues	5	4	3	2	1	0
3d. Assisting students with the development of their career plans and IGPs	5	4	3	2	1	0
3e. Assisting students with college planning and applications	5	4	3	2	1	0
4a. Consulting with teachers and administrators about personal/social issues	5	4	3	2	1	0
4b. Consulting with teachers and administrators about career issues	5	4	3	2	1	0

School Counseling Duties	Duties have **increased greatly**	Duties have **increased somewhat**	Duties **have not changed** in this area	Duties have **decreased somewhat**	Duties have **decreased greatly**	**Not applicable**, this has **never** been a part of my duties
4c. Consulting with teachers and administrators about academic issues	5	4	3	2	1	0
5a. Assisting with exceptional students on personal/social issues	5	4	3	2	1	0
5b. Assisting with exceptional students on career issues	5	4	3	2	1	0
5c. Assisting with exceptional students on academic issues	5	4	3	2	1	0
5d. Chairing individualized education (IEP) program meetings	5	4	3	2	1	0
5e. Chairing Section 504 of the Rehabilitation Act of 1974 meetings	5	4	3	2	1	0
5f. Coordinating special services referrals	5	4	3	2	1	0
6a. Meeting with parents about personal/social issues	5	4	3	2	1	0
6b. Meeting with parents about career issues	5	4	3	2	1	0
6c. Meeting with parents about academic issues	5	4	3	2	1	0
7a. Coordinating special events/programs for the school regarding personal/social issues	5	4	3	2	1	0
7b. Coordinating special events/programs for the school regarding career issues	5	4	3	2	1	0
7c. Coordinating special events/programs for the school regarding academic issues	5	4	3	2	1	0

School Counseling Duties	Duties have **increased greatly**	Duties have **increased somewhat**	Duties **have not changed** in this area	Duties have **decreased somewhat**	Duties have **decreased greatly**	**Not applicable**, this has **never** been a part of my duties
7d. Conducting professional development workshops in career development and guidance for teachers and guidance counselors	5	4	3	2	1	0
8. Identifying and coordinating work-based/extended learning opportunities for students	5	4	3	2	1	0
9. Crisis management	5	4	3	2	1	0
10. Participating on committees within the school	5	4	3	2	1	0
11a. Coordinating the standardized testing program	5	4	3	2	1	0
11b. Administering standardized tests	5	4	3	2	1	0
12. Organizing outreach to low income families (i.e., Thanksgiving dinners, Holiday families)	5	4	3	2	1	0
13. Responding to health issues (e.g., check for lice, eye screening, 504 coordination)	5	4	3	2	1	0
14. Performing hall, bus/car pick-up, cafeteria duty	5	4	3	2	1	0
15a. Registering and scheduling students for classes	5	4	3	2	1	0
15b. Developing the master class schedule	5	4	3	2	1	0
16. Enrolling students in and/or withdrawing students from school	5	4	3	2	1	0

School Counseling Duties	Duties have **increased greatly**	Duties have **increased somewhat**	Duties **have not changed** in this area	Duties have **decreased somewhat**	Duties have **decreased greatly**	**Not applicable**, this has **never** been a part of my duties
17. Maintaining/ Completing educational records/reports (cumulative files, test scores, attendance reports, drop-out reports)	5	4	3	2	1	0
18. Handling discipline of students	5	4	3	2	1	0
19. Substitute teaching and/or covering classes for teachers at your school	5	4	3	2	1	0
In the spaces below, indicate any other duties that have not been covered in this survey that have either increased or decreased since the implementation of EEDA in your school.						
	5	4	3	2	1	0
	5	4	3	2	1	0
	5	4	3	2	1	0
	5	4	3	2	1	0

We would appreciate getting some background information on you:

Position at the school: ____ Guidance director ____ Guidance counselor Other, please specify: _____

Number of years as school counselor: _____

Number of years <u>at this school</u> as a school counselor: _____

Have you completed the Global Career Development Facilitation certification? ____ yes ____no ____ in process

Please either return the survey to the researchers while they are at your school or mail it back in the stamped, addressed envelope provided. We appreciate your taking the time to take our survey!!

Appendix F

School Counselor In-Depth Follow-Up Phone Interview Protocol

School Counselor/Career Specialists Phone Interview

Date:_____
Interviewer:_____
School Name:_____
Name of
Interviewee:_____
Position/Title:_____

I. Job duties since EEDA

1. Please explain how the implementation of EEDA has changed your duties:

2. How has EEDA affected your caseload (check)?
   ____Increased caseload ____Decreased caseload ____No change to caseload

3. What was your approximate caseload before EEDA?

4. What is your approximate caseload now?

5. How have changes in your caseload affected your job duties?

6. When EEDA was initiated, were new counselors and/or career specialists hired?

7. Do you currently hold or have ever held a Career Development Facilitator certification.
   ___Yes, currently certified as a Career Development Facilitator.
   ___No, I am not certified as a Career Development Facilitator.
   ___I have been certified as a Career Development Facilitator in the past, but not currently.
   ___I am currently pursuing a certification as a Career Development Facilitator.

8. How are the duties of school counselors and career specialists defined and divided up?
   a. How are duties coordinated between counselors and specialists?

9. Do you feel that your school has the resources needed to provide students with effective career guidance services in accordance with EEDA guidelines? Explain.

10. If you do **not** have sufficient resources, what do you believe is needed to improve career guidance services to students?

WHAT ABOUT STUDENTS WHO ARE UNABLE TO GET INTO COURSES THEY WANT/NEED OR IF THE SCHOOL DOES NOT HAVE THE DESIRED MAJOR? WHAT IS DONE IN ADVISING THESE STUDENTS?

II. Advising students on career pathways/majors

11. Please explain the ways in which you incorporate career pathways-focused-language when advising students (e.g., program of study, career clusters, career majors, etc.).

12. How would you characterize the level of knowledge of students transitioning into high school regarding career pathways and/or career majors?
    a. Do students generally have *sufficient* knowledge of the 16 career pathways to make an informed decision about declaring a major upon entering high school?
    b. Do they seem uninformed about career pathways?

13. Describe the amount of effort/time you expend in explaining career pathways/career majors to students.
    a. Are there occasions when more time is spent discussing career pathways/career majors?
    b. Are there certain groups that you work with more than others in explaining career pathways/career majors?

14. Upon their entrance into high school, what role do you play in helping students define their career goals? What exactly do you do to help?

15. Upon their entrance into the 10^{th} grade, what role do you play in helping students declare their career major? What exactly do you do to help?

16. What role do you play in helping students develop and update their **individual graduation plan** (IGP)? What exactly do you do to help?

17. Explain your role in providing **work exploration guidance activities and career awareness programs** to students.

    a. Explain the types of work exploration guidance activities and career awareness programs you provide for students.
    b. How often do you provide these types of activities?
    c. Are these provided on an individual, school-wide, program-wide, etc. basis?
    d. Explain how you go about providing these services.

18. Explain your role in providing students with a variety of **work-exploration experiences**.

    a. Explain the types of work-exploration experiences you provide for students.
    b. How often do you provide these types of experiences?
    c. Are these established on an individual, school-wide, program-wide, etc. basis?
    d. Explain how you go about providing these activities.

19. How has the amount of time you interact with students' parents changed since the implementation of EEDA?
    ____**Some increase** in the amount of time interacting with parents

____A **significant increase** in the amount of time interacting with parents
____**No change** in amount of time interacting with parents
____**Some decrease** in the amount of time interacting with parents
____A **significant decrease** in the amount of time interacting with parents
____Not applicable, why? _____

20. How has the amount of time you spent interacting with students changed since the implementation of EEDA?
    ____**Some increase** in the amount of time interacting with students
    ____A **significant increase** in the amount of time interacting with students
    ____**No change** in amount of time interacting with students
    ____**Some decrease** in the amount of time interacting with students
    ____A **significant decrease** in the amount of time interacting with students
    ____Not applicable, why? _____

21. What type of information do you provide parents regarding the career pathways and/or career majors available to students?

III. Confidence level in guidance on career pathways and majors

The intention of the following items is to get a picture of your confidence level in providing students with career guidance in relation to career pathways and career majors.

22. Please describe the type of training you received in providing career guidance to students (e.g., training through formal schooling, training through yearly or one-time workshops, self-taught, etc.).

23. Please describe the level of confidence you have in your ability to provide students with career guidance in relation to the career pathways and the career majors in your school.

24. Please describe the level of confidence you have in your ability to inform students about the careers or degree programs they can pursue once they have completed a career major, upon graduation (e.g., types of programs available to them post-high school, types of careers available to them post high school, etc.).

25. Please describe the level of confidence you have in your ability to answer students' questions about specific careers (e.g., type of training needed, job demand, pay rate, etc.).

26. Since the implementation of EEDA, have you noticed a change in students' interest in their career and/or post-secondary plans or changes in engagement (e.g., increased career focus; increased academic/career motivation; improvements in grades, attendance, etc.)? Please explain.

27. Please describe students' level of responsiveness to your career guidance efforts (For example, are students showing a stronger interest in CATE courses and careers? Are students

seeking out more information on CATE courses and careers? Or other courses and careers?).

IV. ASCA and EEDA? Or just leave ASCA?

The purpose of the following items is to get a sense of how your school counseling program aligns with the ASCA National Model standards.

28. ____Our district has formally adopted the ASCA National Model.
____Our district has not formally adopted the ASCA National Model, but we are aligned with the model's guidelines.
____Our district is not currently following the ASCA National Model guidelines.
____I am unaware of the implementation of the ASCA National Model in our district.

29. What effect, if any, has the implementation of EEDA had on your school counseling programs ability to implement/follow ASCA guidelines?

30. Are there any particular ways that EEDA has positively affected your counseling program's ability to follow the ASCA standards?

31. Are there any particular ways that EEDA has negatively affected your counseling program's ability to follow the ASCA standards?

ADDITIONAL QUESTIONS:
What do your testing duties consists of?

Can you briefly describe support from administration?

Appendix G

Student High School Survey

All Schools Class of 2011 survey responses after completion of 10th grade: Total Sample Size = 1,455

Student Engagement/POS Experiences Survey

Part I: Course and Career Planning

1. Have you selected a career cluster to plan for? (**See a sample list of career clusters and high school majors on page 11**)

N = 1442; Missing=3

85.16%	Yes
6.17%	No
8.67%	Don't Know

2. Have you selected a high school major within that career cluster?

N = 1409; Missing=46

15.47%	No	Go to Question 6, p.2 →
21.58%	Don't Know	Go to Question 6, p.2 →
62.95%	Yes	

An explanation of how failed skip patterns were coded for analysis follows the survey.

If you answered "yes" to question 2, please continue below. If you did NOT answer "yes," go to question 6 on page 2.

2a. Please write the high school major that you selected on the line below. If you have two or more majors, write in your primary major (the one for which you will take the most courses).

N = 1374; Missing= 81

High School Major	
0.07%	AV Tech
0.07%	Accountant
0.51%	Accounting
0.51%	Agriculture
0.07%	Agriculture and Health Science
0.15%	Agriculture, Food, and Natural Resou
0.07%	Agriculture/Science
0.07%	Anatomy
0.07%	Anesthesiology
0.07%	Animal System
0.07%	Animal Systems
0.29%	Architecture
0.07%	Architecture (Architect) Entrepreneu
0.29%	Architecture and Construction
0.07%	Architecture, Construction
0.07%	Army

0.15%	Art
0.22%	Arts
0.07%	Arts and Humanities
0.15%	Arts, Audio and Video Technology, Co
0.07%	Arts, Audio/Video
0.07%	Arts, Audio/Video Tech and Communica
0.22%	Arts, Audio/Video Technology and Com
0.07%	Arts/Graphics Design
0.07%	Audio and Film
0.07%	Audio and Video Technology and Film
0.07%	Audio-Video, Technology and Film
0.07%	Auto Class
0.07%	Auto Collision
0.15%	Auto Mechanic
0.22%	Auto Tech
0.07%	Auto Tech/Business
0.07%	Automechanics at career center
0.07%	Automotive
0.07%	Automotive Industry
0.07%	Automotive Tech
0.15%	Automotive Technology
0.07%	Basketball and Engineering
0.44%	Biology
0.07%	Biology/Chemistry
0.07%	Biology/Medical
0.07%	Biology/Sports Medicine
0.15%	Biotechnology Research and Developme
0.07%	Broadcast Journalism
0.44%	Building Construction
0.07%	Building and Construction
0.07%	Business and Management
1.60%	Business
0.07%	Business Accountant/Cook
0.07%	Business Admin. Accounting
0.07%	Business Finance
0.07%	Business Financial Management
0.29%	Business Financial Management and Ac
0.07%	Business Law
0.95%	Business Management
0.44%	Business Management and Administrati
0.07%	Business Management/Construction
0.07%	Business Mgt
0.07%	Business and Administration
0.51%	Business and Engineering
0.07%	Business and Finance
0.07%	Business and Law
0.36%	Business and Management
0.07%	Business and Mathematics
0.07%	Business and Sales
0.07%	Business, Art and Design
0.07%	Business, Management and Adm

0.29%	Business, Management and Administrat
0.07%	Business/Law
0.07%	Business/Management
0.07%	Business/Music
0.07%	Business/Sports Management and Admin
0.07%	C
0.07%	Can’t remember
0.07%	Carpentry/Construction
0.29%	Chemistry
0.07%	Civil Engineering
0.07%	Civil or Mechanical Engineering
0.29%	Commercial Graphics
0.07%	Communication
0.07%	Communications, Journalism and Broad
0.07%	Computer Design
0.07%	Computer Engineer
0.22%	Computer Engineering
0.07%	Computer Graphics
0.07%	Computer Programming
0.15%	Computer Science
0.07%	Computer Tech
0.07%	Computer Technician
0.15%	Computer Technology
0.07%	Computer and Technology
0.07%	Computers
0.36%	Construction
0.07%	Construction (Welding)
0.07%	Corporate Lawyer
1.31%	Cosmetology
0.07%	Cosmetology/Health and Human Service
0.44%	Counseling and Mental Health Service
0.36%	Criminal Justice
0.07%	Criminal Justice (Law and Law Enforc
0.44%	Culinary
0.29%	Culinary Arts
0.07%	Culinary Arts (Primary) Education
0.07%	Culinary Chef
0.07%	Culinary and Business
0.07%	Current Events
0.07%	D5 (Marketing)
0.15%	Dance
0.07%	Dance (Performing Arts)
0.07%	Dance and Acting
0.07%	Dental Hygienists
0.07%	Dental hygiene
0.07%	Design
0.07%	Diagnostic Health Science
0.07%	Diagnostic Services
0.73%	Diagnostic Services (H2)
0.07%	Dietician
0.07%	Doctor

0.07%	Don’t Know
0.29%	Don’t have one yet
0.07%	EMS
0.22%	Early Childhood Development
0.15%	Early Childhood Education
0.07%	Early Childhood and Development Serv
0.73%	Education
0.07%	Education Teaching/Training
0.07%	Education and Music
0.36%	Education and Training
0.07%	Education/Psychology
0.07%	Education/Training
0.07%	Education/Training (Teaching/Trainin
0.07%	Electrical Engineering
0.07%	Electricity
0.07%	Electronic Technician
0.07%	Elementary Education
0.07%	Elementary Teacher
0.07%	Emergency Fire Services
0.29%	Engineer
2.33%	Engineering
0.29%	Engineering Graphics
0.07%	Engineering Technology
1.89%	Engineering and Technology
0.07%	Engineering or Graphics
0.07%	Engineering, Military
0.07%	Engineering/Manufacturing
0.07%	Engineering/Psychology
0.07%	English
0.07%	Entrepreneurship
0.07%	Family Life
0.07%	Family and Community Services
0.07%	Fashion Design
0.07%	Fashion Marketing
0.15%	Fashion and Construction
0.07%	Finance
0.07%	Fine Arts
0.07%	Fire and Emergency
0.07%	Firefighting
0.07%	Firefighting
0.29%	Foreign Language
0.07%	Foreign Service
0.07%	Forensic Science
0.07%	Forensics
0.07%	Forestry Production
0.07%	Graph (illegible)
0.07%	Graphic
007%	Graphic Arts
0.15%	Graphic Communications
0.22%	Graphic Deisgn
0.07%	Graphic Design

0.29%	Graphic Design – Business Application
0.07%	Graphics
0.07%	Hair
0.07%	Health
0.07%	Health Informatics
0.80%	Health Informatics (H3)
0.07%	Health Informatics/Therapeutic Servi
6.33%	Health Science
0.07%	Health Science (Science Major)
0.07%	Health Science Diagnostic Services
0.07%	Health Science Tech
0.07%	Health Science Tech/Nursing
0.07%	Health Science Technology
0.07%	Health Science and Human Services
0.07%	Health Science – Diagnostic Services
0.07%	Health Science/ Business and Engineer
0.07%	Health Service
0.07%	Health Studies
0.07%	Health Tech I
0.29%	Health and Human Services
0.07%	Health, Safety, and Environmental Aw
0.07%	Healthcare
0.15%	History
0.07%	History Teacher/Strength
0.07%	History and English
0.15%	Horticulture
0.15%	Hospitality
0.44%	Hospitality and Tourism
0.44%	Human Health Services, Banking and R
0.07%	Human Resources
0.15%	Human Services
0.80%	Human Services (Cosmetology)
0.07%	Human Services, Early Childhood Deve
0.07%	IDK
0.07%	IT
0.07%	Info Tech
0.22%	Information Technology
0.07%	International Business/Fashion
0.07%	Intro HS and EMS
0.22%	JROTC
0.07%	JROTC (Pilot)
0.07%	JROTC and Chemistry
0.07%	Journalism
0.66%	Journalism and Broadcasting
0.29%	Journalism and Broadcasting (C5)
0.07%	Junior ROTC
0.07%	Language (Spanish)
1.38%	Law
0.07%	Law Criminal Justice
0.07%	Law Education
0.15%	Law Enforcement

0.07%	Law Enforcement Service
0.58%	Law Enforcement Services
0.07%	Law Enforcement Services (L4)
0.07%	Law Public Safety/Law Enforcement Se
0.07%	Law Services
0.07%	Law and Governance
0.07%	Law and Legal Studies
0.07%	Law, Human Services
0.29%	Law, Public Safety, Corrections and
0.07%	Law – Real Estate and Divorce
0.07%	Law/Public Safety
0.07%	Lawyer
0.87%	Legal Services
0.07%	Legal Services, Teaching
0.07%	Legal Services/Law
0.07%	Local college
0.29%	Management
0.07%	Management (D1)
0.07%	Management and Entrepreneurship
0.07%	Manufacturing
0.22%	Manufacturing Production Process Dev
0.07%	Marine Biology
0.44%	Marketing
0.07%	Marketing Communications and Promoti
0.07%	Marketing Sale Service
0.07%	Marketing and Education
0.07%	Marketing and Entrepreneurship
0.07%	Mass Communications/Journalism
0.22%	Mass Communications
0.80%	Math
0.07%	Math and Science
0.07%	Math and Science, Engineering and Te
0.07%	Mathematics
0.07%	Mathematics – Teacher
0.07%	Mechanic
0.07%	Mechanical Engineer
0.15%	Mechanical Engineering
0.07%	Mechanical Engineering and Machining
0.07%	Medical
0.36%	Medical Diagnostics
0.07%	Medical Health
0.07%	Medical Science
0.07%	Medical and English
0.22%	Medicine
0.07%	Meteorology
0.36%	Military
0.07%	Military Science
0.15%	Military Services
0.07%	Music
0.15%	Music Education
0.07%	Music Management

34.13%	NA
0.07%	Nails
0.07%	National Security
0.07%	National Service
0.07%	Nurse
0.87%	Nursing
0.07%	Nursing – Health Care
0.07%	O and D (Science, Technology, Engine
0.07%	Occupational Therapist/OBN
0.07%	Orthopedic Surgeon
0.29%	Pediatrician
0.07%	Pediatrician/Health Science
0.07%	Pediatrician/Veterinarian
0.95%	Performing Arts
0.07%	Performing Arts (Band)
0.07%	Performing Arts (Theater)
0.07%	Performing Arts Dance
0.07%	Performing Arts – Drama
0.07%	Performing Arts/Music Education
0.07%	Performing Arts: Dance
0.07%	Personal Care Services
0.15%	Pharmacist
0.22%	Pharmacy
0.07%	Photography and Sports Medicine
0.07%	Physical Education
0.07%	Physical Therapist
0.07%	Pre-Law and Political Science
0.07%	Pre-Med
0.07%	Pre-medicine
0.15%	Programming
1.02%	Psychology
0.07%	Public Management and Administration
0.07%	Public Relations
0.07%	RN
0.15%	RN in Trauma
0.07%	ROTC
0.07%	ROTC, Engineering
0.07%	Radiology
0.22%	Restaurants and Food/Beverage Servic
0.07%	School of Bioengineering and Constru
1.09%	Science
0.07%	Science Health Science
0.15%	Science and Math
0.07%	Science, Health
0.29%	Science, Technology, Engineering and
0.07%	Sciences (Nursing)
0.07%	Secondary School Teacher
0.07%	Security and Protective Services
0.07%	Soccer
0.22%	Sociology
0.07%	Spanish

0.07%	Sports Analysis
0.07%	Sports Marketing
0.07%	Sports Medicine
0.87%	Teacher and Training
0.07%	Teaching
0.07%	Teaching and Education
0.29%	Teaching and Training
0.07%	Teaching and Training (E3)
0.29%	Teaching/Training
0.07%	Teaching/Training (E3)
0.07%	Technician
0.07%	Technology
0.51%	Therapeutic Services
0.07%	Therapist
0.07%	Transportation Operations
0.07%	Turf and Lawn
0.07%	Veterinarian
0.07%	Veterinary Assistant
0.07%	Video Game Designer
0.07%	Video Game Programming
0.07%	Video Production
0.07%	Visual Arts
0.80%	Visual Arts
0.07%	Visual Arts (C3)
0.58%	Welding
0.07%	Welding/Manufacturing
0.07%	Wildlife Biology
0.07%	World Languages

3. Is the high school major you gave above in Question 2a. the one you are most interested in?
N = 1421; Missing=34

55.24 %	Yes
5.49%	No
9.92%	Don't Know
23.22%	NA
6.12%	Created Not Applicable

4. Was the high school major you were most interested in available at your school?
N = 1419; Missing=36

49.33%	Yes
5.00%	No
16.21%	Don't Know
23.26%	NA
6.13%	Created Not Applicable
0.07%	Multiple Response

4a. No, the major I was most interested in was:
N = 1405; Missing=50

0.07%	Agricultur
0.07%	Animal Hea
0.07%	Army not M

0.07%	Artilery E
0.07%	At the career center
0.07%	Available
0.07%	Barbershop
0.07%	Building C
0.07%	Business E
0.07%	Business M
0.07%	Childcare/
0.07%	Civil Engi
0.07%	Commerical
0.07%	Computer S
0.07%	Constructi
0.43%	Cosmetology
0.07%	Culinary A
0.07%	Dance Educ
0.07%	At the career center
0.07%	Dentist
0.07%	Dentistry
0.07%	Don’t Know
0.07%	Early Chil
0.14%	Education
0.28%	Engineerin
0.07%	English or
0.07%	Full
0.07%	Graphic De
0.07%	Health Car
0.21%	Health Sci
0.07%	Human Serv
0.07%	Journalism
0.07%	Law Educat
0.07%	Law/Public
0.07%	Masonry
0.07%	Mechanical
0.07%	Medical As
0.07%	Medical, D
0.07%	Merchandis
94.38%	NA
0.07%	Nails
0.14%	No
0.21%	Performing
0.07%	Police Off
0.07%	Police fie
0.07%	Political
0.07%	Pre-Med/Ph
0.07%	Pre-Medica
0.07%	Programming
0.14%	Psychology
0.07%	RN
0.07%	Rapping, S
0.07%	Real Estat
0.07%	Science an

0.07%	Sound Engi
0.07%	Sports Man
0.07%	Sports Med
0.14%	Teacher Ca
0.07%	Teaching/T
0.07%	Theatrical
0.07%	Three-Dime
0.07%	Veterinary
0.07%	Zoology

5. How much do you agree or disagree with the following statements?

Having a high school major and career cluster has (Mark **ONE** RESPONSE FOR EACH ITEM):

	Strongly Disagree	Disagree	Agree	Strongly Agree	NA	N (Missing)
a. Made me more likely to want to come to school.	4.05%	18.31%	37.95%	6.92%	23.06%	1431 (24)
b. Made me less likely to want to drop out of school.	10.28%	11.33%	25.73%	19.79%	23.15%	1430 (25)
c. Helped me get better grades.	2.95%	18.55%	35.77%	9.77%	23.19%	1423 (32)
d. Helped me make connections between what I study and what type of career I want.	2.03%	7.22%	36.82%	21.04%	23.14%	1426 (29)
e. Made it more likely that I would take courses that I need for the future.	2.10%	4.69%	32.66%	27.69%	23.08%	1430 (25)
f. Made it more likely that my parents got involved in my selection of courses.	5.25 %	19.82%	30.74%	11.34%	23.11%	1428 (27)

6. Have you put together a "career plan" or 4-year "Individual Graduation Plan (IGP)," that outlines a series of activities and courses that you will take throughout high school? (Mark **ONE** RESPONSE)

N = 1391; Missing=64

18.69% No → **Go to Question 9, p.4**

16.53% Don't Know → **Go to Question 9, p.4**

64.56% Yes

0.22% Multiple Responses

If you answered "yes" to question 6, please continue below. If you did NOT answer "yes," go to question 9 on page 4.

7. When you put together your career plan or 4-year Individual Graduation Plan, how often did you:

	Never	1-2 Times	3 or More Times	NA	Multiple responses	N (Missing)
a. Talk with your parents, step-parents, or other adults that you live with	4.90%	27.91%	32.32%	23.72%	0.00	1408 (47)
b. Talk with your teachers	17.43%	35.49%	12.09%	23.76%	0.07%	1406 (49)
c. Talk with your guidance counselor	9.92%	31.98%	22.84%	23.84%	0.21%	1401 (54)
d. Talk with your friends	10.17%	23.77%	30.07%	24.43%	0.07%	1367 (88)
e. Take part in a meeting at school with your parents (step-parents or guardians) and guidance counselor to talk about plans for after high school	25.23%	28.67%	10.90%	23.94%	0.00%	1395 (60)
f. Review the sequence of courses you planned to take throughout high school	6.83%	31.72%	26.53%	23.76%	0.00%	1406 (49)

8. When you put together your career plan or 4-year Individual Graduation Plan, who was the most helpful in developing your plan? (Mark **ONE** RESPONSE)

N = 1403; Missing=52

21.38% Parents, step-parents or other adults with whom you live
3.48% A teacher
31.93% A guidance counselor
2.57% Friends
4.70% No one helped me to put together my career plan/4-year Individual Graduation Plan.
23.81% NA
0.93% Multiple responses

9. In **high school**, have you ever done any of the following activities to help you identify jobs or careers that you might be interested in pursuing? (Mark **ONE** RESPONSE FOR EACH ITEM)

	Yes	No	Multiple responses	N (Missing)
a. Answered questions related to jobs and careers on a computer or filled out a questionnaire.	78.82%	21.18%	0.00%	1407 (48)
b. Researched different jobs or careers.	83.75%	16.25%	0.00%	1403 (52)
c. Researched different colleges, universities, military branches or technical/community colleges.	77.92%	22.08%	0.00%	1404 (51)
d. Spoke with or visited someone in a career that interests me.	54.29%	45.71%	0.00%	1400 (55)
e. Been in a class where someone from a local business talked about working at their company or in their career.	55.84%	44.16%	0.00%	1404 (51)
f. Toured a local business with a group from my school.	22.61%	77.39%	0.00%	1402 (53)

10. Between the start of 9th grade and now, have you talked to a school guidance counselor about the following topics? (Mark ALL THAT APPLY)

	Yes	No	Multiple responses	N (Missing)
a. What courses to take this school year	91.38%	8.55%	0.07%	1415 (40)
b. Going to college	71.62%	28.31%	0.07%	1413 (42)
c. Possible jobs or careers when you are an adult	63.83%	36.17%	0.00%	1410 (45)
d. Finding a job after high school	35.44%	64.56%	0.00%	1411 (44)
e. Steps necessary to pursue your career	63.34%	36.66%	0.00%	1402 (53)
f. Applying for college or vocational/ technical school	44.18%	55.82%	0.00%	1408 (47)

11. How much thinking and planning have you done in the following areas? For each item below choose the **ONE** answer that **BEST** tells what you have done so far.

	I have not thought about or done this	I have thought about doing this	I have made plans to do this	I have already done this	Multiple responses	N (Missing)
a. Gathering information about jobs I might be interested in.	7.62%	31.05%	27.17%	33.87%	0.28%	1417 (38)
b. Taking classes to	10.18%	18.,25%	24.12%	47.38%	0.07%	1414

help me decide what kind of job I want.						(41)
c. Participating in school or out-of-school activities that will help me decide what kind of job I want.	19.08%	27.77%	20.78%	32.23%	0.14%	1415 (40)
d. Volunteering, interning, or working on a job to help find out what kind of job I want to have in the future.	19.36%	35.32%	22.55%	22.70%	0.07%	1410 (45)

12. In which of the following **work-based learning experiences** have you participated during high school? (Mark ALL THAT APPLY)

- Internship (work experience, but not necessarily part of a vocational/career/technical class)
  N = 1402; Missing=53
  15.19%
- Co-op (work experience at a local business in your high school major or career cluster)
  N = 1400; Missing=55
  8.43%
- Job shadowing or work-site visits (visits to work places to observe one worker or many workers)
  N = 1401; Missing=54
  36.12%
- Mentoring (a match with an adult in your career area for advice and support)
  N = 1401; Missing=54
  11.35%
- Community service (volunteer work to support your local community)
  N = 1401; Missing=54
  28.62%
- School-based enterprise (working in a business run by students or teachers from your school)
  N = 1401; Missing=54
  12.56%

Part II: Classes and Schoolwork

13. How many courses do you plan to take that will earn college credit by the time you graduate from high school? (Mark **ONE** RESPONSE)

N = 1427; Missing=28

3.64%	0 courses
5.61%	1 course
10.86%	2 courses
12.54%	3 courses
10.23%	4 courses

17.66%	5 courses or more
38.40%	Don't know
0.77%	Not applicable, not an option at my school
0.28%	Multiple responses

14. How often have you been in the following courses or programs in **high school**? (Mark ALL THAT APPLY)

	Never	1-2 Times	3 or More Times	Multiple responses	N (Missing)
a. Advanced Placement	52.54%	32.63%	14.68%	0.00%	1376 (79)
b. Vocational/career/technical courses (such as culinary arts, cosmetology, construction, graphic communication or health science courses)	28.62%	56.17%	15.20%	0.00%	1401 (54)
c. Special education (resource room or regular class)	80.06%	10.38%	9.34%	0.22%	1349 (106)

15. Please respond to the following statements about your **high school teachers** and **courses** this year.

	Strongly Disagree	Disagree	Agree	Strongly Agree	Multiple responses	N (Missing)
a. Most of my teachers make the subject matter interesting and useful.	8.44%	24.00%	58.41%	9.08%	0.07%	1421 (34)
b. Most of my teachers have set high standards for me.	4.08%	11.67%	62.61%	21.57%	0.07%	1423 (32)
c. Most of my teachers have encouraged me to do well in school.	2.62%	11.27%	56.34%	29.62%	0.14%	1411 (44)
d. Most of my teachers make connections between what they are teaching and how it applies in the real world.	7.05%	20.65%	55.25%	16.84%	0.21%	1419 (36)
e. Most of my teachers give me extra help when I need it.	4.78%	13.08%	59.35%	22.71%	0.07%	1422 (33)

16. What have most of your grades in **high school** been up to now?

N = 1432; Missing=23

6.22%	Mostly A's
37.22%	Mostly A's and B's
11.59%	Mostly B's
30.31%	Mostly B's and C's
6.77%	Mostly C's
5.17%	Mostly C's and D's
0.14%	Mostly D's
0.63%	Mostly D's and F's

1.96% Multiple responses

Part III: Plans For The Future

17. As things stand now, what is the **highest** level of education you expect to complete? (Mark **ONE** RESPONSE)

N = 1430; Missing=25

4.13%	Not finish high school
6.85%	Graduate from high school or earn my GED
1.33%	Attend college but not complete a degree
11.96%	Complete a certificate or associate's degree
21.05%	Complete a bachelor's degree
26.22%	Complete a master's degree
18.88%	Complete a doctoral degree
8.32%	Don't know
1.26%	Multiple responses

18. What is the main thing that you plan to do the year after graduation from high school? (Mark **ONE** RESPONSE)

N = 1427; Missing=28

67.27%	Enroll in a 4-year college or university
6.68%	Enroll in a 2-year community college
7.64%	Enroll in a 2-year community college and then transfer to a 4-year college/university
2.52%	Enroll in a vocational, technical, or trade school
6.59%	Join the armed services/military
1.40%	Get a job
0.49%	Start a family
0.91%	Travel
0.07%	Do paid community service or missionary work
0.21%	Do unpaid volunteer, community service, or missionary work
1.26%	Other
5.34%	Not sure what I want to do
1.61%	Multiple responses

18a. If get a job, please give the job title:

N = 1421; Missing=34

0.07%	Any I like
0.07%	Auto repair or
0.07%	Auto technician
0.07%	Beautician
0.07%	Coast Guard
0.07%	Construction wi
0.07%	Dispatcher
0.07%	Drive trucks
0.07%	Electrician
0.07%	Get a job
0.07%	Gym

0.07% Hair salon
0.07% Landscaping and
0.07% Musician
93.38% NA
0.07% Pediatrician
0.07% Private detecti
0.07% Truck drive
0.07% Waitress
0.07% Welding
0.07% Whatever I find
0.07% Work at UTI
0.07% Work at a salon

18b. If other, please specify:
N = 1430; Missing=25
0.07% Army
0.07% Army, then enroll in 4 yr college
0.07% Attend a music school
0.07% Attend art institute
0.07% Attend arts institute
0.07% Attend the national fire academy
0.07% Enroll in 4 year college and cosme
0.07% Enroll in a 8-year college or univ
0.07% Get a job and got to college or ge
0.07% Get married, travel, go to a 2 yea
0.07% Go in the military
0.07% Go to Paul Mitchell
0.07% Go to an art institute
0.07% Hair School
0.07% Hike to Alaska
0.07% Jedi knight
0.07% Military and college
98.11% NA
0.07% Not sure yet might play sport
0.07% Paid internship
0.07% Part-time job
0.07% Party
0.07% Rule a country
0.07% Study abroad for a semester
0.07% Take care of my son
0.07% Technical institute
0.07% Working musician/drug dealer

19. Looking ahead to when you are 30 years old, do you plan to have a job at that time?
N = 1358; Missing=97
54.20% Yes, I plan to have a job at age 30. The name of the job that I plan to have at that time is:
N = 1357; Missing=98
0.07% A traveling band (rock preferably)
0.07% AV Tech

0.44%	Accountant
0.07%	Accountant at a bank
0.07%	Accountant or computer engineer/financial analy
0.07%	Accountant or statistician
0.07%	Accounting
0.07%	Accounting, business, or computer tech
0.07%	Actor, voice actor, and writer
0.07%	Advertising agent
0.07%	Aerospace engineer
0.07%	Aerospace engineer or biomechatronics engineer
0.07%	Aerospace engineering or aircraft engineering
0.29%	Air Force
0.07%	Air Force JAG
0.07%	Air Force fighter pilot
0.07%	Air Force fixing planes
0.07%	Algebra teacher
0.52%	Anesthesiologist
0.07%	Anesthesiologist and Army
0.07%	Anesthesiologist or nurse anesthesist
0.07%	Anesthesiologist/psychologist
0.07%	Anesthesiology
0.07%	Anestology and cosmetologist
0.07%	Animator
0.07%	Archeaology
0.44%	Architect
0.07%	Architect or entrepreneur
0.15%	Architecture engineer
0.15%	Architecture
0.07%	Architecture or landscaper
0.07%	Armed Forces
0.15%	Army
0.07%	Art professor/teacher
0.07%	Art therapist for children
0.07%	Artist
0.07%	Assistant principal or athletic trainer
0.07%	Athletic trainer
0.22%	Attorney
0.07%	Attorney/business owner
0.15%	Auto mechanic
0.07%	Auto mechanic/carpenter
0.07%	Auto technician
0.07%	Automotive industry
0.07%	Automotive mechanic
0.07%	Automotive mechanics and collision
0.07%	Automotive technician
0.07%	Bail bondsman
0.07%	Baller
0.15%	Band director
0.07%	Bank manager
0.07%	Be successful
0.07%	Beautician

0.07%	Behavioral psychologist
0.07%	Being a chemical engineer in the Air Force
0.07%	Being in the military
0.07%	Biologist or biochemist
0.07%	Broadcast journalist
0.07%	Broker/accountant
0.07%	Building construction
0.07%	Business accountant
0.07%	Business and management (owning a business)
0.07%	Business manager
0.07%	Business manager; taking over my mother's salon
0.07%	Business owner
0.07%	C.N.A., cosmetologist, or doctor
0.07%	CEO executive
0.07%	CEO of a major company
0.07%	CEO or financial analyst
0.07%	CFO
0.07%	CSX
0.07%	Campaign staffer
0.07%	Cancer specialist (doctor)
0.07%	Cardiac physician
0.15%	Cardiac surgeon
0.07%	Cardiovascular-thoracic surgeon
0.15%	Carpentry
0.07%	Certified athletic trainer
0.07%	Certified registered nurse anesthesist
0.15%	Chef
0.07%	Chef or anesthesiologist
0.15%	Chemical engineer
0.07%	Chemical engineering
0.07%	Chemistry teacher and a pharmacist
0.07%	Chief designer of Nike's design team – skateboar
0.07%	Child psychologist or guidance counselor
0.07%	Cisco networking
0.07%	Civil engineer
0.22%	Clinical laboratory scientist/technologist
0.07%	Clinical psychologist
0.07%	Clinical psychology
0.07%	Club owner; open my own club
0.07%	Coast Guard
0.07%	College professor
0.22%	Computer engineer
0.07%	Computer engineer or civil engineering
0.07%	Computer engineering
0.07%	Computer graphics
0.07%	Computer programmer or something in the military
0.07%	Computer science
0.07%	Computer tech
0.07%	Construction
0.07%	Cop/coroner/forensic investigator
0.15%	Corporate lawyer

0.29%	Cosmetologist
0.07%	Cosmetologist/nurse
0.29%	Cosmetology
0.07%	Cosmetology/military
0.07%	Counselor
0.07%	Crime scene investigation
0.22%	Crime scene investigator
0.07%	Crime scene investigator and cosmetologist
0.07%	Crime scene investigator, med. Examiner
0.07%	Criminal defense attorney or family court lawyer
0.07%	Criminal investigator in the US Army
0.07%	Criminal justic investigator
0.07%	Criminal lawyer
0.07%	Criminal profiler
0.07%	Culinary arts
0.07%	Culinary arts becoming a chef
0.07%	Culinary/wedding planning
0.07%	DEA
0.07%	Dance teacher
0.07%	Dancer, actor, and business woman
0.07%	Dealing with psychology
0.07%	Dental assistant
0.07%	Dental hygiene
0.07%	Dental hygienist
0.07%	Dental hygienists
0.15%	Dentist
0.07%	Dentist or therapist
0.07%	Dermatologist
0.07%	Design
0.07%	Designing and engineer automobiles
0.07%	Diesel mechanic/welder
0.07%	Dietician for in and out patients
0.07%	Director or producer
0.07%	Divorce lawyer
1.03%	Doctor
0.07%	Doctor working in ER
0.07%	Doctor, ambulance, or fire fighter
0.07%	Doctor, pediatrician
0.07%	Doctor – OBGYN
0.07%	Doctor – internist
0.07%	Doctor/physician
0.07%	Driving trucks
0.07%	Early childhood education (elementary teacher)
0.07%	Ecology
0.07%	Education
0.07%	Education or engineering
0.07%	Electrical engineer
0.07%	Electrician/own a farm plantation
0.07%	Electrical engineer
0.15%	Elementary teacher
0.74%	Engineer

0.07%	Engineer [at specific company]
0.07%	Engineer of some kind
0.07%	Engineer or architect
0.44%	Engineering
0.07%	Engineering, computer engineering
0.07%	Engineering; Comp. Tech
0.15%	Entrepreneur
0.07%	Environmental engineering
0.07%	Environmental lawyer, criminal lawyer or crimin
0.07%	Esthian
0.07%	Ether working someone's massage parlor or milit
0.07%	Event planner
0.07%	Event planner working for a business
0.07%	Event planner/party planner
0.07%	FBI
0.07%	Family practice PR
0.07%	Farmer
0.07%	Farming
0.07%	Fashion Designer
0.07%	Fashion des.
0.07%	Fashion design
0.22%	Fashion designer
0.07%	Fashion designer/artist
0.07%	Fighter pilot for the USAF
0.15%	Fighter pilot in the Navy
0.07%	Fighting – military
0.07%	Film scorer for movies, looking more at Disney
0.07%	Financial analyst
0.07%	Fire department
0.07%	Fire dept and a cop
0.07%	Firefighter/paramedic
0.07%	Force recon
0.07%	Foreign language instructor for the government
0.07%	Forensic chemist
0.07%	Forensic pathologist
0.29%	Forensic scientist
0.07%	Forensic scientist (CSI)
0.07%	GM car company
0.07%	Manicures/pedicures/chiropractor business
2.15%	Game designer
0.07%	Game warden or animal control
0.07%	General practitioner in a hospital or own office
0.07%	Going to the military
0.37%	Graphic designer
0.07%	Graphic/game designer
0.07%	Have my own business
0.07%	Have my own hair salone
0.07%	High school math teacher
0.07%	High school principal or playing prof. basketba
0.15%	High school teacher
0.07%	High school teacher

0.07%	Home health care nurse
0.07%	Homocide detective
0.15%	I don't know
0.07%	I don't know but I want my own restaurant
0.07%	I plan to have my own hair salon
0.07%	I will have a career
0.07%	In a office
0.07%	Insurance service
0.07%	Interning residential neurosurgeon
0.07%	Investment banker
0.07%	Journalist
0.07%	Journalist (magazine/newspaper article writer)
0.07%	Journalist/novelist/editor
0.07%	K-4 teacher
0.07%	Keneisiology
0.07%	Kindergarten or 1st grade teacher
0.15%	Kindergarten teacher
0.07%	LPN/nurse
0.07%	Labor lawyer
0.07%	Landscape photographer/model photographer
0.07%	Landscaping
0.07%	Landscaping and lawn maintenance
0.07%	Law enforcement services
1.03%	Lawyer
0.07%	Lawyer in criminal justice
0.07%	Lawyer, start a law firm
0.07%	Legal counselor/psychologist
0.07%	Licensed pharmacist
0.07%	Machinist or mechanical engineer
0.07%	Magazine editor
0.15%	Managing a welding business
0.07%	Marine Corps Judge Advocate General
0.07%	Marine biologist
0.22%	Marine corps
0.07%	Marines
0.07%	Marketing executive or CEO of my own corporation
0.07%	Marketing for a business I create
0.07%	Marketing/PR
0.07%	Master Sergeant in the US Army
0.07%	Master of the universe or concert pianist
0.07%	Maternity nurse
0.07%	Maternity nurse or pediatrician
0.07%	Maternity ward nurse
0.22%	Math teacher
0.22%	Mathematician
0.07%	McDonals or Burger King
0.07%	Mechanic
0.07%	Mechanic and own my own business
0.07%	Mechanical drafting engineer
0.22%	Mechanical engineer
0.07%	Mechanical engineering

0.07%	Mechanical or aerospace engineering
0.07%	Medical assistant in a doctor’s office or hospi
0.07%	Medical field in the military
0.07%	Medical research
0.07%	Medical researcher
0.07%	Medical researcher/university faculty
0.15%	Meteorologist
0.52%	Military
0.07%	Military Navy
0.07%	Military and medical school
0.07%	Military nurse
0.22%	Military officer
0.07%	Military technician
0.07%	Millitary
0.07%	Modeling, acting, author
0.15%	Mortician
0.07%	Multimedia and graphics designer
0.07%	Music education or musical theory
0.07%	Music production or graphic designing
0.07%	Music store owner, recording label owner
0.07%	Music teacher
0.22%	Musician
0.07%	My business I start
0.07%	My own architect business
0.07%	My own business
0.07%	My own enterprise
0.07%	My own fashion business, like my own clothing d
0.07%	My own fashion design line
0.07%	My own logging business
0.07%	My own salon
45.10%	NA
0.07%	NBA
0.07%	NBA legend
0.07%	NBA player
0.15%	NFL
0.07%	NFL or pilot in Air Force
0.07%	National football player
0.07%	Navy Seal chemist
0.07%	Navy Seal, forensic scientist, trauma doctor
0.07%	Neonatal doctor
0.07%	Neonatal nurse
0.07%	Neonatologist or obstetrician
0.15%	News anchor
0.29%	Nurse
0.07%	Nurse anesthesist or a restaurant owner
0.07%	Nurse or doctor in the A.F.
0.07%	Nurse or nurse practitioner
0.29%	Nurse practitioner
0.07%	Nurse practitioner or doctor
0.07%	Nurse/cosmetology
0.07%	Nurse/writer

0.29%	Nursing
0.07%	Nursing home
0.15%	Nursing job
0.07%	Nursing or medical assisting
0.07%	Nursing, teaching
0.07%	OB/GYN
0.15%	OBGYN
0.15%	Obstetrician
0.15%	Obstetrician gynecologist
0.07%	Officer in US Army
0.07%	Officer in the US Army
0.07%	Officer in the military
0.07%	Opening up my hair shop and getting good busine
0.07%	Optometrist
0.15%	Orthodontist
0.07%	Orthopedic surgeon
0.07%	Orthopedist
0.07%	Own my own business
0.07%	Own my own business or be in the NFL or be a ba
0.07%	Own my own daycare
0.07%	Own my own law firm
0.07%	Owner of [a bakery]
0.07%	Owning my own bakery
0.07%	Owning my own business
0.07%	Owning my own business being a cosmetologist
0.07%	Owning my own business or two
0.07%	Owning my own graphic company
0.07%	Owning my own restaurant
0.07%	Owning strip clubs
0.07%	PE teacher
0.07%	Local hospital
0.07%	Paralegal
0.07%	Pastor of a local Independent Baptist church
0.22%	Pastry chef
0.07%	Machine tool technology company
0.22%	Pediatric nurse
0.07%	Pediatric nurse/cosmetologist
0.07%	Pediatric physical therapist
1.18%	Pediatrician
0.07%	Pediatrician or biomedical engineer
0.07%	Pediatrician or cosmetologist
0.07%	Pediatrician or nurse
0.07%	Pediatrician or physician asst.
0.07%	Pediatrician or psychologist
0.07%	Performing musician
0.07%	Pharmaceutical manager
0.74%	Pharmacist
0.07%	Pharmacist (working in medical field)
0.07%	Pharmacist or basketball player or own my own b
0.07%	Pharmacy
0.07%	Pharmacy tech

0.07%	Photographer
0.07%	Photography or nursing
0.07%	Physical education
0.52%	Physical therapist
0.07%	Physical therapist or athletic trainer
0.07%	Physical therapist or something in medical fiel
0.15%	Physical therapy
0.07%	Physical therapy or marriage counseling
0.07%	Physician
0.07%	Physician (oncologist)
0.07%	Physician assistant
0.07%	Physician or dentist
0.07%	Physician or running a successful business
0.07%	Pilot
0.07%	Plant manager
0.07%	Plastic surgeon and owner of a club
0.07%	Plastic/cosmetic surgeon
0.07%	Playing in the NBA
0.07%	Playing sports still
0.15%	Police
0.15%	Police officer
0.07%	Police work/forensics
0.07%	Principal of a high school
0.07%	Private detective
0.07%	Professional athletic trainer
0.07%	Professional basketball player
0.07%	Professional clarinetist
0.07%	Professional dancing and choreographer
0.07%	Programming and software development
0.29%	Psychiatrist
0.07%	Psychiatrist or teacher
1.03%	Psychologist
0.07%	Psychologist or psychiatrist
0.07%	Psychologist or vet
0.07%	Psychologist/lawyer
0.07%	Psychology
0.07%	Psychology, professional WNBA player
0.07%	Deputy sheriff
0.59%	RN
0.07%	RN nurse
0.07%	RN and then later an anesthesiologist
0.07%	RN at a hospital
0.07%	RN nurse
0.07%	RN or neonatal nurse
0.07%	RN, nursing
0.07%	RNA
0.07%	Radio personnal
0.44%	Radiologist
0.07%	Radiology
0.07%	Radiology, cyciratrist, and performing arts
0.07%	Real estate and modeling (super)

0.07%	Real estate and wedding planning
0.07%	Real estate or professional football, or contra
0.07%	Recording artist/video game tester
0.07%	Recording engineer
0.07%	Registered dietician
1.18%	Registered nurse
0.07%	Registered nurse or nurse practitioner
0.07%	Registered nurse or therapist
0.07%	Registered pediatric nurse
0.07%	Retina specialist (surgeon)
0.07%	Running my own welding shop
0.07%	Local law firm
0.07%	Local power company
0.07%	School principal
0.07%	Services
0.07%	Sex therapist
0.07%	Singer
0.15%	Social worker
0.07%	Social worker, meteorologist, or a policeman
0.07%	Sociology
0.07%	Software engineer
0.07%	Soldier in the US Army
0.07%	Some kind of middle school teaching, preferrabl
0.07%	Some type of architectural firm
0.07%	Something in journalism
0.07%	Something in the medical field
0.07%	Something to do with med
0.07%	Something with criminal justice
0.07%	Something within pharmaceuticals
0.07%	Sous chef in a restaurant
0.07%	Spanish translator
0.07%	County SWAT Team
0.07%	Special ed teacher or nurse
0.07%	Specialist doctor
0.07%	Speech therapist
0.07%	Sportfishing captain
0.07%	Sports agent
0.07%	Sports manager
0.07%	Sports medicine
0.07%	Sports therapist
0.07%	Steel mill
0.07%	Stewardess or translator
0.07%	Still in the military
0.07%	Stock broker
0.07%	Superintendent of schools
0.07%	Supreme ruler of the world
0.15%	Surgeon
0.07%	TV newscaster
0.59%	Teacher
0.07%	Teacher or photographer
0.07%	Teacher, football coach

0.22%	Teaching
0.07%	Teaching at school
0.07%	Teaching elementary school and dance
0.07%	Teaching high school
0.07%	Teaching school or education
0.07%	Technician
0.07%	Technologist
0.07%	The same job that I went to college for
0.07%	Theater director or a theater professor in NYC
0.07%	Therapist
0.07%	Therapist, modeling, fashion industry, business
0.07%	Top lawyer or owner of a law firm
0.07%	Translator (anything to do with linguistics)
0.07%	Traveling nurse
0.07%	Local styling salon
0.07%	Truck drive
0.07%	Truck driving
0.07%	US Army
0.07%	US Army aviation officer
0.07%	Underwater welder
0.07%	United States Marshal
0.07%	Veterinary
0.29%	Vet
0.07%	Vet/animal doctor
0.74%	Veterinarian
0.07%	Veterinarian medicine
0.07%	Video game designer
0.07%	Video game designer/programmer
0.07%	Welding firm
0.07%	Welding
0.29%	Wildlife biologist at DNR
0.07%	Work with arts
0.07%	Work with music and have my own business
0.07%	Working at a business or a plant
0.07%	Working at a hospital
0.07%	Working at a law firm
0.07%	Working in a doctor's office
0.07%	Working in a hair salon
0.07%	Writer
0.07%	Writing novels
0.07%	X-ray technician
0.07%	Youth director
0.07%	Youth ministry pastor

44.18%	Yes, I plan to have a job at age 30 but don't know what type of job I will have.
1.25%	No, I don't plan to have a job at age 30.
0.37%	Multiple Responses

20. How far in school do you think your parents or guardians want you to go?

(Mark **ONE** RESPONSE that reflects the highest level of education that you think your parents or guardians want you to achieve.)

N = 1423; Missing=32

1.55%	Not finish high school
6.96%	Graduate from high school or earn my GED
1.90%	Attend college but not complete a degree
10.68%	Complete a certificate or associate's degree
19.89%	Complete a bachelor's degree
24.17%	Complete a master's degree
25.44%	Complete a doctoral degree
8.36%	Don't know
1.05%	Multiple responses

Part IV: Beliefs and Opinions About Self/School

21. How much do you agree or disagree with the following statements? (Mark **ONE** response for each item)

	Strongly Disagree	Disagree	Agree	Strongly Agree	Multiple responses	N (Missing)
a. Most of the information we learn in school is useful for everyday life.	7.67%	34.20%	47.71%	10.34%	0.07%	1421 (34)
b. Most of the information we learn in school will be useful for college or further training.	2.54%	7.56%	59.22%	30.67%	0.00%	1415 (40)
c. Most of the information we learn in school will be useful for my career.	6.09%	25.09%	52.94%	15.80%	0.07%	1411 (44)

22. How many times did the following things happen in the first half of **this school year**?

	Never	1-2 Times	3-4 Times	5 or More Times	Multiple responses	N (Missing)
a. I was late for school.	25.30%	43.01%	20.10%	11.60%	0.00%	1423 (32)
b. I cut or skipped classes.	72.90%	16.73%	5.86%	4.16%	0.35%	1417 (38)
c. I was absent from school.	13.15%	35.75%	28.78%	22.32%	0.00%	1407 (48)
d. I was put on in-school suspension.	70.68%	21.25%	4.89%	3.19%	0.00%	1412 (43)
e. I was suspended out of school.	79.83%	12.78%	4.69%	2.63%	0.07%	1408 (47)

	Never	1-2 Times	3-4 Times	5 or More Times	Multiple responses	N (Missing)
f. I was expelled from school.	93.68%	3.69%	1.42%	0.99%	0.21%	1408 (47)
g. I went to class without my homework finished.	18.53%	37.27%	23.20%	20.93%	0.00%	1414 (41)
h. I went to class without pencil, paper, book, or other necessary supplies.	43.63%	32.16%	11.68%	12.46%	0.07%	1421 (34)

Part V: Demographics

23. What grade are you enrolled in this school year (2008-09)?

N = 1455; Missing=0

0.00 %	9th grade
100.00%	10th grade
0.00%	11th grade
0.00%	12th grade
0.00%	Multiple responses

24. Since the beginning of 9th grade, how many times have you changed schools? DO NOT count changes that occurred only because you graduated to another grade level.

N = 1387; Missing=68

_____ times zero: ; one: ; two: ;

82.77%	0
10.89%	1
3.10%	2
2.24%	3
0.43%	4
0.36%	5
0.07%	6
0.07%	8
0.07%	63

25. What is your gender?

N = 1450; Missing=5

44.55%	Male
55.31%	Female
0.14%	Multiple Responses

26. Which of the following best describe your race/ethnicity? (Mark ALL THAT APPLY)

N = 1442; Missing=13

1.04%	American Indian or Alaskan Native
1.66%	Asian
50.42%	Black or African American
3.12%	Hispanic or Latino
0.76%	Native Hawaiian or Other Pacific Islander

34.81%	White
` 8.18%	Mutlirace

27. How old are you today?

N = 1444; Missing=11

0.07%	13
0.07%	14
3.74%	15
76.87%	16
17.17%	17
1.73%	18
0.35%	19 or older
0.00%	Multiple responses

28. What is the highest level of education that your parents [or guardians] completed? Indicate the highest level of education for your mother [or female guardian] and father or [male guardian]. (Mark only **ONE** answer for each parent or guardian.)

	Mother/female Guardian	**Father/male Guardian**
a. Did not finish high school	5.42%	7.65%
b. Graduated from high school or earned a GED	18.87%	23.33%
c. Attended college but did not complete degree	11.64%	9.77%
d. Completed a certificate or associate's degree	12.08%	8.48%
e. Completed a bachelor's degree	13.45%	10.45%
f. Completed a master's degree	10.92%	8.11%
g. Completed a doctoral degree	1.66%	2.42%
h. Don't Know	11.14%	16.59%
i. Does Not Apply	1.01%	2.58%
j. Multiple responses	13.81%	10.61%
k. *N* (missing)	1383 (72)	1320 (135)

Thank you for taking the time to take our survey!

Do you have any comments you would like to make about anything in the survey?

Career Clusters (underlined and in **bold**) and **High School Majors** (listed under clusters)

A. Agriculture, Food & Natural Resources
A1. Food Products and Processing Systems
A2. Plant Systems
A3. Animal Systems
A4. Power, Structural & Technical Systems
A5. Natural Resources Systems
A6. Environmental Service Systems
A7. AgriBusiness Systems

B. Architecture & Construction
B1. Design/Pre-Construction
B2. Construction
B3. Maintenance/Operations

C. Arts, Audio/Video Technology & Communications
C1. Audio and Video Technology and Film
C2. Printing Technology
C3. Visual Arts
C4. Performing Arts
C5. Journalism and Broadcasting
C6. Telecommunications

D. Business, Management & Administration
D1. Management
D2. Business Financial Management & Accounting
D3. Human Resources
D4. Business Analysis
D5. Marketing
D6. Administrative & Information Support

E. Education & Training
E1. Administration and Administrative Support
E2. Professional Support Services
E3. Teaching/Training

F. Finance
F1. Financial & Investment Planning
F2. Business Financial Management
F3. Banking & Related Services
F4. Insurance Services

G. Government & Public Administration
G1. Governance
G2. National Security
G3. Foreign Service
G4. Planning
G5. Revenue and Taxation
G6. Regulation
G7. Public Management and Administration

H. Health Science
H1. Therapeutic Services
H2. Diagnostic Services
H3. Health Informatics
H4. Support Services
H5. Biotechnology Research and Development

I. Hospitality & Tourism
I1. Restaurants and Food/Beverage Services
I2. Lodging
I3. Travel & Tourism
I4. Recreation, Amusements & Attractions

J. Human Services
J1. Early Childhood Development & Services
J2. Counseling & Mental Health Services
J3. Family & Community Services
J4. Personal Care Services
J5. Consumer Services

K. Information Technology
K1. Network Systems
K2. Information Support and Services
K3. Interactive Media
K4. Programming and Software Development

L. Law, Public Safety, Corrections & Security
L1. Correction Services
L2. Emergency and Fire Management Services
L3. Security & Protective Services
L4. Law Enforcement Services
L5. Legal Services

M. Manufacturing
M1. Production
M2. Manufacturing Production Process Development
M3. Maintenance, Installation & Repair
M4. Quality Assurance
M5. Logistics and Inventory Control
M6. Health, Safety and Environmental Assurance

N. Marketing, Sales & Service
N1. Management and Entrepreneurship
N2. Professional Sales and Marketing
N3. Buying and Merchandising
N4. Marketing Communications and Promotion
N5. Marketing Information Management and Research
N6. Distribution and Logistics
N7. E-Marketing

O. Science, Technology, Engineering & Mathematics
O1. Engineering and Technology
O2. Science and Math

P. Transportation, Distribution & Logistics
P1. Transportation Operations
P2. Logistics Planning and Management Services
P3. Warehousing and Distribution Center Operations
P4. Facility and Mobile Equipment Maintenance
P5. Transportation Systems/Infrastructure Planning, Management and Regulation
P6. Health, Safety and Environmental Management
P7. Sales and Service

Creation of the Variables Used for Analysis of Responses to Q3-Q5f and Q7a-Q8 of the Student Survey to Adjust for Skip Pattern Errors

The first part of the *Student Engagement/POS Experiences Survey* includes 12 questions that inquire about a student's coursework and career planning. In this section of the survey, there are two instances when a student's response to a question dictates which question should be next answered: question 2 (Q2) and question 6 (Q6). Directions beside the answer choices for these two questions indicate whether the student should continue to the next question or skip to a subsequent question.

Q2 is the first item that includes directions to skip certain questions depending on the student's response to this question. Q2 asks if the student has selected a high school major within a career cluster. If the student responds that she has not selected a major ("No") or is not sure ("Don't Know"), arrows beside those response choices prompt the student to go to Q6 on page 2. The student should only respond to Q3, Q4, and Q5a-f if she responds that she has selected a major ("Yes"). In addition, if the student responds that she has selected a major in question 2, a subsidiary question (Q2a) asks her to write the selected high school major on the line below. Likewise, Q6 asks if the respondent has put together a "'career plan' or 4-year 'Individual Graduation Plan (IGP)'" that outlines a series of courses that the respondent will take throughout high school. If the student responds that she has not done this ("No") or is not sure ("Don't Know"), then the student should skip to question 9a on page 4. Because questions 7a-f (Q7a-f) and 8 (Q8) reference the student's experience putting together a career plan or 4-year IGP, the student should only complete those items if she responded "Yes" to Q6.

During the data entry process, it became apparent that many respondents did not skip questions appropriately. In fact, in almost 30 percent of the surveys analyzed, respondents did not skip questions correctly after responding to Q2 or Q6. To circumvent eliminating these surveys altogether, new variables were created for Q3, Q4, and Q5a-f, and for Q7a-f and Q8. These new variables included an additional data code created to indicate when a question was not skipped appropriately and the response should not be included in the analysis ("Created Not Applicable," i.e., "Created NA"). Relative frequencies were created for Q3 – 4 under the following conditions:

- The respondent responded "Yes" to Q2
- The respondent responded "Yes" to Q2, even if they didn't report a major for Q2a
- The respondent did not respond to Q2 but reported a major for Q2a
- The respondent responded "No" or "Didn't Know" to Q2 but reported a major for Q2a
- The respondent responded "No" or "Didn't Know" to Q2, did not report a major for Q2a but responded "Don't Know" to both Q3 and Q4

Because Q5a-Q5f involve agreement with outcomes associated with having a high school major and career cluster, the surveys where respondents indicated that they did not have a major or were not sure they had selected a major and did not list a major were not included in the analysis, that is, they were "Created NA." Relative frequencies were created for Q5 under the following conditions:

- The respondent responded “Yes” to Q2
- The respondent responded “Yes” to Q2, even if they didn’t report a major for Q2a
- The respondent did not respond to Q2 but reported a major for Q2a
- The respondent responded “No” or “Didn’t Know” to Q2 but reported a major for Q2a

The schematic below summarizes the creation of the new Q3Analysis-Q5fAnalysis variables.

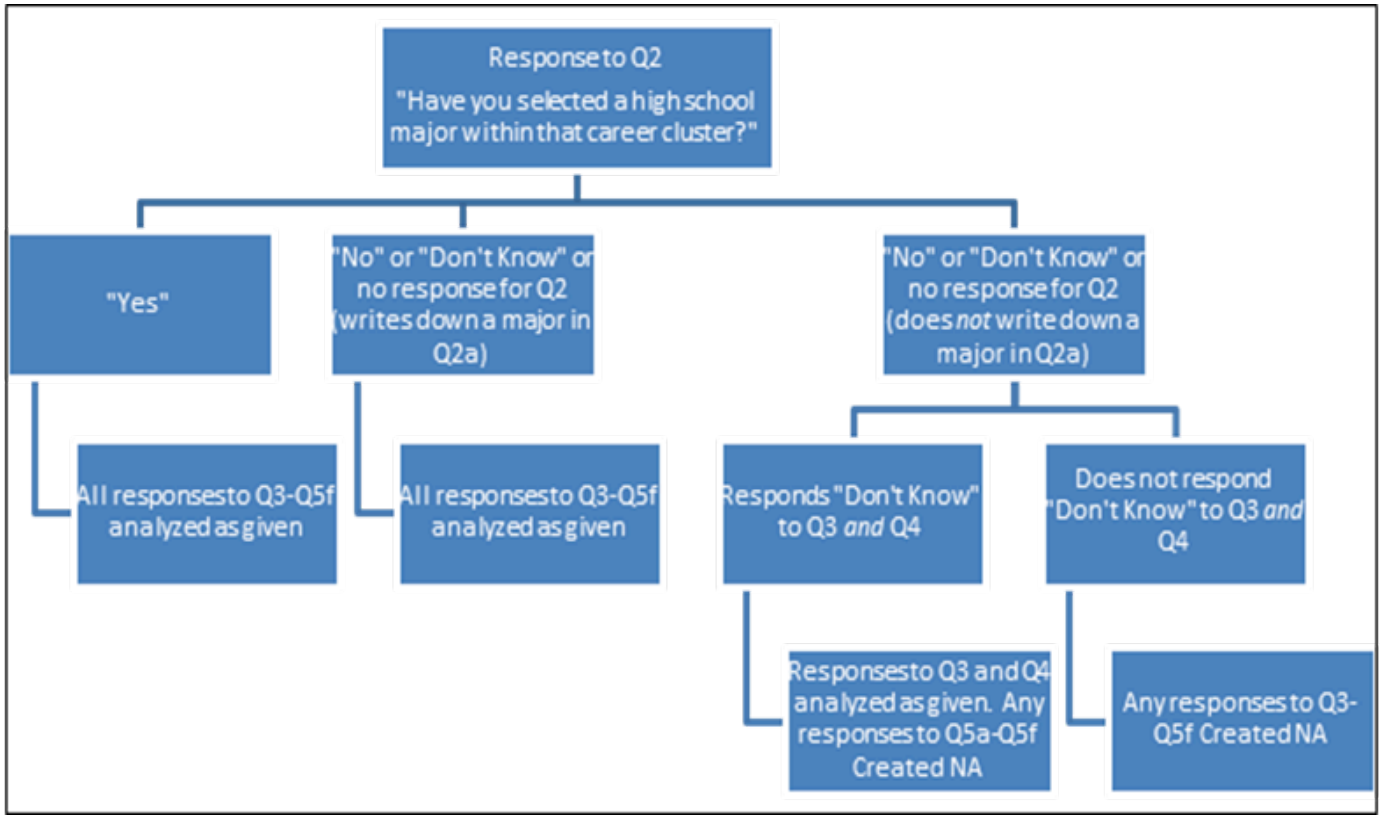

Figure G-1. Creation of the Q3Analysis-Q5fAnalysis Variables

The analysis of the questions following the second instance when survey respondents were prompted to skip or continue (Q6) was straightforward. If a student answered that she had not put together a career plan or IGP (“No”) or that she did not know (“Don’t Know”) whether she had put together a career plan or IGP, then any response for Q7a-Q8 was “Created NA.” Figure 2 highlights when a student’s responses following Q6 were analyzed as provided or “Created NA.”

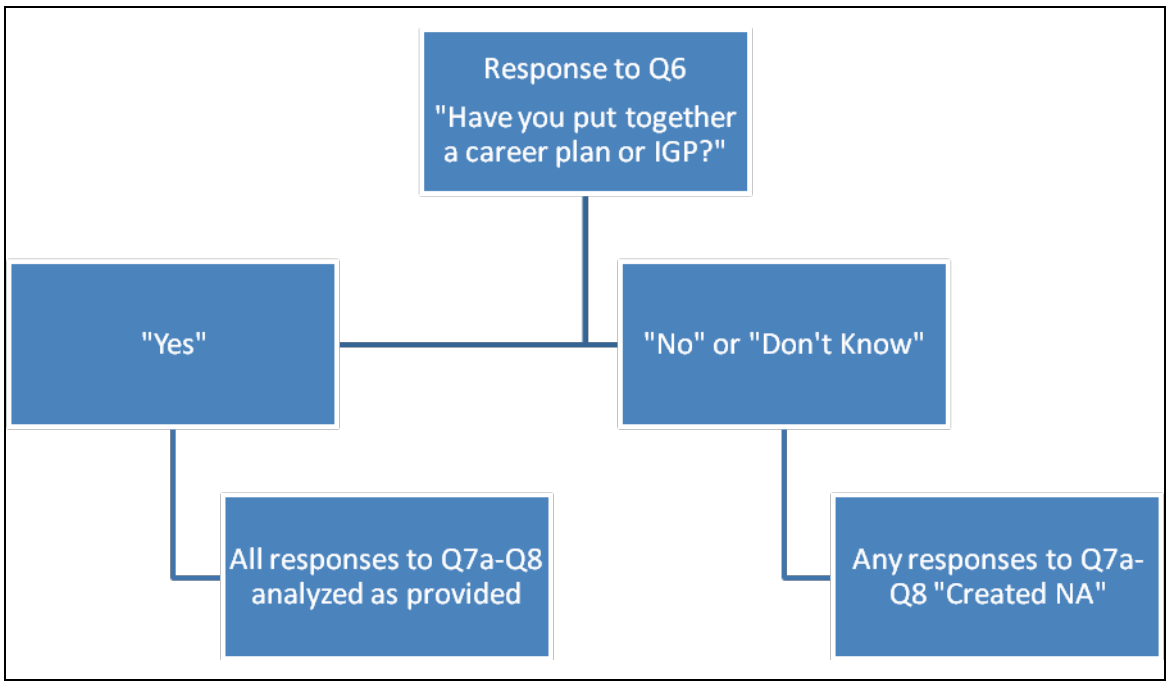

Figure G-2. Creation of the Q7aAnalysis-Q8Analysis Variables

Appendix H

2008-2009 and 2009-2010 Career Specialists/Guidance Personnel Accountability Report Surveys

Career Specialists/Guidance Personnel Accountability Report

THIS DOCUMENT MUST BE COMPLETED ON LINE!!

[You will be notified when the on-line document is available]

Reporting Period: ☐ **1st (August –December 31)** **DUE JANUARY 12, 2009** ☐ **2nd (January 1–Last Day of School)** **DUE JUNE 15, 2009**

Name of School:_____ Names of feeder schools whose activities are included in this report:

District :_____ _____

Career Specialist Name(s): _____ GCDF Certification # _____

_____ GCDF Certification # _____

_____ GCDF Certification # _____

Career Specialist's Supervisor: _____

ACTIVITIES ***Note; Please report <u>unduplicated</u> numbers served as a result of activities delivered during this reporting period. The numbers reported should not exceed the student population.***	**COLUMN A**	**COLUMN B** 6th	7th	8th	9th	10th
1. Indicate the number of certified guidance counselors.						
2. Indicate the number of career specialists that are not certified guidance counselors.						
3. Indicate total number of students at this school.						
4. Indicate the number of students enrolled in each grade level.						
5. a. The number of career development and guidance workshops presented for teachers, school counselors, and work-based constituents. b. The number of participants in these activities	# of workshops ____ # of participants ___					

ACTIVITIES ***Note; Please report <u>unduplicated</u> numbers served as a result of activities delivered during this reporting period. The numbers reported should not exceed the student population.***	**COLUMN A**	**COLUMN B** **6th**	**7th**	**8th**	**9th**	**10th**
6. The number of students assisted in identifying and accessing career information and resource material pertaining to various career clusters						
7. The number of educators, parents, and students provided with information on career and technology education programs offered in the district.	Educators _____ Parents _____					
8. The number of students who <u>completed</u> at least one career assessment (either computer-based or paper and pencil) this reporting period.						
9. The number of students who used <u>computer-assisted</u> career guidance systems (SCOIS, KUDER, virtual job shadowing, etc) to explore careers.						
10. The number of eight, ninth, and tenth grade students who attended a conference to develop an individual graduation plan (IGP) *with a parent or guardian*.						
11. The number of eighth, ninth, and tenth grade students who attended a conference to develop an IGP with *a parental designee*.						
12. The number of eighth, ninth, and tenth grade students who attended a conference to develop an IGP *without a parent or parental designee*.						
13. The number of parents provided with information pertaining to career development resources and activities.						
14. The number of ONE TIME career events, career classes, and/or career programming activities coordinated by the career specialist.						
15. The total number of ONGOING career events, career classes, and/or career programming activities attended by students in your school that the career specialist has coordinated with teachers, district personnel, or business partners.						
16. The number of <u>different career occupations</u> within a cluster presented or highlighted during the various career development activities for parents and students.						

An Accountability Report must be completed and submitted for each middle and high school in every district. A copy of the report should be kept on file, along with documentation of activities, resources created, and programming examples.

<u>For schools not funded with a career specialist from E.E.D.A funds, complete information for questions 1-4, and 10- 12.</u>

Career Specialists/Guidance Personnel Accountability Report

THIS DOCUMENT MUST BE COMPLETED ON LINE at www.ed.sc.gov

Reporting Period: ☐ **1st (August –December 31)** **DUE JANUARY 8, 2010** ☐ **2nd (January 1–Last Day of School)** **DUE JUNE 11, 2010**

An Accountability Report must be completed and submitted for each middle and high school in every district. A copy of the report should be kept on file, along with documentation of activities, resources created, and programming examples.

Name of School:_____ ☐EEDA funded career specialist ☐ No EEDA funded career specialist

District :_____ Names of feeder schools whose activities are in this report: _____

Career Specialist Name(s): _____ GCDF Certification (if attained since completing EVF)# _____

_____ GCDF Certification # _____

_____ GCDF Certification # _____

Career Specialist's Supervisor: _____

ACTIVITIES ***Note: Please report <u>unduplicated</u> numbers served as a result of activities delivered during this reporting period. The numbers reported in each question should not exceed the student population for that grade.***	**COLUMN A**	**COLUMN B** **6th**	**7th**	**8th**	**9th**	**10th**	**11th**
1. Indicate the number of certified guidance counselors.							
2. Indicate the number of career specialists that are not certified guidance counselors.							
3. A. The number of career development and guidance workshops presented for teachers, school counselors, and work-based constituents B. The number of participants in these activities	# of workshops ____ # of participants ___						
4. The number of career events, career classes, and/or career programming activities conducted by the career specialist and the number of students	Activities _____						
5. The number of career events, career classes, and/or career programming activities conducted by someone other than the career specialist (teacher, district staff, military collaborative, business partners, etc)							
6. The number of parents (Column A) and students (Column B) assisted in identifying and accessing career information and resource material pertaining to various career clusters	Parents _____						

ACTIVITIES ***Note: Please report <u>unduplicated</u> numbers served as a result of activities delivered during this reporting period. The numbers reported in each question should not exceed the student population for that grade.***	**COLUMN A**	**COLUMN B** **6th**	**7th**	**8th**	**9th**	**10th**	**11th**
7. A. The total number of 16 National Career Clusters presented to parents and students B. Estimate of <u>different career occupations</u> within a major presented to parents and students	Clusters _____ _____1-5 _____ 5-10 _____ 10+						
8. The number of educators (Column A), parents (Column A), and students (Column B) provided with information on majors offered in the district	Educators _____ Parents ____						
9. The number of students who <u>completed</u> at least one career assessment (either computer-based or paper and pencil) this reporting period							
10. The number of different career assessments used to assess each grade							
11. The number of students who used <u>computer-assisted</u> career guidance systems (SCOIS, KUDER, virtual job shadowing sites, etc) to explore careers							
12. The number of ELOs scheduled using: A. Connect2Business B District created system C. Online system other than C2B or district created system D. Manual System							
13. For non-guidance certified career specialist: A**.** The number of students assisted in pre-IGP Conferences B. The number of e-IGPs pre-populated			A B				

*Comments:*_____