Assessment of the Florida College and Career Readiness Initiative: Year 2 Report

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Abstract

The Florida College and Career Readiness Initiative is a statewide policy that mandates college placement testing of 11th-graders who meet high school graduation criteria but are unlikely to meet college readiness criteria. Students who score below college-ready on the Postsecondary Education Readiness Test (PERT) are required to take math and English/language arts college readiness and success courses in 12th grade. This report discusses qualitative feedback from students, teachers, district administrators, and college faculty and staff from the 2013/14 school year. It examines how educators perceive the effectiveness of the initiative and barriers to implementation, what the grade 12 courses look like in practice, how K–12 and postsecondary institutions collaborate around the initiative, what types of promising practices Florida's state colleges use to prepare students for college and careers, and what high school students think could be done to better prepare them for post–high school plans.

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Executive Summary

The Florida College and Career Readiness Initiative (FCCRI) is a statewide program designed to assess the college readiness of high school students in 11th grade, and for those assessed as not college-ready, to provide instruction in the 12th grade that will lead to their college success. The assessment used is the Postsecondary Education Readiness Test (PERT), which includes math and reading/writing components.

This report describes feedback CNA obtained during the 2013/14 school year about the strengths and weaknesses of the FCCRI and ways to increase its effectiveness, particularly as it relates to improving those 12th grade college readiness and success (CRS) courses.

This feedback was obtained through a survey of 109 CRS course teachers in 89 schools and 33 districts; site visits to six school districts, where we interviewed 24 CRS teachers in 12 schools, 11 high school counselors, and seven district curriculum specialists and observed eight CRS classes; and reviews of essays from 329 CRS course students. We also interviewed a mix of 36 administrators and instructors at six nearby state colleges.

The FCCRI's effectiveness and impediments

- **The FCCRI targets students who too often are given inadequate attention— those who test below college-ready in math and/or in reading/writing but have a chance of catching up during their senior year.** The targeted students fall within distinctly different subgroups, however, with distinctly different educational needs, as described below.

  - <u>Students interested in going to college who are close to but not quite college-ready</u>: The FCCRI is perceived to be most effective at meeting the needs of these students, because they need only small gains in hard and soft skills—skills teachers are best equipped to teach.

  - <u>Students interested in going to college but who are far from college-ready</u>: The FCCRI is perceived to be less effective at meeting the needs of these students, because it is very challenging to get them college-ready in a single school year.

- o <u>Students interested in developing career-related skills</u>: The FCCRI is perceived to be ineffective at meeting the needs of these students, because very little attention is given to developing those particular skills or describing how those skills can be gained at a state college.

- o <u>Students disengaged in school</u>: The FCCRI is perceived to be especially ineffective at meeting the needs of these students, because too little attention is given (a) to helping these students see the connections among high school, college, and careers and (b) to giving them the individual attention they need.

- **Lack of student engagement is the primary factor limiting the FCCRI's effectiveness.** Two-thirds of CRS teachers report that lack of engagement is a major problem among non–college-bound students, and half report it is a major problem for college-bound students.

How to increase the FCCRI's effectiveness

- **Placing students with different needs into different sections of the CRS courses** was frequently recommended by teachers as a means to focus lessons on what students in particular subgroups need the most. Importantly, grouping together students with similar needs is a key element of Florida's state college developmental-education (dev-ed) programs. Doing this at the K–12 level, however, can be challenging for many reasons, especially in small high schools where there are few CRS sections. But in every class there will be some differences across students, and attention should be given to developing ways to individualize instruction.

- **Improving students' understanding of the connections among high school, college, and careers** was frequently cited by students as a key element of increasing engagement; it is also a strategy recognized in the research literature on college access. This goal could be achieved by:

  - o Allotting more class time to developing realistic post–high school plans and less time to test preparation. This could be done by integrating into the curriculum the type of career planning software and counseling we observed in high school Junior Reserve Officer Training Corps programs and at state college career-counseling centers.

  - o Increasing interaction between college faculty and students by (a) bringing to high schools many speakers from state colleges and universities to describe the full range of their programs, the preparation needed to complete the programs, and the appealing

features of the programs; (b) increasing campus visits by CRS students; and (c) extending dual enrollment to include dev-ed courses.

- **Developing mentoring relationships between students and high school teachers and staff** is a strategy for improving students' college aspirations. It was frequently cited by teachers and students as a desirable step to increase student engagement and help students improve their self-image and belief that they can become college-ready. Indeed, a common student complaint was that no one at their school took the time to talk to them individually about their interests, aspirations, and plans. Personal relationships could be fostered by:

  o Devoting time to counseling students one-on-one or in small groups in conjunction with integrating career and college planning into the curriculum

  o Expanding opportunities for students with a wide range of interests to participate in high school activities that bring them together with faculty outside the classroom, and encouraging participation in those activities.

- **Increasing use of computer-aided instruction and other techniques to assess strengths and weaknesses and to provide individualized instruction to overcome weaknesses** is a promising practice for developmental education. It frequently was cited in interviews with state college faculty as a key means to help college dev-ed students master the material they need to know to become college-ready. While increasing use of computerized systems would probably be effective in high school CRS courses and make more time available to develop students' soft skills and college/career plans, lack of resources is a major impediment to doing this.

- A much more feasible approach would be to **provide more opportunities for CRS teachers to interact with college faculty** to obtain additional materials and identify skills most needed by their students to become college-ready. CRS teachers expressed a strong interest in doing this, as well as in having more opportunities to exchange ideas with fellow teachers.

- **Greater collaboration between K–12 and postsecondary education seems to help smooth post–high school transitions.** A promising way to foster interactions between high school CRS teachers and college dev-ed faculty would be for the colleges to invite both groups to workshops shortly before the start of each school year to exchange information. The topic would be the most feasible and effective ways to improve CRS lessons through identifying materials and activities that are of interest to high school students, providing practical applications of subject matter needed for success in college and

careers, and integrating a variety of class activities such as group work and student presentations.

- Although not directly related to the FCCRI, **giving students access to a much wider range of career-oriented courses** may increase student engagement and career preparation. One way to do this is by giving students the option of attending magnet schools with specialized career and technical programs. The one career and technical education high school we visited had an exceptionally high level of student engagement, to the point where students told us in their essays they worked hard to complete their academic courses so they could take career courses of interest.

Primary and overall conclusions

- **Increasing student engagement is the key to reaching the central goal of the FCCRI**, which is to have more students complete college programs that lead to fulfilling careers.

- **There are promising approaches that should at least be tried out to resolve this difficult and complex problem of lack of student engagement.** Spending more time developing engagement may improve college readiness of CRS students, particularly those who would be the first in their families to attend college.

- One key concern voiced by many teachers and administrators is that only limited progress can be made with the seniors. **Efforts to boost engagement and establish connections among school, college, and careers would be much more effective if started no later than ninth grade.**

Alerting juniors to their college readiness

Most of our year 2 work was directed at increasing the effectiveness of the CRS courses. Nevertheless, alerting juniors that they are not college-ready is an important component of the FCCRI. Some of the feedback we received indicates that even after completing CRS courses, many students are overly optimistic about having the skills needed to complete college work.

One reason why the FCCRI is not more effective at helping students understand the importance of testing college-ready is that many students now are exempt from taking the PERT math exam, due to changes in the eligibility requirements for mandatory PERT testing. Previously, all students took the FCAT math in grade 10, and those scoring a level of 2, 3, or 4 were required to take the PERT math exam in

grade 11. However, the state phased out the FCAT math exam and replaced it with End-of-Course (EOC) exams, which students take at the end of math courses such as Algebra I. Now only students taking the Algebra I EOC exam in grade 10 and scoring a level of 2, 3, or 4 on it are required to take the PERT math exam the next year. But most students take Algebra I in grade 9 or prior (i.e., don't take the EOC exam in grade 10), and so are not required to take the PERT math exam as juniors or to enroll in a math CRS course as seniors.

The implications of this change in policy on the number of students being tested are difficult to gauge because students also have the option to take the PERT math exam to obtain a score that can be used to satisfy the Algebra I EOC requirement for high school graduation. This means that many lower-performing students might be taking the PERT math exam for reasons completely independent of the FCCRI.

Our primary concern, however, is not whether the number of students taking the PERT math exam in grade 11 declined; it is whether fewer students who are not college-ready are being assigned to the math CRS courses in grade 12. These courses review critical skills that students will need to pass for-credit math courses in college. Many of these skills are from Algebra I, Geometry, and Algebra II—courses the high school students may have taken three or four year earlier and need to review.

To offset concerns about over-testing in high school, a reasonable way to assign students to CRS math courses would be to use their most recent math EOC score in grade 11. The exact threshold for placement should be determined by examining the correlation between the EOC scores and PERT scores. This is likely to provide an indicator of college readiness similar to the PERT, while reducing the number of students who need to take the PERT.

In addition, students who believe they are being improperly placed into the math CRS courses could be offered the opportunity to voluntarily take the PERT. If they score college-ready on the PERT, then they could choose to take more-advanced math courses in grade 12. A salutary benefit of making the PERT a route by which students can avoid being assigned to the math CRS courses is that it addresses concerns voiced by some teachers that students do not take the PERT seriously (because they do not understand the implications of scoring below college-ready).

A related suggestion would be to increase flexibility in the CRS course requirement by providing students with low EOC and/or PERT scores in math the option of taking more-advanced math courses in grade 12 in lieu of the CRS courses. This option should be considered by examining the correlation between pass rates in more-advanced courses with college readiness test scores, and the correlation between performance in more-advanced courses and performance in college-level math courses. Flexibility should be limited to the extent that performance in the more-

advanced high school math courses is associated with college readiness and college success.

Finally, the state may want to consider whether to allow students to enroll in career-oriented math courses in lieu of the math CRS courses. The rationale for this suggestion is based on feedback from teachers that some students may benefit more from a course that would help them to see the connections between high school and careers. If this option is considered, students (and parents) would need to receive adequate information and counseling to understand that not taking the math CRS course may substantially reduce the probability of their passing a for-credit math course in college without remediation.

Next steps

Our year 2 feedback indicates that there are many promising practices that can help to make the CRS courses more effective. There are also many individuals with the expertise, knowledge, and willingness to disseminate ideas to increase effectiveness, but not a lot of resources available to organize and disseminate such information.

Thus, CNA plans to use our resources from the federal grant that funds this project to develop and hold regional forums in at least three locations in Florida aimed at providing ideas and materials to increase CRS course effectiveness. To do this, we will create working groups that will enlist the aid of knowledgeable individuals throughout Florida to identify the specific practices and materials that are most likely to achieve that goal. The forums will be developed during the 2014/15 school year and held shortly before school begins, in August 2015.

Each working group will have subcommittees focusing on improving (a) college and career planning to increase student engagement; (b) instructional materials and techniques (separately in math and English/language arts); and (c) collaborations among Florida's high schools, districts, and colleges.

We are actively recruiting volunteers to serve on these working groups. Anyone interested in joining one of these groups can contact Dr. Christine Mokher, Principal Investigator, at mokherc@cna.org.

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Glossary

AP	Advanced Placement
CRS	college readiness and success
CTE	career and technical education
dev-ed	developmental education
ELA	English/language arts
EOC	End-of-Course assessment
FAFSA	Free Application for Federal Student Aid
FCAT	Florida Comprehensive Assessment Test
FCCRI	Florida College and Career Readiness Initiative
FIPSE	Fund for the Improvement of Postsecondary Education
FLDOE	Florida Department of Education
GPA	grade point average
¡HACER!	Hispanic Access to College Education Resources project
IT	information technology
JROTC	Junior Reserve Officer Training Corps
NCAA	National Collegiate Athletic Association
PERT	Postsecondary Education Readiness Test
SB	Senate Bill
SIGI^3	System of Integrated Guidance and Information
SY	school year

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Introduction

Purpose

This report summarizes the key findings from the second year of a five-year study evaluating the statewide Florida College and Career Readiness Initiative (FCCRI), currently consisting of college readiness testing of high school juniors, followed by mandatory enrollment in math and English/language arts (ELA) college readiness and success (CRS) courses as seniors for those students who did not test college-ready.

This study is funded by the U.S. Department of Education and carried out by the CNA Corporation, a nonprofit research organization in Northern Virginia, in collaboration with the Florida Department of Education (FLDOE). The purpose of the study is to gain a comprehensive understanding of the strengths and weaknesses of the FCCRI and to provide suggestions for improvement from the viewpoint of a range of participants—high school students, teachers, and district administrators, as well as college faculty and staff.

In this year 2 report, we describe findings from a qualitative evaluation that includes data from a statewide survey of 109 CRS teachers; discussions with administrators, staff, and instructors at 12 high schools, six district offices, and six community colleges;[1] classroom observations of eight CRS classes; and essays from 329 high school students taking CRS courses.

The FCCRI began in school year (SY) 2008/09. Initially, testing was voluntary, as was the follow-up enrollment in the CRS courses; we refer to that program as the "voluntary" FCCRI. In SY 2011/12, college readiness testing on the Postsecondary Education Readiness Test (PERT) became mandatory for juniors who had mid-level scores as sophomores on the Florida Comprehensive Assessment Test (FCAT) and/or the Algebra I End-of-Course (EOC) assessment; the follow-up enrollment in the CRS

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[1] Florida has 28 public colleges that award associate's degrees; some of these institutions also offer bachelor's degrees. The state refers to these as "state colleges" rather than as "community colleges." Florida's public postsecondary institutions that predominately award bachelor's or higher degrees are referred to as "universities."

courses also became mandatory for seniors who had tested below college-ready on the PERT as juniors. We refer to this current program as the "mandatory" FCCRI.

The primary focus of this report is the 2013/14 school year, which is the second year of the mandatory FCCRI program. We address five research questions:

1. How do educators perceive the effectiveness of the FCCRI and barriers to its implementation?

2. What do CRS courses look like in practice?

3. How do high schools, districts, and colleges collaborate around the FCCRI?

4. What types of promising practices do Florida's state colleges use to prepare students for college and careers?

5. What do students think could be done to better prepare them for post–high school plans?

Outline of the report

This chapter describes the sources of data used for the analysis and provides background information on the sites that participated in this part of the study. Each subsequent chapter addresses one of the research questions listed above.

First, we use teacher surveys and site visit interviews to describe perceptions of the strengths and weaknesses of the FCCRI and changes over time. In particular, we examine the emphasis placed on its various course goals, the curriculum and teaching methods used by the CRS teachers, student engagement in the courses, and the effect of the courses on students' postsecondary plans.

Second, we use site visit interviews with high school CRS teachers and classroom observations to describe curriculum and instruction in CRS courses, the emphasis placed on various goals in the courses, and student engagement in the courses.

Third, we use site visit interviews with instructors and staff at high schools, school districts, and local state colleges to describe collaborations around the FCCRI, and we highlight examples of effective collaboration and identify barriers to greater collaboration.

Fourth, we provide examples of promising practices from Florida's state colleges for developing students' academic and soft skills, as well as for supporting all students to succeed academically and to prepare for careers. We also identify challenges to transferring these practices to the high school level and recommend some of the more feasible promising practices that could be replicated.

Fifth, we use student essays to describe students' post–high school plans, their perspective on how their high school helped shape those plans, and their views on how their high school could have been even more helpful.

We conclude with a discussion of the findings and next steps.

Sources of information

This report includes information from four sources: a statewide survey of teachers, site visits, classroom observations, and student essays. The procedures and materials for collecting information from each source were created by the research team for the purpose of this study. All study participants provided consent to participate, in accordance with institutional review board procedures.[2]

Statewide survey of teachers

The statewide survey data include responses from teachers during the first and second years of the evaluation (Spring 2013 and Spring 2014, respectively). In the first year, we collected feedback on program implementation through a statewide survey of teachers' perceptions of the effectiveness of the FCCRI and impediments reducing its effectiveness (Mokher, Jacobson, Rosenbaum, & LaLonde, 2013). This survey was administered in Spring 2013 to a stratified sample of Florida high school teachers of CRS courses. School size and school performance were used to define the strata.[3]

Our goal in selecting the strata was to place each high school into a group where outcomes and implementation problems were likely to be similar within the group, but different across groups. This allowed us to understand differences in implementation experiences and to arrive at recommendations for increasing the effectiveness of the FCCRI that would apply to all high schools, as well as recommendations that would apply only to high schools facing particular sorts of implementation challenges.

The year 1 survey sample consisted of 225 CRS course teachers in 113 high schools spread across 42 of Florida's 67 school districts.

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[2] This study was approved by Western Institutional Review Board, study number 1143414.

[3] *School size* was defined as the total high school enrollment in the district. *School performance* was defined as the percentage of students with scores of Level 1 or Level 2 on the grade 10 FCAT.

Key conclusions from the year 1 survey were that the FCCRI:

- Was widely regarded as a well-conceived program to improve the readiness of students interested in going to state colleges who were close to testing college-ready.

- Did not do enough to help students who were unengaged in school and uninterested in postsecondary education to understand how they could benefit from attending a state college and becoming more engaged in school.

- Was rarely able to get students who tested far below college-ready adequately prepared for college.

In year 2, we tried to re-survey the 225 CRS teachers in the year 1 sample to determine to what extent their expectations of further increases in the effectiveness of the FCCRI were realized, to what extent previously identified impediments have been ameliorated, what impediments remain, and how they can be ameliorated. The surveys were administered in May 2014 so teachers could reflect on the effectiveness of the FCCRI and any changes made over almost a complete school year.

Among the 225 teachers from the year 1 sample, 29 were no longer at the same school and 37 were no longer teaching a CRS course, so they were not eligible to take the year 2 survey. Of the remaining 159 teachers, 109 completed the survey, a 69 percent response rate. The sample includes teachers from 89 schools and 33 districts. These respondents represent a similar distribution of district performance, small and large districts, teachers' highest degree, and of considerable importance, about the same ratings of the effectiveness of the FCCRI as in year 1. The year 2 respondents, however, are significantly more likely to teach in medium-sized districts, have community college experience, and have eight or more years of experience teaching at the high school level compared with the year 1 sample. This means the responses may not be equally representative of all schools or all CRS teachers.

Figure 16 in the Appendix provides a breakdown of teacher and school characteristics represented in our year 1 and year 2 samples.

Site visit interviews

We conducted site visits to six districts in order to gain a more in-depth understanding of the implementation of the FCCRI in different settings. These districts represent 2 of the 7 large districts in the state, 2 of the 21 medium-sized districts, and 2 of the 39 small districts. Each site visit was to one county, since each Florida county is its own school district. In each district, we visited two high schools,

the district office, and the local state college. This provided a total of 24 sites consisting of 12 high schools, six district offices, and six state colleges.

We limited the selection of districts and high schools to those that participated in our year 1 survey so we could compare baseline characteristics for the two years. We further limited the selection to districts where we could visit one high school where teachers said FCCRI implementation was very effective and another high school where they said implementation was ineffective.[4] This selection helped us identify the factors that facilitate and impede effective FCCRI implementation.

In the first year of the evaluation, we collected information only from high school teachers. In year 2, we collected information from people who could provide a greater range of perspectives on the implementation of the FCCRI. For each high school, we requested to interview at least one person in each of the following roles: math CRS teacher, English/language arts CRS teacher, and high school guidance counselor. At each district office, we requested to interview at least one curriculum specialist; and at each local state college, we requested to interview at least one developmental math chair, one developmental reading chair, one developmental math instructor, one developmental reading instructor, and one academic advisor.

Table 1. Total number of site visit interview participants in Spring 2014, by site type.

Type of site	Role	Participants (#)
High school (N=37 participants)	Math CRS teacher	11
	English/language arts CRS teacher	13
	Guidance counselor	11
	Other high school staff	2
District office (N=7 participants)	Curriculum specialist/ instruction staff	7
State college (N=36 participants)	Developmental math instructor or chair	9
	Developmental reading instructor or chair	9
	Academic advisor	4
	Other college staff	14
	Total (all sites)	80

Note: "Other college staff" includes roles such as Vice President for Instructional Services, Vice President for Academic Affairs, Retention Specialist, Director of Student Success Services, and Testing Coordinator.

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[4] Data demonstrating the actual effectiveness of the FCCRI at each school are not available. As a result, we define effectiveness based on the responses to our year 1 survey of teachers' perceptions of the overall effectiveness of the FCCRI, identifying those districts with the largest difference in effectiveness ratings across schools.

The site visits included a mix of group discussions and individual interviews. A total of 80 people participated: including 37 at high school sites, 7 at district sites, and 36 at state college sites (Table 1).

Classroom observations

We also asked for permission to observe CRS courses taught by the teachers whom we interviewed at high schools that rated the FCCRI as effective. Classroom observations could not be conducted at all effective schools because some districts or schools did not approve this activity, some teachers chose not to participate, and some of the classes occurred at a time that did not align with the site visit schedule. In total, we conducted eight classroom observations across four districts.

For each classroom observation, the observers completed a standardized observation instrument we developed that included four key areas: (1) the model of instruction and activities; (2) student engagement; (3) course content; and (4) non-academic activities that prepare students for college and careers, such as developing soft skills and post–high school plans. [5]

Student essays

We were given permission to conduct an essay contest in all but one of the six districts we visited. Each CRS teacher we interviewed was asked to conduct the contest, which had students write an essay of 500 words or less on the following:

- What are your plans for college and/or career after high school?

- In what ways has your high school helped shape your plans and your ability to successfully realize them?

- In what ways could your high school have been even more helpful in shaping your plans and helping you realize them?

Essays were submitted by the teachers without student names or any other identifying information about the student authors. Teachers were free to use the contest as a voluntary or mandatory requirement and have students write the essay in class or as homework. One grand prize winner and two runner-ups were chosen

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[5] Items in the first two sections of the observation instrument were adapted from Stapleton, LeFloch, Bacevich, and Ketchie (2004). The instrument also included a scale for "engaging students in learning" from Danielson (2013) and a scale for "depth of knowledge" from King and Razzouk (2011).

from each school that submitted at least 15 essays. Grand prize winners received a $100 Visa gift card, and runner-ups each received a $50 Visa gift card.

Essays were judged by members of the research team, and we gave equal weight to each of the following factors: (1) how well the essay linked students' high school experiences to their plans; (2) the soundness of their suggestions for how their high school could have been more helpful; and (3) grammar/spelling and style. We received a total of 329 student essays from 15 CRS teachers (4 math and 11 ELA) in 10 high schools. We obtained information about how the teachers administered the essay contest in each school from a short survey completed by 11 of the participating teachers; its results are summarized in Table 6 through Table 11 in the Appendix.

Background on sites visited

We examined background information on the sites we visited to get a better understanding of the study context. As mentioned, we selected two large districts, two medium-sized districts, and two small districts for the site visits to get a better understanding of how the FCCRI is implemented in different types of settings. [6]

Within each district, we selected one high school where teachers rated the effectiveness of the FCCRI as high in our year 1 survey and one high school where the effectiveness was rated as low.[7] In five of the six districts, there was at least a 2-point difference between the highest-scoring school and the lowest-scoring one in average effectiveness rating, on a 5-point Likert scale. The average effectiveness ratings for the FCCRI for all the high schools we visited ranged from 2.0 to 5.0. The high schools also represented a wide range of performance on the statewide

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[6] Data sources varied: Data on the effectiveness of the FCCRI is from the research team's year 1 survey of CRS teachers. Data on school grades, percentage of students receiving free or reduced-priced lunch, percentage of students from racial/ethnic minority groups, and Title I status are from the 2012/13 school year and were downloaded from the FLDOE school report cards (http://schoolgrades.fldoe.org/). Data on the percentage of 2012 graduates who took the PERT, scored college-ready in math and reading/writing, and attended a postsecondary institution were downloaded from FLDOE's High School Feedback Reports (http://data.fldoe.org/readiness/).

[7] The specific survey question used to rate the effectiveness of each school was: "Overall, how effective has the FCCRI (testing, counseling, course taking) been in helping students in your earliest college-prep course?" Scale ratings were 1 = "not at all effective," 2 = "slightly effective," 3 = "moderately effective," 4 = "highly effective," and 5 = "extremely effective."

accountability "report card," with sites receiving grades from A to F.[8] The schools with the higher grades on the statewide accountability system also tended to have higher ratings of the effectiveness of the FCCRI on the year 1 survey.

Of the 12 high schools visited, 9 are Title I schools. The percentage of students receiving free or reduced-priced lunch ranges from 39 percent to 83 percent, and the percentage of students from racial/ethnic minority groups ranges from 6 percent to 99 percent. There was also substantial variation across sites in the percentage of graduates who took the PERT, scored college-ready in math and reading/writing, and attended a postsecondary institution (Figure 1).

Figure 1.   Ranges of values for the percentage of 2012 graduates at each high school site who took the PERT, scored college-ready in math or reading/writing, or attended a postsecondary institution.
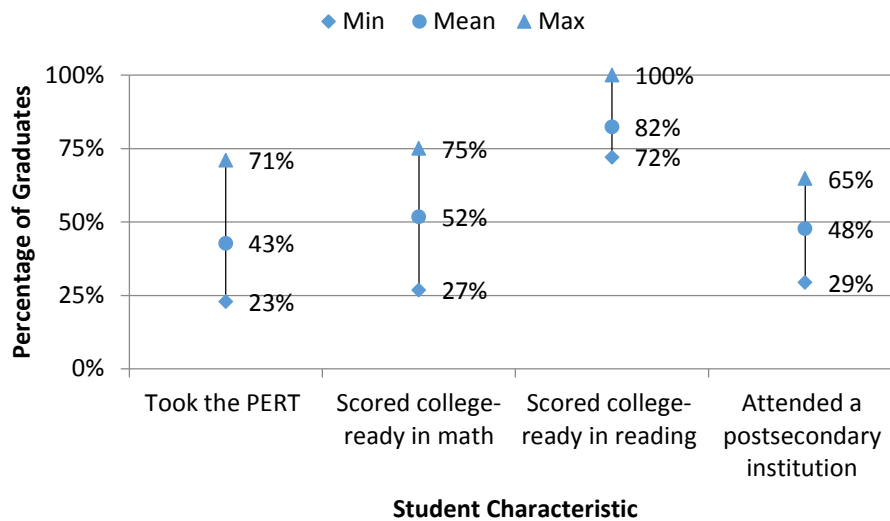
Source: Author's calculations based on data from FLDOE's High School Feedback Reports for 2012 graduates (http://data.fldoe.org/readiness/).

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[8] "Florida School Grades" are based 50 percent on student performance on assessments (FCAT and EOCs) and 50 percent on other components that include participation and performance in accelerated curricula, graduation rates, college readiness (percentage of students scoring college-ready on ACT, SAT, College Placement Test, or PERT), and performance on the U.S. History EOC assessment. See http://schoolgrades.fldoe.org/pdf/1314/Guidesheet2014SchoolGrades.pdf.

This suggests that the scale of the FCCRI testing and remediation varies considerably across high schools. For example, the percentage of graduates who took the PERT ranges from 23 percent in one high school to 71 percent in another high school. It is possible that schools where the majority of students take the PERT may place more emphasis on preparing students for the test than do schools where students taking the PERT are in the minority.[9]

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[9] Florida House Bill 1255 requires students to take the PERT reading/writing test in grade 11 if they score a level of 2 or 3 on the grade 10 FCAT reading exam, or to take the PERT math test if they score a level of 2, 3, or 4 on the grade 10 Algebra I EOC exam. Schools or districts also have the option of allowing additional students to take the PERT. For example, some schools provide the PERT test to students who want to take dual enrollment courses.

RQ1. How Do Educators Perceive the Effectiveness of the FCCRI and Barriers to Its Implementation?

During Spring 2013, we collected feedback on CRS teachers' perceptions of the effectiveness of the FCCRI through a statewide survey. The survey indicated that most teachers supported the goals of the FCCRI, believed that their CRS courses were effective in helping students test college-ready, and predicted that the effectiveness of the FCCRI would increase in the next school year.

In Spring 2014, we re-surveyed the year 1 respondents to examine their current perceptions about the effectiveness of the FCCRI, how those perceptions have changed, and whether teachers' expectations for improvements to the FCCRI have been met.

This year we also conducted visits to six school districts, interviewing high school CRS teachers and administrators as well as college developmental education (dev-ed) instructors and department chairs. We draw on these interviews to supplement what we learned from the CRS teacher survey. We use the term "teacher" to refer to high school teachers, but we use the term "educator" to refer to all of the high school and college personnel we interviewed.

In this chapter, we examine educators' perceptions of the effectiveness of the FCCRI and the impediments reducing its effectiveness in year 2. Overall, we find that:

- Teachers continue to see the FCCRI as moderately effective in meeting its goals. They also remain optimistic that the effectiveness of their CRS courses will improve if they teach them again next year.

- Several educators commented that the FCCRI begins too late—with testing in 11th grade and coursework in 12th grade—to help many students who are far off track for meeting college readiness benchmarks.

- The majority of teachers believe more students will test college-ready as a result of CRS courses, but most of the college personnel interviewed have yet to observe an improvement.

- Teachers continue to report that (a) it is difficult to simultaneously engage the interest of students in "heterogeneous" classrooms where some students test close to college-ready and others test far below college-ready; (b) most non-college-bound students are not engaged in the CRS courses regardless of their academic preparation; and (c) it is difficult to effectively help students who test far below college-ready.

- Some teachers see the severity of impediments declining, others see it as increasing. This indicates that the reform is improving differentially across schools.

- Teachers suggest that PERT scores may not be an accurate measure of college readiness for students. Because the 11th grade PERT does not "count" for high school graduation, teachers report that students do not take the test seriously, particularly students uninterested in attending college.

- While increasing students' abilities to pass the PERT are perceived as one of the most successful components of the FCCRI, increasing student motivation to test well still presents challenges.

Perceptions of the effectiveness of FCCRI in year 2

In this section, we examine CRS course teachers' perceptions of the effectiveness of the FCCRI at reaching its goals overall and the effectiveness of the initiative's separate components. We begin by describing the results derived from the teacher surveys conducted this year and last. We then use information obtained from interviews with educators during this year's site visits to explain the reasons underlying the survey responses.

Teachers see FCCRI as moderately effective, similar to last year

In Spring 2013, our survey asked CRS teachers to rate the FCCRI as a whole, including testing, counseling, and course taking, on a 5-point scale, ranging from 1 ("not effective") to 5 ("extremely effective"). The mean response was 3.2, just above "moderately" effective (Figure 2). In the Spring 2014 survey, the mean response for overall effectiveness was similar at 3.1.

The two surveys also asked teachers to rate five separate components of the FCCRI. In 2013, the mean ratings by component showed almost no variation from the overall

rating, with an average score of between 3.1 and 3.2 for each component. In 2014, the mean ratings showed somewhat greater variation, from 2.9 to 3.3 for each component. The largest changes are for the goals of helping students to select 12th grade courses and to make realistic postsecondary plans.

In 2013, we also asked teachers to predict how effective they believed the FCCRI would be in 2014. At the time, CRS teachers predicted gains in effectiveness of 0.5 to 0.6 on a 5-point scale—considerably greater than the actual changes were.

Figure 2.   Average CRS teachers' ratings of the effectiveness of the FCCRI at achieving various goals.
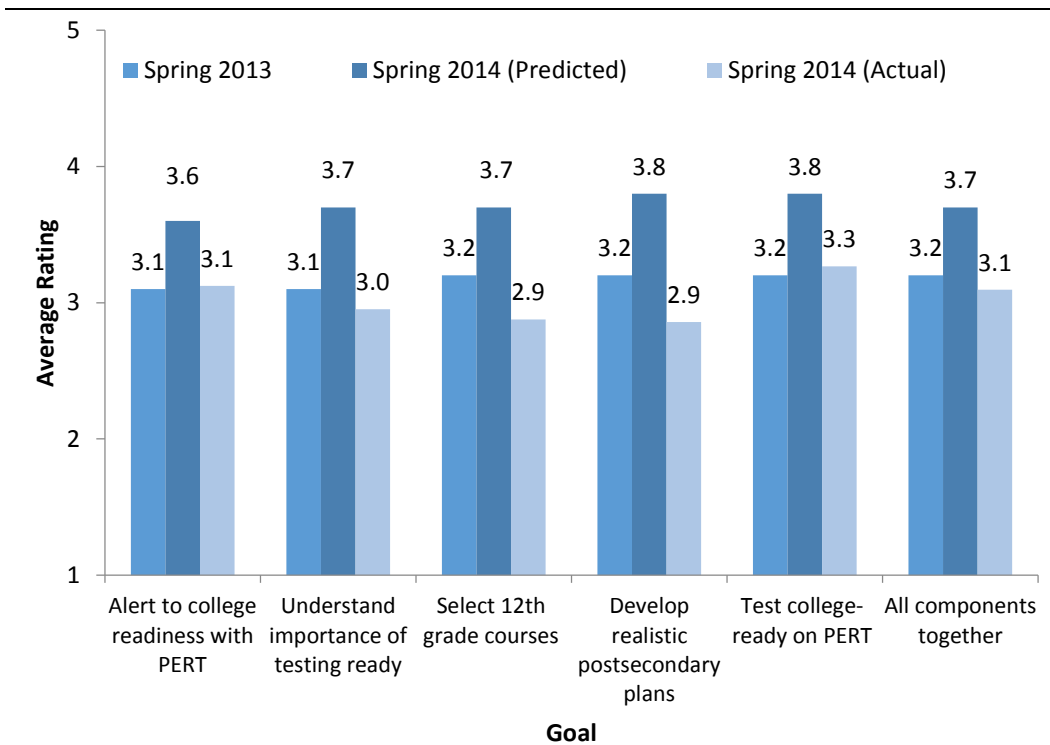
Source: Responses from Spring 2013 (N=225) and Spring 2014 (N=109) CRS course teacher surveys.

Notes: Survey question is "Overall, how effective has the FCCRI (testing, counseling, course taking) been in helping students in your earliest college-prep course?"

Scale ratings are 1 = "not at all effective," 2 = "slightly effective," 3 = "moderately effective," 4 = "highly effective," and 5 = "extremely effective."

Below we present information we obtained from educators during our 2014 site visits explaining what is effective and what is not effective with respect to each FCCRI goal.

Alerting students to whether they are college-ready by giving the PERT to 11th-graders

CRS course teachers and high school counselors generally believe that PERT testing in high school helps alert students to their current college readiness level. This is an important finding because one of the key goals of the FCCRI is to make sure students understand that the FCAT tests achievement of 10th grade skills only, not skills through 12th grade that are needed to demonstrate college readiness. Counselors reported using PERT scores to share information with students about how to improve skills and become more prepared for college. One counselor also appreciated that students get scores in real time to inform next steps in improving readiness.

Several educators suggested, however, that PERT scores themselves may be poor indicators of an individual student's readiness because students testing in the 11th grade often do not take the test seriously. They offered several explanations for this belief. A common refrain was that students are over-tested. The PERT does not count for high school graduation or for passing a course in the 11th grade, and therefore, does not have the same importance to students relative to all the other assessments they take. In addition, some CRS teachers stated that students in their classes do not intend to go to college, so the students didn't care what score they get.

A more serious issue raised by several teachers is whether the PERT test is a valid indicator aligned to college-level work. They claimed that its reading passages are short and easy, its writing section addresses basic grammar, and its math exercises examine basic skills that may not be sufficient for college math. There is a lack of research on the validity of the PERT to validate these claims, however.

Helping students to understand the importance of testing college-ready

Several high school counselors and teachers stated that concerted counseling has helped many students understand the importance of testing college-ready and being academically prepared for college prior to leaving high school. Many interviewees mentioned discussing the time and money associated with taking developmental education courses in college as part of their counseling with students. One district administrator claimed that the FCCRI, with its emphasis on college readiness, has helped focus accountability and resources on grades 11 and 12.

One reason why the FCCRI is not more effective at helping students understand the importance of testing college-ready is that many students now are exempt from taking the PERT math exam due to changes in the eligibility requirements for mandatory PERT testing. Previously, all students took the FCAT math in grade 10, and those scoring a level of 2, 3, or 4 were required to take the PERT math exam in grade 11. However, the state phased out the FCAT math exam and replaced it with EOC exams, which are taken at the end of math courses such as Algebra I. Now only

students taking the Algebra I EOC exam in grade 10 and scoring a level of 2, 3, or 4 on it are required to take the PERT math exam the next year. But most students take Algebra I in grade 9 or prior (i.e., don't take the EOC exam in grade 10), and so are excluded from being required to take the PERT math as juniors or to enroll in a math CRS course as seniors. If there are concerns about over-testing, then their most recent math EOC scores could be used to determine which students should enroll in the math CRS courses, instead of using PERT scores. Any students who prefer to take a more-advanced math course could be given the option of voluntarily taking the PERT in grade 12. If they score college-ready on the PERT, then they could choose to take a more-advanced math course in grade 12.

Another problem is that two major benefits of testing college-ready on the PERT in high school have been eliminated by the 2013 passage of Senate Bill (SB) 1720, which ended requiring state college students who are recent high school graduates to test college-ready on the PERT or even to take dev-ed courses before taking gateway math courses in college.

Helping students to select 12th grade courses that will improve their college readiness

Teachers offered several examples of how the FCCRI is moderately effective at helping students select courses. First, it was generally agreed that mandatory assignment to the CRS courses was effective in countering the "senior slump," where students who had enough credits to graduate left high school entirely or took only non-challenging courses during their senior year.

Further, teachers who viewed this goal favorably talked about the design or content of the CRS course as a reason for why it is a good option for improving college readiness. They said their CRS courses offer summaries of several previous topics, allowing students to refresh their memories and master content, which teachers believe may be a better approach to readiness than introducing new concepts. In addition, one teacher described her CRS course as extending slightly beyond Algebra II, where many students would have topped out without the availability of a CRS course.

Among teachers who did not think the FCCRI was effective at reaching this goal, discussions centered on two main reasons. The first reason, educators claimed, is that many 12th-graders are at a 10th grade academic level or lower, which makes a college readiness course inappropriate. Many educators believe 12th grade is too late to offset deficits that prevent students from being college-ready, and more needs to be done even before the start of high school. The second reason was that the CRS courses are reducing the availability of other courses offered in the same subject areas. While some students are required to enroll in a CRS course even though they would prefer to take a less challenging course, there are other students who might

otherwise take a higher-level course such as Advanced Placement (AP) but are not allowed to do so because they are required to take the CRS course.

Helping students develop realistic post–high school plans

Teachers and counselors offered a few points about what has been effective with respect to helping students develop realistic post–high school plans. Most educators believe the combination of testing and college-preparatory coursework opens students' eyes to what is required for college admissions, success in college, and various careers. These teachers also believe the FCCRI program helps students identify how their current knowledge and skills compare with college-level skills. Other teachers noted that they integrate activities into their CRS courses to help students make better decisions about their post–high school plans. For example, some teachers have students research career interests, while others have students develop college application portfolios. Thus, the FCCRI is effective for helping students interested in attending college to develop realistic plans.

On the other hand, many educators believe that the FCCRI has not been effective at helping students who do not intend to go to college immediately to develop sound postsecondary plans. They said that it is very difficult to help students see the full range of opportunities to develop career interests at various types of postsecondary institutions, understand the benefits of getting career-oriented (as opposed to academic) training beyond high school, and recognize that "academic" skills are important in careers.

Several interviewees also discussed cultural factors as a problem that the FCCRI has not solved. They cited external factors, such as lack of family support, personal problems, or financial hardships, as reasons it is difficult to help students develop realistic postsecondary plans that include college. In addition, counselors noted that they lack time to devote to postsecondary planning or advising. They cited large caseloads and other obligations, such as administering assessments and helping students meet graduation requirements, as barriers to facilitating conversations about postsecondary plans.

Helping students test college-ready on the PERT or other test before they leave high school

Teachers generally agreed that if they are given clear instructions about what their students need to know, then they can design a course that will build that knowledge. Thus, once the topics being tested by the PERT and the types of questions being asked are effectively transmitted to the teachers, they believe they can develop courses that effectively prepare students for the PERT.

The primary impediments to testing college-ready are related to students' motivation to learn the material. Teachers again cited students' lack of interest in becoming

college-ready and lack of understanding of the importance of college readiness (among those interested in going to college) as key reasons the FCCRI is not more effective at helping students test college-ready. Again, the teachers noted that it is unrealistic to expect students who test far below college-ready in grade 11 to make up lost ground in a single year. This is especially true for reading comprehension, where it takes years to build up the vocabulary and reading skills to perform at the college level. Interestingly, math teachers often said they believe they can cover sufficient material for students who came close to passing Algebra I. One math teacher commented that the time delay between taking Algebra I in the 8th or 9th grade and taking CRS math courses in grade 12 may cause students to forget what they learned, but it is possible to refresh students' memories over their senior year. A much bigger problem is helping students learn material that they never mastered.

At the same time, teachers still noted that major impediments are lack of information about the content of the PERT and lack of practice tests. Math teachers also complained about lack of materials and lack of access to computer-aided instruction and diagnostics. In several schools, teachers wanted to switch the focus from PERT test prep to ACT/SAT test prep—in part because much better practice tests and other materials are available for those tests, but also in part because some students who got high scores on those tests would be encouraged to apply to state universities, since the SAT and ACT are a part of the State University System admissions requirements. In addition, the ACT/SAT practice tests provide diagnostic information that helps students identify their individual strengths and weaknesses so they can focus on correcting their deficiencies, and that helps teachers figure out what skills they should emphasize in their lessons. The PERT has a separate diagnostic test, but at extra cost, which most respondents said high schools cannot afford.

Teachers are optimistic for SY 2014/15

The CRS teachers we re-surveyed in Spring 2014 described their expectations for their CRS courses in 2014/15. Overwhelmingly, CRS teachers believe that the effectiveness of their course will improve if they teach it again next year (Figure 3). In particular, English/language arts respondents have higher expectations for their courses next year than CRS mathematics teachers do.

Similarly, teachers surveyed in Spring 2013 reported higher expectations for SY 2013/14 about many goals of the FCCRI program (see Figure 2 above). While teachers judged the effectiveness of the FCCRI very similarly in 2012/13 and 2013/14 (a mean of 3.2 and 3.1, respectively), it appears that they are still optimistic that FCCRI and its components may still improve in 2014/15.

Figure 3.   Expected changes in effectiveness of CRS courses if taught next year.
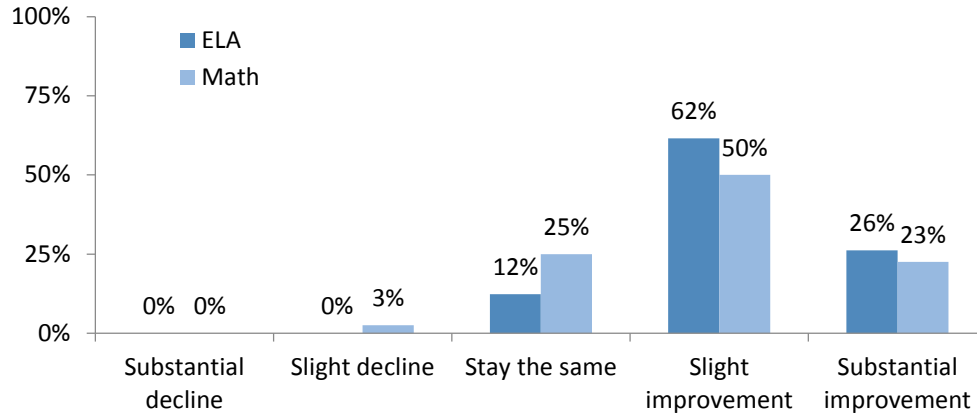
Source: Responses from Spring 2014 CRS course teacher survey. ELA N = 65; Math N = 40.

Notes: Survey question is "To what extent would you expect the effectiveness of your earliest college-prep course to change if you teach the same college-prep course NEXT year?"

Scale ratings are 1 = "substantial decline," 2 = "slight decline," 3 = "stay the same," 4 = "slight improvement," and 5 = "substantial improvement."

Educators mixed about whether college readiness of recent high school graduates has changed

Ultimately, the goal of the FCCRI is to prepare students for college and careers. In this section, we describe perceptions of both high school and college educators about changes in students' college readiness.

College readiness as perceived by high schools

Teachers of CRS courses expect that high percentages of their students (who had not met college readiness benchmarks before) will meet these benchmarks by the end of 12th grade. In 2014, more than 70 percent of survey respondents indicated they believe that at least half of their students will test college-ready by the end of the course (Figure 4). This shows a substantial increase in expectations since the year before, when around half of survey respondents held such high expectations for students. Expectations for students to test college-ready among CRS teachers rose in 2014 despite no improvement in their perception of the FCCRI as a whole, as discussed below.

ELA teachers expect more of their students to be college-ready than do math teachers, however. In 2014, 43 percent of English/language arts CRS course teachers expect at least 75 percent of their students to meet benchmarks, while 31 percent of mathematics teachers expect that same percentage to meet benchmarks.

Figure 4.   Percentage of CRS course students that teachers expect to test college-ready by the end of their senior year.
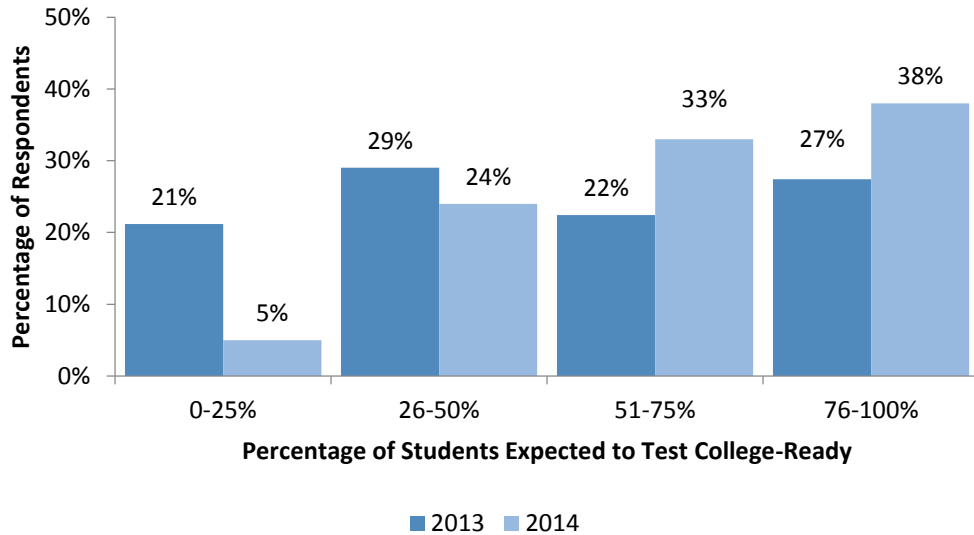
Source: Responses from Spring 2013 (N=208) and Spring 2014 (N=100) CRS course teacher surveys.

Notes: Survey question is "Among 12th-graders in your earliest college-prep class who scored below college-ready on the PERT in the subject area of that course (math, reading/writing), what is your best estimate of the percentage of students who would score college-ready in the subject area of that course if they were to take a college readiness test (PERT, ACT, or SAT) before the end of their senior year?"

The response categories for the percentages of students expected to test college-ready changed slightly between the two surveys. In the 2014 survey, eight teachers predicted that 46–55 percent of students would test college-ready after the course. We distributed these responses equally across the 26–50 percent and 51–75 percent ranges for comparison with 2013 results.

In the interviews, teachers provided several reasons for why their expectations about students' ability to meet college readiness benchmarks increased. One is that the PERT and the End-of-Course Algebra I tests are new, and it takes several years for teachers to learn about the contents of the tests and what help their students need the most. Test-prep for the PERT is especially challenging because it is a computer-adaptive test that teachers are not permitted to take themselves, and few pencil-and-paper practice tests are available.

Despite these challenges, some interview participants are more optimistic about changes over time in helping students to become college-ready. For example, one

district administrator suggested that the district has improved the alignment between CRS course curriculum and college developmental education courses after acquiring more information about those courses from a local college. Another district administrator indicated students have a greater focus on college this year, which may contribute to teachers' beliefs that the students will be more ready for college.

College readiness as perceived by colleges

Interviewees at state colleges (developmental education instructors, advisors, and administrators who oversee services related to admission and retention) provided both a specific rating about changes in students' college readiness (Figure 5) and comments about their perceptions.

Figure 5.   Percentage of state college interviewees who observe changes in the college readiness of recent high school graduates.
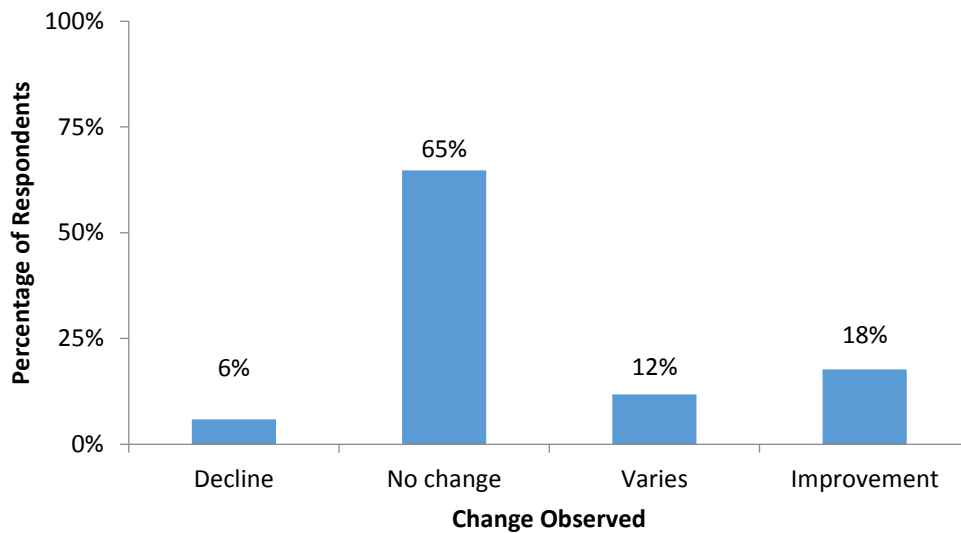
Source: Author's calculations based on data from participants in Spring 2014 college site visits (N=17).

While colleges lack data on whether college readiness of recent high school graduates actually has changed since the FCCRI began, a common perception among college interviewees is that college readiness has not changed in an appreciable way overall, or at least it is difficult to tell whether the FCCRI program is changing the level of college readiness. Nevertheless, some college instructors identify improvements in college readiness, in particular among recent high school graduates relative to older, nontraditional students. They said they believe this improvement might be attributable to CRS courses, but they also noted that the improvement seems to vary by high school. Some college instructors suggested that the improvement in

readiness is specific to academic skills, while other aspects of college readiness (such as independent study skills and self-discipline) have not improved. Finally, some college instructors suggested that perhaps more "marginal" students are enrolling in college as a result of the FCCRI, making it more difficult to judge whether the "average" student is better prepared.

Interview participants also discussed how aspects of college readiness seem to have declined over time, independent of the FCCRI. College academic counselors and advisors noted that many students now have trouble navigating the college experience on their own. Some of them indicated that students lack maturity and the soft skills that help them to be independent learners—even the "bright" students. Similarly, college instructors noted students failing to attend class or complete assignments. Some instructors also noted that many students currently in their developmental education courses are struggling more than have students in the past, even if overall enrollment in developmental education has decreased.

The range of comments and observations about college readiness suggests there are many nuances to understanding and measuring college readiness. Changes might be localized based on school practices or cultural conditions, making it hard to evaluate the FCCRI policy at the state level. There might be increases in college attendance by marginal students, who otherwise would not have enrolled. In addition, there might be competing changes in aspects of college readiness, where academic readiness increases but soft skills decline.

Perceptions of the impediments reducing FCCRI effectiveness in year 2

The year 2 survey asked teachers to what extent they believe impediments identified in year 1 have changed in year 2. These questions were on a 5-point scale and ranged from 1 ("much worse") to 5 ("much better"), with 3 being "no change." Teachers also were asked the extent to which these factors are impediments in year 2.

Teachers identified many potentially important impediments that could reduce CRS course effectiveness. We group these in two categories: (1) classroom-level impediments that include academic heterogeneity (the mix of students close to versus far from college-ready), engagement of college and non-college-bound students, and teaching students who lack clear postsecondary goals and (2) resource-deficiency impediments that include insufficient preparation time for teachers, useful materials, information about PERT, and community college collaboration.

Classroom-level impediments (academic heterogeneity, engagement, and goals)

The year 1 report found that classroom-level impediments, especially academic heterogeneity and the lack of engagement of non-college-bound students, made teaching CRS courses particularly difficult. The year 2 survey indicates that these classroom-level impediments remain a problem, and teachers believe that they limit the effectiveness of the FCCRI program.

Figure 6 compares math and ELA teacher perceptions of classroom-level impediments in the year 2 survey. Teachers of both subjects reported classroom impediments at almost exactly the same rate, with the exception of students' in their classrooms lack of postsecondary goals, where 65 percent of ELA teachers reported it as "important" or "very important" compared with 50 percent of math teachers. The impediment identified by the greatest percentage of teachers (66 percent) is the disengagement of non-college-bound students. Excessively heterogeneous classes also continue to be an issue, with more than half of teachers reporting that this is an "important" or "very important" impediment.

Figure 6.   Percentage of teachers reporting classroom impediments as "important" or "very important," by subject area.
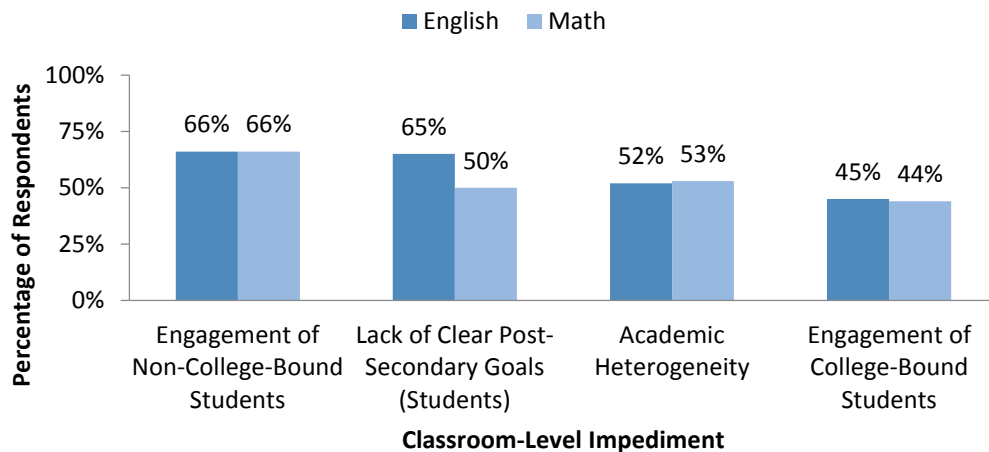
Source: Responses from Spring 2014 (N=109) CRS course teacher survey.

Notes: Survey question is "Rate the extent the following student/parent-based impediments reduce the effectiveness of your earliest college-prep course in helping students become college ready: (1) Lack of engagement among students unlikely to go to college, (2) Students not having clear goals for the future, (3) Having students with a wide range of academic skills in the same class, (4) Lack of engagement among students likely to go to college."

Scale ratings are 1 = "not an impediment," 2 = "very minor impediment," 3 = "minor impediment," 4 = "important impediment," and 5 = "very important impediment."

Importantly, cross-tabs of the survey questions indicate that teachers who believe that there is improvement in one area usually believe there has been improvement in other areas, as well, and vice versa. In other words, teachers in about one-quarter of the classrooms perceive classroom problems as getting better across the board, but as getting worse in about one-quarter.

Figure 7 shows to what extent teachers in the year 2 survey believe each classroom-level impediment to be worse ("slightly worse" or "much worse"), the same, or better ("slightly better" or "much better") relative to their year 1 responses.

Figure 7.   Percentage of teachers reporting classroom difficulties were worse, the same, or improved between SYs 2012/13 and 2013/14.
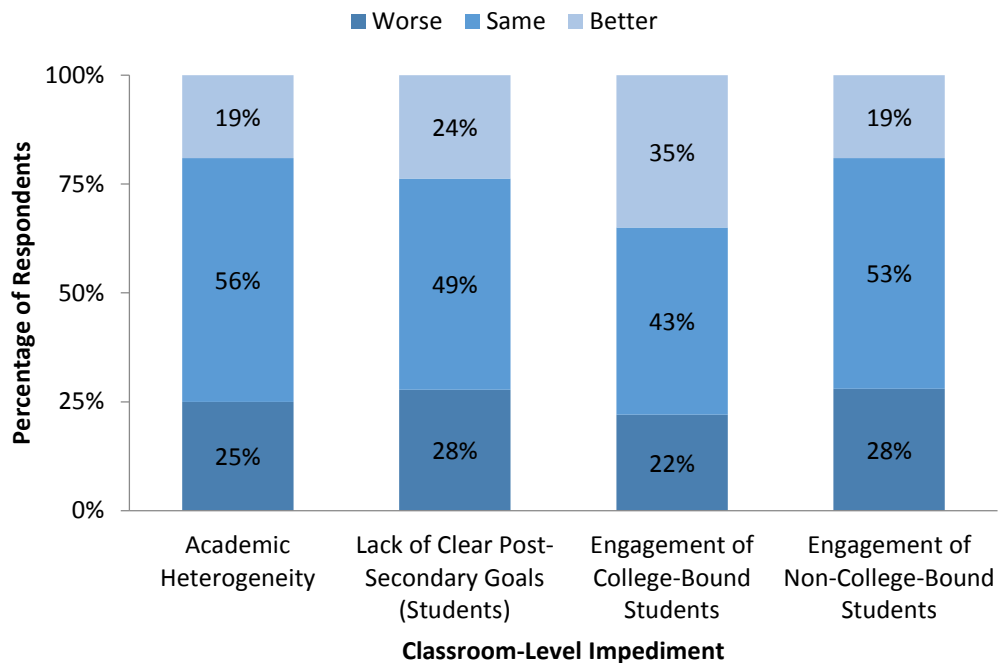
Source: Responses from Spring 2014 (N=109) CRS course teacher survey.

Notes: Survey question is "To what extent have the following potential impediments changed compared with LAST year? (1) Lack of engagement among students unlikely to go to college, (2) Students not having clear goals for the future, (3) Having students with a wide range of academic skills in the same class, (4) Lack of engagement among students likely to go to college."

Scale ratings are 1 = "much worse," 2 = "slightly worse," 3 = "stayed the same," 4 = "slightly better," and 5 = "much better."

An important feature of the figure is that for each impediment, there was considerable movement in both the positive and negative directions. On balance, however, college-bound student engagement was the most likely to be perceived as better, with 35 percent of teachers seeing an improvement compared with 22 percent

seeing a decline. The engagement of non-college-bound students was the least likely to be reported as improved, with 19 percent of teachers seeing an improvement compared with 28 percent seeing a decline.

Overall, the results suggest that teachers continue to have concerns about too much academic heterogeneity and too many unengaged students in their classrooms. Where the CRS classes mainly include targeted college-bound students who have similar academic achievement levels, teachers report having fewer difficulties. When their classes include students who aren't college bound or who have varying achievement levels, teachers report having greater difficulty effectively teaching CRS courses.

Importantly, cross-tabs of the survey questions indicate that teachers who believe that there is improvement in one area usually believe there has been improvement in other areas, and vice versa. In other words, teachers in about one-quarter of the classrooms perceive classroom problems as getting better across the board, but as getting worse in about one-quarter.

Figure 8 (on page 24) displays results separately for the two subject areas. ELA teachers reported the biggest net improvement, 16 points, in engagement of college-bound students, with 38 percent perceiving the problem as better versus 22 percent as worse. ELA teachers also reported the biggest net decline, 13 points, in academic heterogeneity, with 17 percent perceiving the problem as better and 30 percent as worse.

Among math teachers, the biggest net gain, 10 points, is for engagement of college-bound students, with 32 percent better versus 22 percent worse; and the biggest net decline, 8 points, is for the engagement of non-college-bound students, with 8 percent better versus 20 percent worse.

For math and ELA teachers, then, engagement of non-college-bound students, which is seen as an "important" or "very important" impediment in 2014 by 66 percent of all teachers, got substantially worse over the last year: by 10 points for ELA teachers and by 8 points for math teachers.

Academic heterogeneity, which is seen as an "important" or "very important" impediment by about 52 percent of all teachers in 2014, got substantially worse for ELA teachers, but modestly better for math teachers.

On the more positive side, engagement of college-bound students, which is an "important" or "very important" impediment for about 44 percent of the all teachers, got substantially better: by 16 points for ELA teachers and by 10 points for math teachers.

Figure 8.   Percentage of teachers reporting classroom difficulties were worse, the same, or improved between year 1 and year 2 surveys, by subject area.
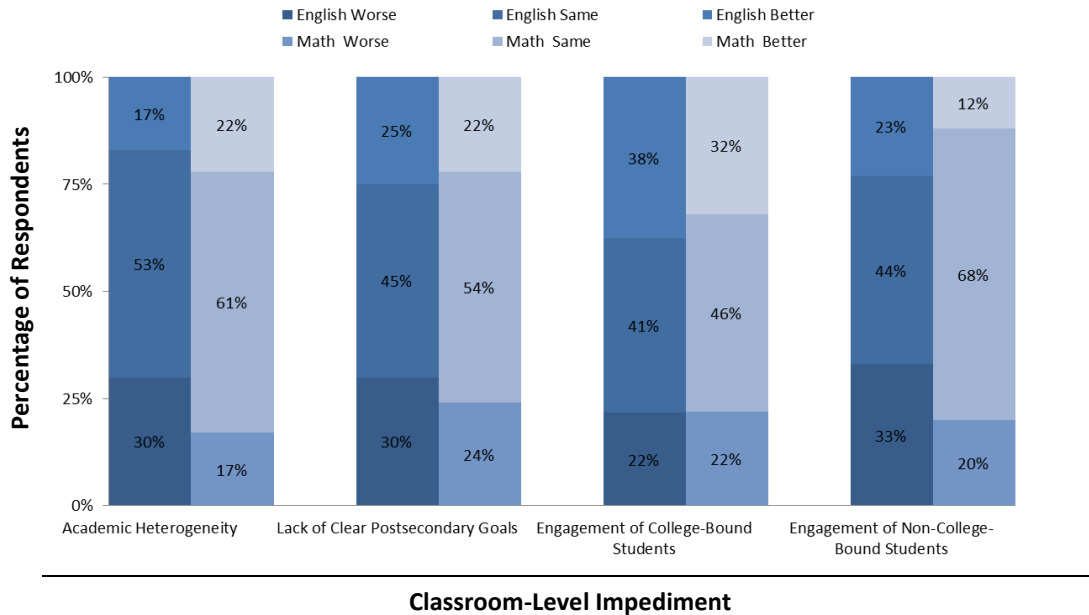
Source: Responses from Spring 2014 (N=109) CRS course teacher survey.

Notes: Survey question is "To what extent have the following potential impediments changed compared with LAST year? (1) Lack of engagement among students unlikely to go to college, (2) Students not having clear goals for the future, (3) Having students with a wide range of academic skills in the same class, (4) Lack of engagement among students likely to go to college."

Scale ratings are 1 = "much worse," 2 = "slightly worse," 3 = "stayed the same," 4 = "slightly better," and 5 = "much better."

Taken together, these results strongly reinforce the view that the college readiness and success courses (as their name implies) can be effectively taught to college-bound students, but that teachers find it very difficult to engage the interests of non-college-bound students. Other chapters provide additional evidence that more balance is needed between developing college-ready and career-ready skills. In particular, student essays tell us that it would be highly worthwhile to put less emphasis on teaching to the test and more emphasis on solving problems that occur in everyday life and on increasing the motivation of non-college-bound students by helping them to see the benefits of getting some type of postsecondary career-oriented training.

These results also suggest that teachers find it much more difficult to teach CRS classes where the students testing close to college-ready are mixed in with students testing far from college-ready. While more detailed analysis is needed for confirmation, the results suggest that there may be a limit to how much academic

improvement students can make in a single year, and that those who are far below college-ready may be disengaged from the class, making it difficult to help higher-performing students.

Additionally, teachers from districts with many low-performing students are significantly more likely to say engagement of both college-bound and non-college-bound students was worse in 2013/14 than in 2012/13. This is a concern because districts with many low-performing students have great needs for FCCRI activities, but the reform may be least helpful in those classrooms. This result also suggests that a major part of the problem in increasing engagement is mixing students who are close to testing college-ready with those who are far from testing college-ready, as well as mixing college-bound students with those who are not college bound. We speculate that CRS teachers tend to focus their courses on the students most likely to benefit from them—on college-bound students testing close to college-ready—which may be a much smaller group of all CRS course students in districts with many low-performing students than in districts where smaller numbers of students are low performing.

Resource impediments (preparation time, classroom materials, collaboration)

In our year 1 survey, teachers reported that various resources would improve the effectiveness of the FCCRI. These resources include collaboration with college instructors; additional preparation time; and guidance in creating course content, additional course materials, and information about the PERT. The year 2 survey asked teachers to what extent lack of these resources is an impediment in 2014 and whether resource deficiencies are better or worse than in 2013. In this section, we separately display responses for math versus ELA teachers because their response patterns differ.

Figure 9 (on page 26) shows considerable variation by subject area in the severity of the impediments perceived by teachers. Specifically, ELA teachers indicated they believe each impediment, except lack of PERT information, is considerably more severe than did math teachers. For example, lack of teaching materials is the most severe impediment among ELA teachers, with 55 percent reporting it as an "important" or "very important" impediment. In contrast, 30 percent of math teachers reported teaching materials as "important" or "very important," a substantial difference of 25 percentage points.

Figure 9.   Percentage of teachers reporting resource impediments in 2014 as
"important" or "very important," by subject area.
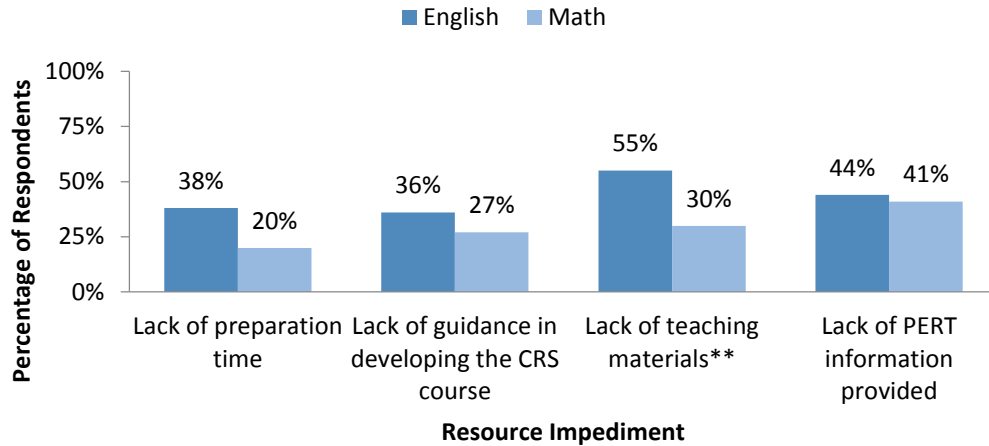
Source: Responses from Spring 2014 (N=109) CRS course teacher survey.

Notes: Survey question is "Rate the extent the following school-based impediments reduce the effectiveness of your earliest college-prep course in helping students become college ready: (1) Lack of time to prepare lesson plans, (2) Lack of clear guidance over the contents of the course, (3) Lack of teaching materials, (4) Lack of information about skills tested on the PERT."

Scale ratings are 1 = "not an impediment," 2 = "very minor impediment," 3 = "minor impediment," 4 = "important impediment," and 5 = "very important impediment."

Asterisks (**) denote statistically significant difference from a t-test comparing means by subject area (p<.01).

Lack of collaboration with colleges was reported as the greatest impediment, by far. It was rated as an "important" or "very important" impediment by 81 percent of ELA teachers and 63 percent of math teachers, an 18-point difference. In contrast, lack of preparation time was reported as an "important" or "very important" impediment by only 38 percent of ELA teachers and 20 percent of math teachers, also an 18-point difference.

Figure 10 (on page 27) shows to what extent teachers believe each impediment to be worse ("slightly worse" or "much worse"), the same, or better ("slightly better" or "much better") in 2014 compared with in 2013. (We show results for math and ELA together because they were similar for both groups.)

Figure 10. Percentage of teachers reporting resource deficiencies were worse, the same, or better between SYs 2012/13 and 2013/14.
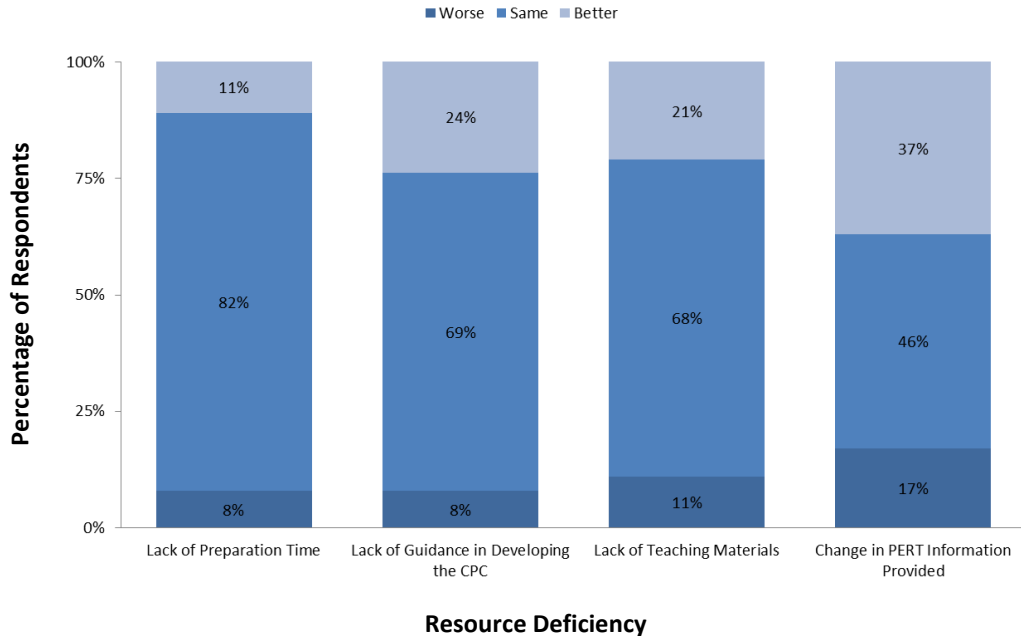
Source: Responses from Spring 2014 (N=109) CRS course teacher survey.

Notes: Survey question is "To what extent have the following potential impediments changed compared with LAST year? (1) Lack of time to prepare lesson plans, (2) Lack of clear guidance over the contents of the course, (3) Lack of teaching materials, (4) Lack of information about skills tested on the PERT."

Scale ratings are 1 = "much worse," 2 = "slightly worse," 3 = "stayed the same," 4 = "slightly better," and 5 = "much better."

By far the largest improvement is in the receipt of information about the PERT. Thirty-seven (37) percent of teachers reported the impediment is better, compared with 17 percent who reported the impediment is worse, a difference of 20 percentage points. Several factors contributed to this larger positive difference. In the intervening year, the company that created the PERT produced much more information about it; the state more widely disseminated this information, especially to districts; and districts had considerably more time to provide this information to teachers. Use of the Edmodo.com website also may have contributed to the improvement because the site includes the details of how information about the PERT can be obtained. A possible additional factor, however, is that teachers could have asked their SY 2012/13 students to describe the test and the corresponding areas that were well covered, and poorly covered, by their CRS courses.

The improvement in guidance also is large, with 24 percent of teachers reporting the impediment is better, but only 8 percent reporting it is worse, a difference of 16 percentage points. There also is a substantial improvement in teaching materials, with 21 percent reporting the impediment is better, and 11 percent reporting it is worse, a difference of 10 percentage points. There is only a small net increase, 3 points, in teachers reporting the preparation time impediment is better, and a small decrease of 2 percentage points in teachers reporting the college collaboration impediment is better.

Once again, we find that perceived gains in reducing one impediment are positively correlated with perceived gains in reducing other impediments. Thus, while some teachers are seeing an improvement in many resources, others say these deficiencies have become worse across the board.

We also examined how teachers from different districts and with different experience levels saw the lack of resources was an impediment. Teachers with community college experience are less likely to lack PERT information and materials. Additionally, teachers in small districts are significantly more likely to report that the lack of materials in 2014 is worse than in 2013. This suggests that small districts might require more attention when it comes to disseminating such materials, because they don't have the same network with other educators or institutions that large districts do.

RQ2. What Do College Readiness and Success Courses Look Like in Practice?

The FCCRI uses college readiness and success courses as a strategy for supporting high school students who are not considered college-ready. The intent of these CRS courses is to provide high school students with the knowledge and skills needed to be successful in college and careers. This section uses teacher surveys and interviews to describe the content of CRS courses, goals and effectiveness of these courses, some of the challenges related to CRS courses, and strategies teachers use to address these challenges. We find that:

- There is variation among CRS courses in the level of difficulty and the types of resources and curricular materials used.

  o The most common source of information and materials for CRS courses is teachers' own experience.

  o Resources most commonly reported as "moderately" or "very useful" include collections of materials (textbooks, binders, websites) and test-preparation materials (PERT, ACT, SAT).

- Teachers reported several different goals for their CRS courses; however, most teachers reported that their top priorities are helping students to develop academic skills for college and to test college-ready.

- CRS teachers continue to struggle with student engagement in their courses, particularly among students who are not college bound.

  o Teachers noted that they use a variety of strategies for improving student engagement. Examples include allowing students to explore career and postsecondary interests, having students participate in inquiry-based problem solving, and integrating technology into class activities.

Course content

This section discusses math and English/language arts CRS course content and how high schools have been developing and implementing this content. The Florida Department of Education has approved five CRS courses. Three are one-semester courses: Mathematics for College Success, Reading for College Success, and Writing for College Success. Two are two-semester courses: Mathematics for College Readiness and English 4: College Prep. Schools are required only to offer one course in math and one course in ELA. Most of the high schools we visited offer only the two-semester courses that count toward graduation requirements in their respective subject area.

Each CRS course has standards set by FLDOE that define the topics to be covered in the course. Districts, high schools, and teachers have considerable discretion in how they implement these courses, however.

Overall, the level of difficulty of the courses varies widely across schools. A counselor in one mid-sized district high school said that the English CRS course was "a step above regular English IV." Yet teachers in other districts noted that they spend a lot of time reviewing basic skills, because many students in their CRS courses have not yet passed the FCAT.

There are also mixed views about how similar the CRS courses are to developmental education courses at state colleges. One teacher in a large district who is also an adjunct at a state college said, "It's the same content but in a different order." Another instructor at the same state college disagreed and said, "[The high school] courses are supposed to mimic ours, but they don't. We're not sure they're using the state competencies."

Math CRS courses

Many math CRS courses take the form of review of basic skills of Algebra I and II. By the time they take the math CRS course, most students have taken Algebra I and II and Geometry—three of the four math courses required for high school graduation. One teacher commented that the students "really, really get it"—because this is the second time they are receiving instruction in the content of the course. For some teachers, the emphasis of these courses is on refining students' Algebra II skills to prepare them for college-level Algebra. Some of the teachers noted that students in the math CRS courses would otherwise be taking courses such as Pre-Calculus, Financial Applications, Trigonometry, or Math Analysis. One interviewed teacher said CRS courses are "absolutely" a better fit for some students. Another teacher said CRS courses are "less scary" for them than Pre-Calculus and students are "happier" there.

One of the schools we visited uses a different approach. The school offers a one-semester Math for College Success course for students who did not pass the PERT, focusing almost entirely on ACT test prep. The school also offers a two-semester Math for College Readiness course that is "much more rigorous" and goes beyond Algebra II content. This approach was not observed in any of the other schools that participated in the site visits, however.

Observed during Our Site Visits

Math Instruction in a CRS Course

In a Title I high school in a large school district, a math CRS course starts after lunch with about 20 students in the section. For today's lesson on unconditional probabilities, the teacher uses an "I do, we do, you do" instructional method where the teacher walks through an initial problem, then asks a student to come to the board and work through another problem with the assistance of the class and teacher, and finally students are asked to work through a few practice problems on their own, to end the class.

For the "I do" exercise, the teacher asks questions of students as she works through the problem about which formula or strategy might be good to approach the problem. For the "we do" exercise, the teacher has a student work through a problem at the board with the class using the same inquiry-based problem-solving method she used for the first problem. The problem considers the probability of winning the lottery. She prefaces the problem by stating that she wants to show students how small the chance of winning the lottery actually is and urges students to consider better uses for their money.

Finally, for the "you do" exercise, the teacher asks students to work on a problem by themselves while she walks around helping students who might be struggling with the content.

While this example does not represent how all math CRS teachers are implementing their courses, it does provide an example of how teachers are working with students to reach goals of the FCCRI.

English/language arts CRS courses

English/language arts CRS courses tend to be similar to a traditional English IV course. Many of the teachers interviewed approach the CRS courses in the same way they would other ELA courses but place more emphasis on integrating ACT or PERT preparation and study skills into the CRS course. Other teachers follow the same

"In a lot of respects, the CRS course is a lot like a traditional English IV course, but there is some additional emphasis on things like ACT prep and study skills"

—English/language arts CRS teacher, large district

curriculum used for their honors English IV course but implement it at a slower pace.

The level of rigor also varies by school. In one rural district, students in the English/language arts CRS course do not read a single novel during the entire school year because the teacher struggles to get students to read even a few pages.

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Observed during Our Site Visits

English Instruction in a CRS Course

An English/language arts CRS course, in a Title I high school in a small school district, has approximately 20 students in the section. Written on the whiteboard, the primary objective of today's class is to make use of context clues in text. The class starts with a "bell ringer" exercise asking students what they do when they are reading and come across a word they do not know. The question stresses that the students be honest in their responses. Answers from students include "do nothing," "look it up," and "keep going without thinking about it."

The teacher then pivots the discussion to a broader vocabulary lesson about deciphering words based on the components of the word. The teacher uses contemporary references such as *workaholic* and *bromance*. These references seem to resonate with the students, as they are able to understand the meaning of the word by breaking down the parts of it.

For the last part of the class, students read a passage from Lewis Carroll's nonsense poem "Jabberwocky." The teacher asks students to circle words they don't understand in the passage. Most students are able to understand the main points of the passage despite not knowing every word in the passage—reinforcing the idea of using parts of words or sentences to draw larger meaning from what they are reading.

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Given the similarities between English/language arts CRS courses and the English IV courses, some high schools have dropped the traditional English IV course in favor of the CRS course for seniors. Honors English or AP English still are offered in these schools, but any student not taking these courses enrolls in the English/language arts CRS course to satisfy the requirement to complete the four ELA courses needed for graduation.

Development of CRS course content

Most CRS course curricula were developed in the last two or three years. Many teachers drew from their previous teaching experiences, colleagues, and the state colleges for activities and lessons. Figure 11 (on page 33) provides a breakdown of the frequency with which surveyed teachers use various sources to develop their

lesson plans and materials, ranked on a 5-point scale (1= "not at all" to 5 = "exclusively"). The most common source of information and materials is teachers' own experience, with 90 percent reporting that they rely on their own experience "to a great extent" or "exclusively."

Figure 11. Extent to which teachers use various sources to develop lesson plans and materials for their CRS courses.
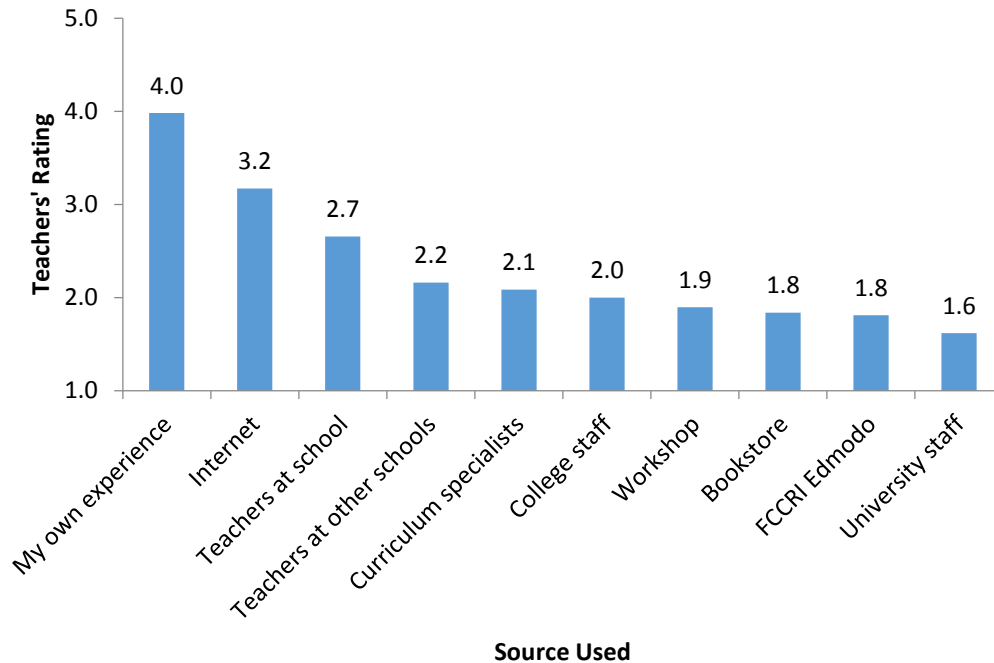
Source: Responses from Spring 2014 (N=109) CRS course teacher surveys.

Notes: Survey question is "To what extent did you use information and materials from the following sources to develop lesson plans and materials for your earliest college-prep class?"

Scale ratings are 1 = "not at all," 2 = "very little," 3 = "sometimes," 4 = "to a great extent," and 5 = "exclusively."

According to the survey, the second most common source of useful material for lesson plans is the Internet. When broken down by subject taught, English/language arts CRS teachers rely more heavily on the Internet than do math CRS teachers (55 percent and 39 percent, respectively). In speaking with teachers during site visits, we observed that this theme seemed to hold true. English/language arts CRS teachers frequently mentioned using the Internet to find activities and lessons, particularly for some of the newer novels they are using in their courses.

Another interesting finding is that teachers use a number of different resources in developing their CRS courses. Approximately 81 percent of teachers use at least

three different types of resources from Figure 11 "sometimes" or more in their CRS courses, and 42 percent use five or more of these resources.

The survey also asked teachers how useful they find each of the sources they use to develop lesson plans and materials for their CRS courses. Among teachers who use different materials as sources for their CRS courses, the sources most commonly reported as "moderately" or "very useful" include collections of materials (textbooks, binders, websites) and test-preparation materials (PERT, ACT, SAT).

Figure 12 shows the percentage of teachers who find various materials to be "moderately" or "very useful" in the development of their CRS course. More than 50 percent of the teachers using practice guides, diagnostic tests, college materials, instructional software, and binders find these materials to be "moderately" or "very useful." Fewer teachers find pacing guides (40 percent), organizational software such as Blackboard (35 percent), or the FCCRI Edmodo.com site (34 percent) to be "moderately" or "very useful," however.

Figure 12.   Percentage of teachers finding materials "moderately" or "very useful" in developing their CRS courses.
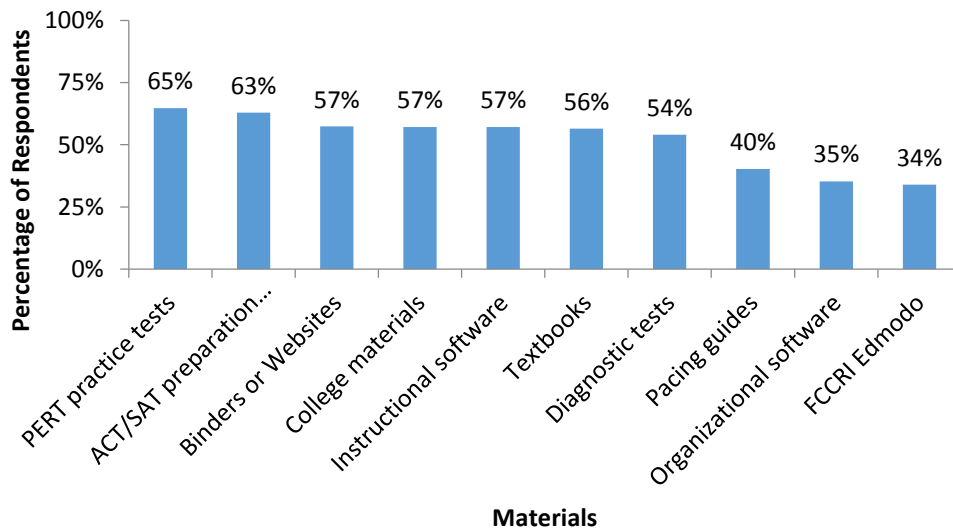
Source: Responses from Spring 2014 (N=109) CRS course teacher surveys.

Notes: Survey question is "Rate the usefulness of the following resources."

Scale ratings are N/A = "did not have this resource," 1 = "of little use," 2 = "slightly useful," 3 = "moderately useful," and 4 = "very useful."

Math and English/language arts CRS teachers reported different levels of usefulness for particular resources. The largest difference is in which test-prep materials teachers find useful: 61 percent of math teachers reported PERT practice tests are,

compared with 30 percent for ELA teachers, which aligns with math teachers' stated goals (as discussed in the next section) of focusing on passing PERT. In contrast, 50 percent of ELA teachers found ACT/SAT practice materials "moderately" or "very useful," compared with 29 percent of math teachers, which aligns with ELA teachers' reported goal of preparing students for the ACT/SAT.

Goals of CRS courses

We found that CRS courses had several goals associated with preparing students for life after high school, including helping students to test college-ready, develop the academic skills needed in college, develop soft skills needed in college, develop career-related skills, and decide what they want to do after high school. Districts and teachers place different levels of emphasis on each of these goals as they implement the CRS courses, however.

This section uses the surveys and teacher interviews to provide perspectives on how much emphasis teachers place on each of these goals, and how teachers have been integrating each of the goals into their CRS courses.

Figure 13 (on page 36) provides a breakdown of the relative importance that surveyed teachers placed on particular goals of CRS courses. As the figure illustrates, two goals are an "important" or "very important" focus for 80 percent or more of teachers: developing academic skills and providing test preparation. Three goals are secondary compared with the first two goals: developing soft skills, plans for college, and plans for careers, with 43 to 47 percent of the teachers rating these goals as "important" or "very important." Interviews with teachers during site visits confirmed the emphasis teachers place on these goals.

Figure 13.   Percentage of teachers ranking the relative importance of goals for their CRS courses.
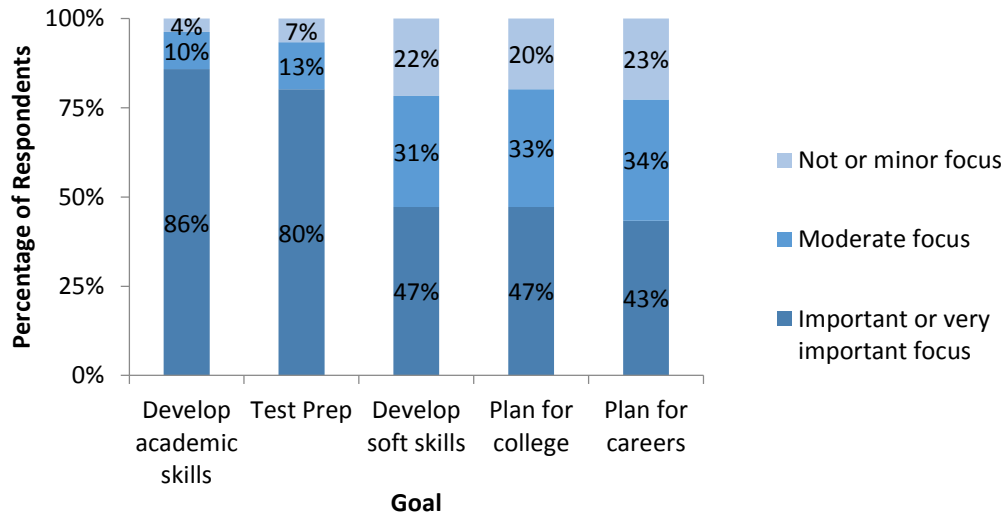
Source: Responses from Spring 2014 (N=109) CRS course teacher survey.

Notes: Survey question is "To what extent does your earliest college-prep course focus on the following goals?"

Scale ratings are 1 = "not a focus," 2 = "minor focus," 3 = "moderate focus," 4 = "important focus," and 5 = "very important focus."

Developing academic skills is the most important focus of most CRS courses

The foundation of many CRS courses is to provide students with the academic skills and knowledge needed to perform at the college level. Surveyed teachers put a strong emphasis on developing the academic skills of students, with 86 percent saying it was a "very important" or "important" focus.

Many of the interviewed teachers place a high emphasis on this goal because of the importance of students' having a strong base of content knowledge when entering college. Many teachers believe developing students' academic skills is the most important goal in order to prepare students for life after graduation. Teachers commented that fundamental reading and writing skills prepare students for a variety of college and career opportunities over their lifetimes regardless of what a student might do after high school. As one teacher summarized:

> I'd really like to see more of a college-prep [emphasis] than a career-prep [emphasis in the CRS course] because I think the same skills a freshman

has going into college are the same skills that would benefit them in the working world.

Teachers are using several strategies to integrate this goal into their CRS courses. These strategies include:

- **Drawing on lessons and activities from state college syllabi.** Various reading, writing, and math CRS teachers mentioned that they draw from state college syllabi for their course assignments. One writing teacher integrates activities directly from the college course, including the time in the computer lab for students to work on and proofread their papers. Many teachers believe that if students in college are expected to complete these activities, the activities are well suited for CRS courses.

- **Reinforcing content over time.** Some of the teachers develop routines for their classrooms as a way to continue to reinforce concepts learned. For example, one teacher reviews previous lessons to begin the class, reviews old vocabulary, and then does a brief benchmark assessment to see how well students grasped the previously taught material. Teachers believe that over time this helps students better absorb the content because it gives students a chance to regularly work on previous material covered.

- **Building a student's content knowledge from the ground up.** In math, one teacher provides foundational math content as if all students did not have any background in these areas. While many of his students are reviewing content they previously mastered, some are learning the material for the first time.

- **Developing critical-thinking skills.** Several CRS teachers noted the importance of helping students to develop critical-thinking skills. One math CRS teacher said that when students respond to a problem, he asks probing follow-up questions such as "How do you know?" The teacher noted that such inquiries help to prepare students for college-level work.

A strong emphasis on testing college-ready in CRS courses

Teachers highly emphasize ensuring students test college-ready. Of teachers surveyed, 80 percent reported that test preparation is an "important" or "very important" focus in the course. While many teachers use the PERT to gauge students' college readiness, students also can test college-ready using the ACT, SAT or

Accuplacer.[10] This high level of emphasis on testing college-ready is consistent across the large, medium, and small districts. Site visits and interviews also confirmed this emphasis on test preparation.

Teachers commented that they highly emphasize students' testing college-ready for two reasons: (1) It gives students options after high school, even for students currently not planning to attend college. (2) Their district places significant importance on getting students to test college-ready, sometimes at the expense of other goals of the CRS course.

Not all teachers highly emphasize this goal, however. Some of the reasons teachers gave during site visits were that they did not have much guidance on the PERT; because students were too far behind academically, teachers had to focus on basic deficiencies rather than on college readiness; and they believe students are over-tested or get test preparation in other settings.

Given the emphasis on students' testing college-ready, teachers have developed a number of strategies for integrating this goal into CRS courses. These strategies include:

- **Spending significant classroom time on ACT/PERT preparation.** Some teachers take students to the computer lab each week throughout the school year to do online ACT preparation, while others focus on it three to four times a week in the weeks leading up to the exam. Preparation activities can include going over previous scores with the students, developing the vocabulary and grammar skills students need on the test, and working through ACT/PERT preparation guides available from the state colleges.

- **Bringing in graduation coaches and counselors to help with ACT preparation.** These graduation coaches and counselors help students with test strategies, including time management on the test, breaking down questions, and vocabulary development.

- **Using the PERT as their course final exam.** The state legislation does not require students to retake the PERT at the end of the CRS course, but several of the schools we visited have opted to do this. Some teachers find that making the PERT an End-of-Course exam has helped students take the exam seriously. In addition, they believe that students might have a better chance of passing the exam in this kind of a setting.

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[10] https://www.flrules.org/gateway/ruleno.asp?id=6A-10.0315

CRS courses place less emphasis on soft skills, post–high school plans, and career-related skills

While CRS teachers place a high emphasis on academic content and students testing college-ready, there are other goals that get a lower priority, such as developing the soft skills needed in college, helping students decide what to do after high school, and developing career-related skills. Less than 50 percent of teachers surveyed focus on those goals. The main reason they gave is that there is no specific mention of these goals in the state standards for the CRS courses, and many times there is no expectation that teachers should cover this kind of content.

Many of the teachers who are integrating these goals are doing so on their own initiative, because they believe it is important for student development in a course about college readiness. Teachers in our interviews who highly emphasized developing soft skills stressed that students will not be able to succeed in college without good study habits, time management skills, and knowing how to use technology in academic settings, especially to complete academic tasks such as writing a research paper. For the career and college choice goals, teachers believe it is important to expose students to the various opportunities available to them after high school so they can make informed decisions about what profession to pursue.

While many interviewed teachers wish they were able to dedicate more time to these goals, there simply is not enough time available because of the strong emphasis on academic content and testing. Some of the teachers noted that they are able to spend only a few days in an entire semester on some of these goals. The rest of the time is spent on academics and test preparation.

In addition, the soft skill and college/career planning goals tend to overlap with other parts of the high school experience, including students' interactions with counselors. As a result, some teachers believe that less time needs to be spent on those goals in the CRS courses.

Despite limited time available, some teachers have found ways to integrate the soft skill and college/career planning goals into their CRS courses. The examples that follow are being implemented by a handful of teachers we interviewed; they are not widespread. They do, however, provide insight on how some teachers are integrating those other goals into their CRS courses.

Develop soft skills needed in college:

- **Developing organizational skills.** Several of the teachers we interviewed work with students to develop the organizational skills and habits needed to succeed in college. One math teacher exclusively uses a workbook that

students must keep organized throughout the school year. The workbook includes the problems they will need to complete as well as the formulas used for various types of problems. The teacher periodically checks these workbooks for a grade to ensure students keep up with the organization. Another teacher uses a graphical organizer to help students keep track of the characters they read about as they progress through *Beowulf*.

- **Providing academic interactions with technology.** Given the emphasis that colleges place on technology use in and out of the classroom, one teacher tries to integrate technology in meaningful ways into her course. She uses message boards to post assignments, uses the computer lab to help students learn how to research topics of interest using multiple sources, and incorporates modules from the Kahn Academy (www.kahnacademy.org; a website offering thousands of instructional videos on various topics) to help students prepare for the PERT.

Decide what to do after high school:

- **Allowing for student exploration of interests in careers.** One teacher mentioned providing students with questions from the Armed Services Vocational Aptitude Battery as a way to see what careers might interest them. For students wanting to enter careers immediately after high school, a few teachers develop course assignments that help such students research possible career paths. These assignments allow students to explore career options for the first time, or for students with an idea of what they want to do, allow students the opportunity to gain some additional information on their anticipated career.

- **Providing opportunities to learn about colleges.** Several teachers have representatives from state colleges and four-year universities come in to their CRS classes to discuss options for students once they graduate, which range from academic degrees to career and technical education (CTE) pathways. Other teachers allocate class time for students to complete college applications or to research their college options.

Develop career-related skills:

- **Developing basic professional skills.** Some of the teachers have students do resumes, applications, cover letters, and thank you letters to build a foundation of skills needed to perform in a professional setting. For example, one teacher developed an assignment where students have to write a persuasive letter to a business about an issue they have regarding the company.

- **Using real-world examples.** Some teachers noted that they use real-world examples in class assignments or have informal conversations about how what students are learning is relevant for careers. This seems to be particularly common in rural districts and schools where the college-going rates are low.

Student engagement in CRS courses

Many interviewed teachers commented that it is very difficult to reach students when they have little interest in being in the course. More than 70 percent of teachers interviewed during our site visits identified student engagement as a significant impediment to CRS course effectiveness. For students likely to go to college, 45 percent of teachers reported student engagement is a problem; in contrast, for students not likely, 66 percent of teachers reported student engagement is a problem. Results are similar by subject area and years of teacher experience with the course.

Examples of student engagement issues in CRS courses include:

- **Students lack intrinsic motivation.** Some teachers observed that students put little effort into the course, fail to complete assignments, and get off task easily. This lack of motivation also can come in the form of absenteeism and failure to stay on task while in class, particularly with students not planning on attending college. Some teachers have had so much trouble with this issue that they have completely given up on asking students to complete homework or do independent reading.

> "(Students) don't have the will to want to do it. They want to do the least possible. They don't want to work. They think that they are going to pass anyway even if they don't try."
>
> —Math CRS teacher, large district

- **Students lack an understanding of why they are in a CRS course.** One teacher mentioned that the course simply shows up on a student's course schedule without any discussion with the student about needing to take a CRS course. As a result, students can be hostile to being in the course, particularly for those not planning on going to college.

- **Students' academic preparation is too varied to develop lessons that engage the interest of all students at the same time.** Interviewed teachers noted that it is hard to customize learning activities to students in CRS courses when there is such a wide variation in their achievement level. Students who are almost college-ready tune out when teachers conduct basic reviews, and struggling students tune out when more-challenging lessons are presented.

- **Students are dealing with other life issues.** Teachers observed that student engagement suffers when students are dealing with other life issues. This challenge seems particularly difficult for low-income students because they are sometimes worrying about troubles such as providing for their family.

Strategies for improving student engagement

Despite the challenges, teachers have found ways to improve engagement. Strategies include:

- **Helping students see the connections between their post–high school plans and CRS courses.** Many teachers observed that student engagement is high when students get to explore topics they are interested in. Teachers report that many students do not see the value of getting postsecondary career training and do not realize that career-enhancing programs available at state colleges cover a wide range of interests and are suitable for students with a wide range of skills. To develop students' interest and their understanding of how the CRS course can be of value, teachers said they develop assignments that allow students to learn more about promising careers and colleges. Teachers also bring in representatives from various colleges to speak with students about opportunities after high school.

- **Having students participate in inquiry-based problem solving.** Surveyed and interviewed math teachers commented that they have students come to the board to help answer problems with the class. During these problems, the teacher facilitates discussion about which strategy to use and the teacher can quickly see which step a student misses in trying to solve the problem. While it doesn't work with every student, even the struggling students participate when they are up at the board.

  Another math CRS teacher has a class set of mini-whiteboards. The teacher puts a question on the overhead projector, and students work out the problems on their individual whiteboards. When they finish, they raise up their whiteboards so the teacher can quickly assess their progress. The strategy also helps to keep students on task because the teacher calls out students who are not holding up their boards.

- **Integrating technology.** Interviewed teachers understand the need to integrate technology in meaningful ways to engage students. One teacher commented that students typically use technology in personal settings (e.g., social media) rather than academic and professional ones. That is, technology is a medium they are already familiar with, but need to learn how to use in other contexts. Therefore, he thinks it is important to find ways to engage students with these

technologies to better prepare them for life after graduation. Several teachers reported using resources such as Kahn Academy or TED Talks (www.ted.com) to provide engaging materials for students on important topics.

- **Picking topics that attract students' interest.** As with other high school courses, CRS teachers find that introducing topics that interest students can make a significant difference in how much they engage with the course. Several CRS English/language arts teachers reported that they assign "contemporary" literature, such as *The Perks of Being a Wallflower*, by Stephen Chbosky, or *Tuesdays with Morrie*, by Mitch Albom. Other teachers use more classical literature, but focus on making it relevant to students' lives. For example, one teacher assigns Shakespeare's "Macbeth" to her CRS English course and incorporates the material into discussions about relationships. As she described it, "[The students] got into some really neat discussions. It was something they were interested in, and they saw how it related to what we were reading. They went out of this class so excited. It was phenomenal."

  Several math teachers also reported integrating real-world examples into their assignments or incorporating current events into their courses. One teacher explained: "We bring up the latest events in the media. I feel like I can use that as a teachable moment. You'd be amazed after we spend 15 or 20 minutes communicating about a current event. They're motivated. They just want to be heard and they know how this relates to life."

- **Using interactive games or projects.** Some teachers find that providing students with activities that are either competitive or project based helps with engagement. One teacher mentioned that using "*Jeopardy*-like" competitions against other sections of the CRS course can get students engaged. Another teacher has students discuss current events or particular topics as a panel similar to *The View.* In addition, teachers use project-based assignments such as creating posters or videos as a way to encourage participation in CRS courses.

- **Developing supportive relationships with students.** Instruction is but one part of teaching a CRS course. Many teachers stressed the importance of building supportive relationships with students to both encourage them and engage them in the course. Teachers reported positive results from inviting students to find a time outside of class to have one-on-one discussions about coursework, engagement, and the benefit of learning what is being taught.

RQ3. How Do High Schools, Districts, and Colleges Collaborate around the FCCRI?

This section uses data from the year 2 CRS teacher survey and site visit interviews with educators at the high schools and state colleges to examine collaborations within and across high schools, as well as between high schools and colleges. Examples of effective collaboration are highlighted and barriers to further collaboration are identified, along with ways to improve collaboration among schools, districts, and colleges. Overall, we find that:

- The majority of teachers agree that increased collaboration, especially with state college faculty and other CRS teachers in their own schools, could make the FCCRI more effective.

- Nevertheless, the level of collaboration around the FCCRI is rated as low, especially between high schools and colleges. There are, however, some examples of promising practices. For example, we learned about partnerships between several schools and colleges to develop CRS course materials. Many of the examples of more extensive collaboration were made possible through the support of external grants.

- High school teachers largely are left on their own in developing lesson plans and materials, while these elements are centrally developed and expected to be used by all college instructors in dev-ed courses. As a result, college faculty and staff noted that there is no single person at the district or school level in charge of the CRS courses with whom to collaborate.

- Other impediments to collaboration include insufficient time, funding, and incentives, as well as lack of alignment between high school and college curricula, goals, and regulations.

- The key recommendation for improving collaboration is encouraging partnerships between colleges and high schools to create summer workshops, professional development programs, and other opportunities to help CRS teachers acquire useful materials, learn about opportunities for CRS

students to advance their education and careers by attending state colleges, and develop relationships with college faculty.

Overall impressions of collaboration

The FCCRI is a complex initiative involving a range of educational stakeholders at the state and local levels. Each organization plays a specific role in FCCRI implementation, sharing information and interacting, when appropriate, with organizations at other levels.

The Florida Department of Education provides a common assessment through the PERT and EOC math tests and grant funding to administer the PERT to targeted students. Additionally, FLDOE sets standards for CRS courses and communicates these requirements to district-level administrators, who in turn are responsible for communicating FCCRI-related information from FLDOE to high schools.

Districts have autonomy in making curricular decisions, providing textbooks and other instructional materials to use in CRS courses, and organizing professional development for teachers. They also are responsible for providing guidance and oversight of PERT administrations and for reporting test score results to the state.

High school administrators directly implement PERT testing and CRS courses, the key components of the FCCRI. They also provide guidance to CRS teachers. CRS teachers are largely left on their own, however, to develop lesson plans and select which texts and materials to use in their classes.

While state colleges have no direct role in the FCCRI implementation, they have extensive experience in crafting dev-ed programs with very similar goals as the CRS courses. In sharp contrast to the high schools, state colleges have dev-ed departments that provide detailed lesson plans for their instructors, a wide range of teaching materials, and extensive supportive services such as tutors, computer labs, and separate study skills courses. Almost all CRS teachers who are familiar with college dev-ed programs agree that there would be a great deal to be gained from much closer collaboration between high schools and colleges.

During our site visits, interviewees at high schools, districts, and colleges provided their impressions of the level of collaboration between the different groups of stakeholders on a 5-point scale (0 = "none," 1 = "little," 2 = "some," 3 = "considerable," and 4 = "major"). As shown in Table 2 (on page 46), among high school teachers and staff, within-school collaboration receives slightly higher ratings than either collaborations between schools and districts or between K–12 and college. Ratings of K–12 and college collaboration tend to be lowest, averaging 0.6 to 1.9. The highest ratings by high school administrators and counselors may simply

reflect their collaborating with colleges on recruitment activities for prospective students, not directly supporting the FCCRI.

Table 2.   Interview participants' average rating of collaboration around the FCCRI, by collaboration type and role.

Participant Role	Average Rating of Collaboration:		
	Within School	School to District	K–12 to College
District administrators	—	2.0 (n=5)	1.6 (n=5)
High school administrators and counselors	2.4 (n=5)	1.6 (n=7)	1.9 (n=10)
High school ELA and math CRS teachers	2.0 (n=23)	1.1 (n=21)	0.6 (n=21)
College dev-ed English and math instructors	—	—	1.5 (n=11)
College staff	—	—	1.6 (n=5)

Source: Author's calculations from Spring 2014 site visit data.

Note: Not all of the participants provided ratings for each type of collaboration; therefore, the number of respondents is included with each average. That college dev-ed faculty and staff did not provide ratings for collaboration within K–12 schools or school-to-district collaboration is indicated by a dash (—).

The year 2 survey of CRS teachers also included a question about the frequency of collaboration within schools, between schools and districts, and between K–12 and local colleges (Figure 14, below). Approximately half of the responding teachers reported collaborating with other teachers in their school at least once a month (44 percent with other CRS teachers; 51 percent with other teachers). In contrast, the majority of respondents reported never collaborating with other staff (e.g., with administrators or counselors) in their districts (52 percent) or at colleges (63 percent).

Figure 14.   Frequency of CRS teachers' collaboration with others.
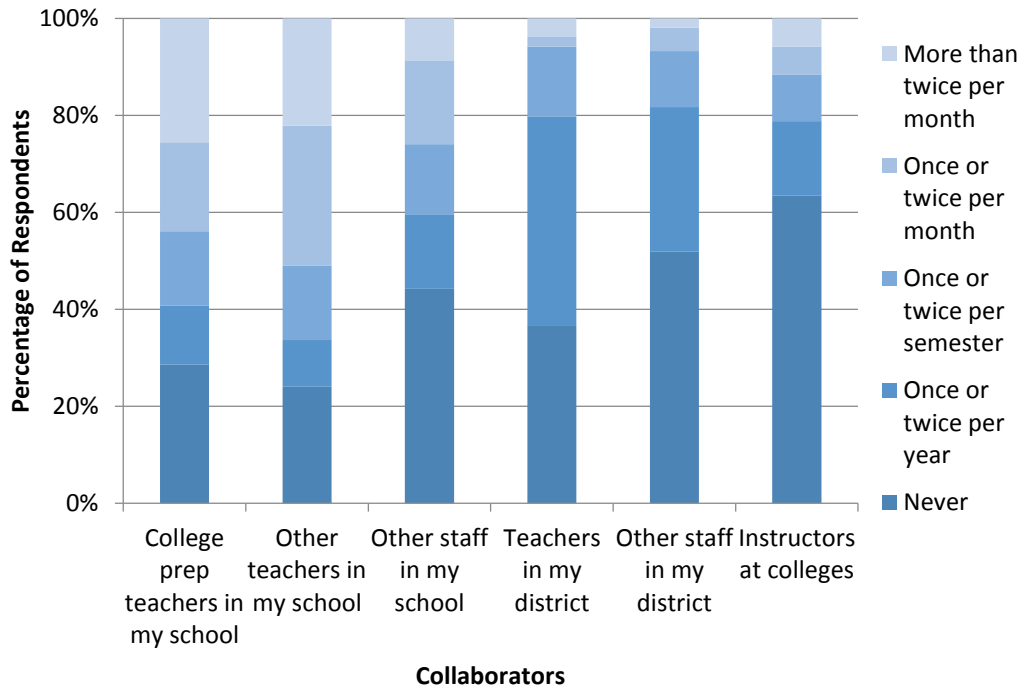
Notes: Survey question is "How frequently do you collaborate—work with or exchange information with—the following people in developing or teaching your college-prep courses?"

Scale ratings are 1 = "never," 2 = "once or twice per year," 3 = "once or twice per semester," 4 = "once or twice per month," and 5 = "more than twice per month."

Interest in increasing collaborations

Even though collaboration around the FCCRI currently is limited in many of the sites visited, both interview and survey data reveal a desire for greater collaboration at all levels. In the year 2 survey, CRS teachers indicated that increasing collaboration around the FCCRI would improve college readiness courses (Figure 15, below). In particular, nearly three-quarters of respondents (74 percent) believe increased collaboration with college instructors would improve their courses, and more than half of teachers recommend increasing collaboration among other CRS teachers in their schools (63 percent) and other teachers in their districts (55 percent).

Figure 15.   Whether CRS teachers recommend increasing collaboration to improve their courses.
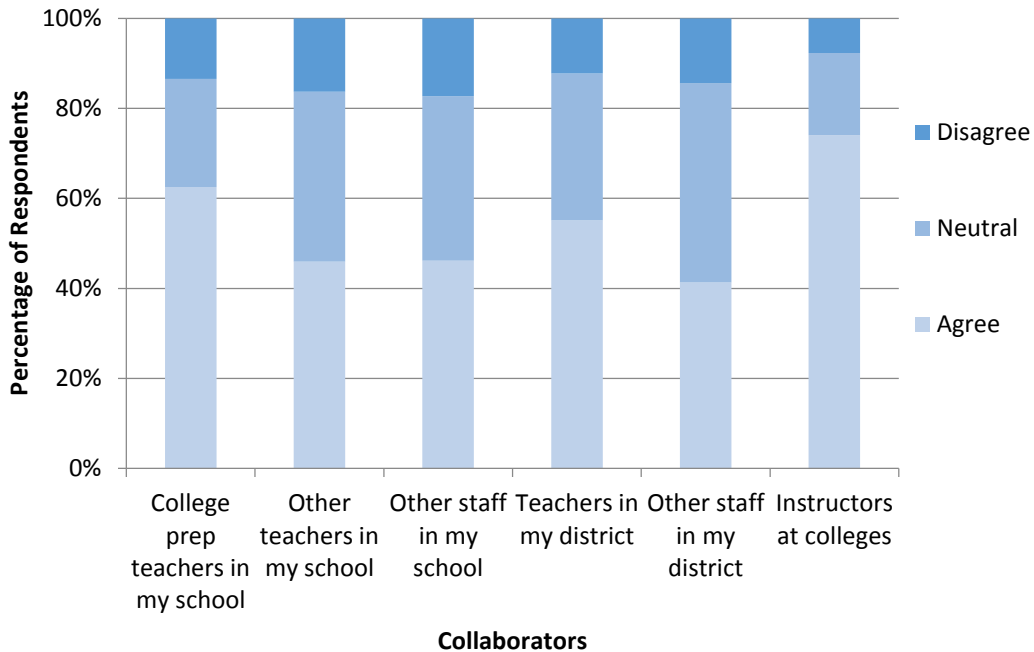
Source: Responses from Spring 2014 (N=109) CRS course teacher survey.

Notes: Survey question is "To what extent do you agree or disagree with the following statement? 'More collaboration with individuals in each of the following groups would substantially improve the effectiveness of my earliest college-prep course.'"

Scale ratings are 1 = "strongly disagree," 2 = "disagree," 3 = "neither agree nor disagree," 4 = "agree," and 5 = "strongly agree."

We also found that CRS teachers who collaborated with college instructors tend to rate the FCCRI as more effective than do teachers who do not have this type of collaboration. We conducted a t-test for the difference in means between the two groups on the survey question about overall effectiveness of the FCCRI (on a scale of 1 to 5). The average rating is 3.5 for teachers who collaborate with college instructors, which is significantly higher compared with a mean of 2.9 for teachers who do not collaborate with college instructors (p<.001). This result does not necessarily mean, however, that collaboration *caused* effectiveness ratings to be higher, as there could be other unobserved differences between the two groups that caused the ratings difference.

The majority of interviewees also would like to see more future collaboration, particularly between high schools and colleges. According to an administrator in a

medium-sized district, "Anytime we can collaborate and make sure we are doing things well is a good thing." Interviewees' primary recommendations related to secondary-postsecondary collaboration included:

- Increasing the amount of professional development colleges offer to high schools related to college readiness.

- Providing additional opportunities for collaboration and information exchange between high school teachers and college faculty.

- Exchanging curricular materials and resources.

Examples of collaboration

Collaboration within high schools

Teachers informally exchange ideas and materials

The majority of collaboration at the school level consists of teachers informally exchanging instructional ideas, information, and materials, although some schools use the same pacing guides from the district and report teaching the same content. For example, English/language arts CRS teachers at a school in a medium-sized district collaborate to teach the same vocabulary lessons. Their pace of instruction may vary, and some teachers differentiate assessment and assignments based on students' skill levels and progress. One teacher in another medium-sized district cited collaboration between teachers as a key reason why the FCCRI is effective at her school: "We all have the same test, same materials, [and] same ideas."

Teachers take advantage of common planning times

Most teachers who reported high levels of collaboration at their schools took advantage of common planning periods. But oftentimes, ensuring that CRS teachers had common planning times did not lead to high levels of collaboration. According to a teacher from one school, "We do things with other teachers, but it's not directly related to the course." Another teacher said she does not collaborate much with other teachers, beyond informally comparing students' progress and occasionally exchanging materials. Instead, she uses curricular resources in a binder available from her department and revises them as necessary.

Two teachers from one school said common planning time is typically "in name only"; the teachers plan their courses independently during the same time period. Some teachers would like to collaborate more frequently or extensively with colleagues, while others are satisfied with the current level of collaboration.

Teachers have more limited interactions with school administrators

The interviews indicated that there is limited collaboration between school administrators and teachers around the FCCRI. A typical example of teacher-administrator collaboration is administrators at one school meeting with CRS teachers at the beginning of each school year to discuss the curriculum, including relevant Common Core State Standards and the benchmarks students must meet to be college-ready. Teachers, however, often perceive that rather than two-way communication, these meetings are designed for administrators to tell teachers about rules in place from the district or state.

Some teachers also criticized the administrators' approach to CRS course content. One teacher said administrators developed the curriculum without input from teachers or regard for its effectiveness. This teacher opts to use curricular materials from the local community college, which she considers much more effective, in part because the materials focus on preparing students for the PERT. Another teacher at the same school offered a similar perspective, noting that the school's curriculum does not always align with how she would like to approach her course. She also would like to use materials from when she taught English at the community college level, but said, "The [course] format was so preconceived for us here, I was not able to do that."

Collaboration between schools and districts

Districts supply curricular resources for CRS courses to some extent

The primary form of district-to-school collaboration is the dissemination of CRS curricular resources and information to schools, including pacing guides and resources on the PERT. Information sharing takes place to some extent in all six school districts studied, but the amount and type of resources available vary by district size.

Both of the large districts provide schools with CRS pacing guides and textbooks for CRS courses. Additionally, one of these districts provides a computerized ACT/SAT preparation program as part of an ACT/SAT prep course that substitutes for the Writing for College Success CRS course. The program allows students to take online versions of previously released ACT and SAT assessments. Teachers then receive specific feedback on students' performance and provide differentiated, small-group instruction based on students' needs. When they are not working with teachers, students use the online preparation program to focus on their areas of weakness. The ACT/SAT preparation course also includes in-depth study of a novel similar to what students would experience in college.

Medium-sized districts also support high school teachers and administrators with resources and information. One of these districts uses pacing guides to provide general guidance, such as the suggested duration of each unit. Each year, the pacing guide is revised with input from teachers. The district also regularly convenes committees of teachers to assist with the selection of textbooks. One of the high school teachers on the committee charged with selecting a math CRS textbook had previously taught at the community college level and recommended using the same book as the college, which the district adopted. The committee selecting the English/language arts CRS course textbook did not have information on books used at the college level and selected a CRS textbook independently. The textbook selection committees typically do not include college-level instructors or other postsecondary stakeholders.

This same district also provides each teacher with one set of textbooks, regardless of how many separate classes (sections) the teacher has. This makes it challenging for teachers to assign text-based homework. A district administrator noted that this district purchased a limited quantity of textbooks because CRS courses began after the last regular textbook adoption cycle. A decision will be made at next year's regular review about what textbook to purchase, and funds will be available for purchasing textbooks for all CRS students.

In the other medium-sized district, curriculum specialists provide teachers with pacing guides and compile additional materials and resources relevant to CRS courses and the PERT. Each month they share information with department heads at each school, who subsequently pass it on to their teachers. Curriculum specialists also share information via email and technology

> "The curriculum specialists work hard to understand the needs of teachers and make sure they have support."
>
> —Administrator, medium-sized district

platforms such as Moodle, and they occasionally meet with individual teachers outside of school hours. The district also provides an online test-preparation program for the Math for College Success course.

Small school districts have the fewest resources to support CRS courses. According to an administrator in one small district, the district office has not extensively assisted high schools with CRS curriculum due to its limited size and capacity. Instead, the district has focused its curriculum support on subjects with End-of-Course examinations and on FCAT preparation. This district does provide an organizational template, with objectives and goals for the course, but no curricular materials, such as textbooks. At one high school in this district, teachers within each department meet to determine specific course content. The other small district does not provide teachers with a pacing guide or standardized curricular materials. One teacher there received assistance from the district to purchase calculators and low-cost textbooks through eBay, however.

Teachers offered feedback on district curricular resources for CRS courses

Some teachers indicated they did not believe the curriculum materials that their districts provide contribute to effective CRS course implementation. In one district, a committee of teachers compiled a binder with a course outline for the English/language arts CRS course and related materials. While teachers find some of these resources useful, others—even some of the committee members—think that the materials included in the binder are not consistently worthwhile or well organized. One teacher said the binder includes "a lot of partial activities that require a lot of materials, but we don't have the [necessary] materials or supplies." Additionally, teachers had limited time to use the binder for planning because they received it right before the beginning of the school year.

Teachers in two other districts agreed that their district pacing guide does not consistently include helpful guidance or materials. A teacher in the first district finds the pacing guide somewhat helpful and has made some revisions to its content. In the second district, a math teacher commented that the quantity of material is front-loaded in the first nine weeks to prepare for curriculum guide assessments; she believes students do not have adequate time to master these materials. Another teacher said it is difficult to follow the ELA pacing guide because of the emphasis placed on testing, noting that the objective to test college-ready seems to supersede the overall course goal of improving college readiness. A third teacher wished the pacing guide provided additional guidance on instructional strategies for the two novels required for the English/language arts CRS course. She found supplemental materials or developed her own lessons based on the books.

Curriculum specialists and coaches support some CRS teachers

Some CRS teachers receive instructional support from curriculum specialists or coaches. These professionals rotate among several different schools in some districts. In other districts, they are assigned to work within a specific, often low-performing, school. For example, English/language arts curriculum specialists support CRS teachers in one large district. They conduct training, model lessons for teachers, facilitate common planning, and provide instructional materials. At a school in a small district, a reading coach worked with an English teacher to select a novel for her CRS course and improve her classroom management. Another English teacher in a third district occasionally discusses her CRS course with a curriculum specialist, the principal, and the assistant principal in charge of testing. These collaborations are not extensive or formalized, however. Other respondents noted coaches and curriculum specialists support teachers in their district, but they currently do not provide assistance specific to the CRS courses.

In a different small district, a district administrator attended summer training on the goals and purpose of the English/language arts CRS courses and subsequently worked with CRS teachers on how to reframe their courses. For example, community

college representatives who presented at the training had said entering students needed more exposure to nonfiction, so the administrator assisted the teachers with incorporating more nonfiction into their instruction.

Some districts provide short-term professional development for CRS teachers

Overall, most teachers reported that they receive little to no professional development specifically related to their CRS courses; however, three districts provide short-term professional development for CRS teachers. One medium-sized district held a one-day professional development workshop on CRS courses when they were first implemented in 2012. The workshop included an overview of the pacing guide and the goals and expectations of the courses, as well as background information on the origins of the FCCRI to help teachers understand the initiative's broader context. Finally, the workshop sought to facilitate connections between CRS teachers in the same subject areas. This district has not offered the professional development in subsequent years, so teachers new to CRS courses have not had the opportunity to participate.

A large district, which recently revised its CRS curriculum materials, held a day-long "refresher" professional development academy for English teachers to discuss the goals of CRS courses, the curriculum, and effective instructional strategies, such as how to help students develop inferences from text. One teacher said such strategies for implementing the curriculum were the most beneficial component of the academy. Another teacher reported that this professional development session was particularly helpful because this was his first year teaching the course. This district also offered teachers a week-long English/language arts academy in the summer of 2013. The academy was offered three times so teachers could select the most convenient week. While the academy was not entirely focused on college readiness, a breakout session on CRS courses provided an overview of CRS English, the objective for the course, and model lesson plans. Teachers were compensated for participating in the week-long academy, but participation was voluntary.

A medium-sized district provided a professional development session that offered an overview of the online software program used in their Math for College Success course, but the training focused on course delivery rather than content. A teacher who attended this training thought the focus of the professional development was adequate, as teachers should be familiar with course content.

Collaboration between K–12 and colleges

All six state colleges included in our site visits have established relationships with local high schools for the purpose of recruiting students, but not necessarily for improving students' college readiness. Activities include recruiter visits to the high

schools and college nights for high school students. None of the state colleges we visited has a full-year program such as the federal TRIO program,[11] in which college students and instructors provide weekly help to a small group of engaged and high-performing high school students preparing for college. At least one high school we visited has a TRIO program run by a nearby state university. One rural state college, however, has an extensive outreach program designed to identify high school students who would be trained to enter professional occupations including medicine and the law needed by the local community. The extent to which high schools take advantage of these opportunities varies.

In addition, most of the high schools we visited offer extensive dual enrollment programs, but these programs are limited to higher-performing students who test college-ready. In some cases, the dual enrollment courses are offered at the high schools, but most students have the opportunity to attend regular classes on the state college campuses. Some CRS math students take dual enrollment (and AP or honors) English courses because they tested college-ready in English, and some CRS English/language arts students take dual enrollment in math because they tested college-ready in math. Some students, however, mostly those in rural schools, take dual enrollment courses in the subject area of their CRS course because they opted to take the CRS course even though they tested college-ready in that course's subject area.

Collaboration between colleges and CRS high school teachers is much less frequent. Nonetheless, respondents described examples of secondary-postsecondary collaboration related to the FCCRI.

Some colleges provide college readiness curricular materials to high schools and districts

Most often, colleges provide curricular materials and other resources from their developmental education courses to high school teachers. For example, a state college in a medium-sized district provides course materials to the four school districts in the area it serves. The college has held periodic trainings to introduce the materials to CRS teachers and recommended which books to use. Districts generally require teachers to attend; however, the college has not received any follow-up questions from teachers on texts or materials. One of the districts the college serves subsequently developed its own pacing guide. While there may be some teachers still using the college materials, they are not implemented district wide. Staff at the

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[11] TRIO is a federal initiative that provides postsecondary institutions and community-based organizations with funding for programs to promote increased educational opportunity and attainment among low-income students, first-generation college students, and students with disabilities. See http://www2.ed.gov/about/offices/list/ope/trio/index.html.

college are in the process of updating the materials, with support from an adult education grant.

When FCCRI implementation became mandatory, a college in a small district convened a meeting for high school teachers, providing course materials and describing how the content was suitable for CRS courses. Teachers reported using the course materials only in the first year of implementation, however. A different state college provided curricular materials to a nearby small district that we visited in this study, but it appears teachers are not using them widely.

Two high school teachers in a large district are working to implement math classes modeled after the redesigned developmental math program at a nearby state college. The college coursework focuses on mastery of content. Students work at their own pace and do not receive zeroes on incomplete assignments until the last week of class. Course content is delivered through an online program that does not permit students to take an assessment on a particular topic until they have completed all of their assignments. The model requires Pearson's MathXL (www.mathxlforschool.com), an inexpensive software program; however, an instructor from the college noted that wide-scale implementation of the model at high schools could be challenging because schools might have insufficient computer resources.

External grants have funded partnerships between several schools and colleges to develop CRS course materials

There are several examples of more extensive collaboration between schools and colleges around CRS curriculum that have been facilitated through external grants. Two colleges have worked with small groups of schools on developing CRS course content using grants from external sources. A state college formed a partnership with five high schools in the large district it serves with support from a Fund for the Improvement of Postsecondary Education (FIPSE) grant from the U.S. Department of Education. The partnership was established during the initial period of the FCCRI when college readiness testing and CRS course participation were voluntary.

The state college provided the high school with resources from its upper-level developmental education courses, including the online course platform, curriculum materials, and assessments. Additionally, college faculty visited the high schools once every two weeks to provide instructional support. The partnership lasted only one year, when the funding from the grant ended. The college wanted schools to take ownership of the courses and requested they pay for a CRS course workbook; unfortunately, it was difficult to get buy-in from the schools and district following the request. College staff believe that, while short-lived, the initiative was valuable, a strong strategy for improving students' college readiness.

In a similar small-scale collaboration, a state college, in partnership with a state university and a large district, received funding from the Florida Education Fund to

develop a new curriculum for math CRS courses. The partnership was limited to only a few high schools. The college developed a comprehensive CRS curriculum that included pre-tests, class exercises, post-tests, and a pacing guide, then piloting the course at one high school for students who scored below college-ready. After piloting the course, the college made a binder of course materials available to the district office, and teachers at several additional high schools began using the materials. Subsequently, the district developed its own pacing guide and required all CRS math teachers to use it. Some teachers at the pilot high school continue to use the college's materials to supplement their course content, however.

Several colleges offer informal training on college readiness

In addition to providing high schools with materials and supporting curriculum development, some colleges also hold training sessions or workshops for high school teachers and counselors focused on college readiness and PERT testing. In most cases, the sessions are open to staff from all local high schools, but only a few high schools have participated. In at least one case, the district arranged for at least a few representatives of every high school to attend these sessions.

A state college in a medium-sized district provided training sessions on the significance of developmental education courses for districts and high schools, as well as district preparation of a CRS framework and curriculum. These sessions offered participants contact information for a full-time developmental education instructor whom CRS teachers could contact with any questions. Additionally, the college's assessment division has helped high school staff understand the PERT, providing training to counselors and test administrators at each high school the college serves. The college's level of involvement with such professional development was more extensive when the FCCRI was first implemented.

A state college near rural districts holds mini-conferences with high school math and English teachers that include ongoing conversations about the resources and materials high schools need and how they can align their coursework with college requirements. An associate dean at the college also organized a summer conference on college readiness for high school teachers and college faculty. Breakout sessions focused on instructional strategies for improving PERT scores, the relationship between the Common Core State Standards and college readiness, and curricular alignment between high school courses and introductory for-credit college courses. While there has been little subsequent collaboration during the school year, the college plans to make the conference an annual event.

Finally, several state colleges hold monthly workshops for high school counselors focused on a variety of topics, which have included instructional changes within developmental education and the addition of meta-majors under Florida Senate Bill 1720.

Informal interactions between some high school teachers and college instructors

On some occasions, high school CRS teachers reach out to college faculty to align curricula and provide information to their students. Largely, such teachers also serve as adjunct college instructors or have existing relationships with college staff. For example, a math teacher in a small district sought assistance from an instructor at her local college, who helped her align her course with state college courses. Another teacher who previously taught at a state college used syllabi from introductory credit-bearing English Composition to develop writing assignments for the fourth quarter of his CRS English/language arts course. Class activities include time in the computer lab for students to write, revise, and proofread papers. Further, teachers in several districts reported that they regularly invite college instructors or administrators to speak to their classes about college readiness requirements and the college experience.

Although most informal interactions are one-on-one, a teacher in a rural district reached out to a nearby state college and organized a meeting with English/language arts CRS teachers, the college's Dean of Developmental Communication and College Success, and reading, college success, and English as a second language faculty. The college provided the high school teachers with its developmental education coursework handbook, a copy of its remedial reading textbook, and other curricular materials. While teacher-initiated collaborations with college instructors are fairly informal, one campus of a multi-campus system serving a large school district has initiated more-formal opportunities for partnerships between college faculty and CRS teachers.

Organized opportunities for collaboration between high school teachers and college instructors at one campus

Although not explicitly focusing on the FCCRI, one campus of a state college in a large school district spearheads initiatives that allow for more organized interactions between high school teachers and college faculty. One initiative is focused on K–12/postsecondary curriculum alignment. High school teachers receive data on the number of students from their school who attend the college and their postsecondary achievement outcomes. Teachers meet individually with college faculty to review both the secondary and postsecondary curricula and discuss any gaps between the two. The pairs also consider potential opportunities for further collaboration. As part of the alignment initiative, the campus also is working with high school career academies to provide information on how certifications earned in high school align with postsecondary certificate and associate's degree programs, which has contributed to increased student persistence.

This alignment initiative has been in place for several years, but it was promoted more actively during the 2013/14 school year under new campus leadership. The

campus currently is collaborating with teachers at all six feeder high schools and hopes to expand curriculum alignment efforts to middle schools.

Similarly, as part of the college's participation in the Lumina Foundation–funded Hispanic Access to College Education Resources project (¡HACER!), math and English teachers at six high schools work one-on-one or in pairs with a college faculty member. They observe each other's classes and, afterward, meet to discuss instructional techniques, examine any gaps in curricular alignment, and share syllabi and pacing guides. At the end of the four-week program, all of the participants write reflections on their experience and gather as a group to discuss them (see the box "Lessons Learned from the Lumina Foundation's ¡HACER! Program" below).

**Lessons Learned from
the Lumina Foundation's ¡HACER! Program**

By observing high school classes, college faculty participating in the Hispanic Access to College Education Resources project gained firsthand knowledge of teachers' challenges with classroom management. They also learned about the breadth of materials high school teachers are required to cover and the pressure to follow the district pacing guide regardless of students' progress.

College faculty were surprised to learn that students need only a 33 percent on an End-of-Course exam to pass courses that require it. They cited this as a reason for some incoming college students' lack of college readiness.

High school teachers also gained knowledge from ¡HACER!, identifying gaps in their curriculum and pacing guides. They found that colleges cover less material, but at a much deeper level. They were surprised to learn that some college courses were covering content equivalent to the 10th grade level.

The ¡HACER! program grew out of a campus initiative designed to formalize interaction between high schools and college by organizing three meetings throughout an academic year for secondary and postsecondary administrators, faculty, and students. Attendees were encouraged to continue conversations and collaboration after the meeting. For example, college and high school staff have jointly held workshops for students and parents at all six feeder high schools on completing the Free Application for Federal Student Aid (FAFSA).

The initiative revealed that high school staff were interested in more opportunities to collaborate with the college to increase college readiness. This finding was the impetus to apply for the ¡HACER! grant, which provided the opportunity for more

formal collaboration between the campus and several of the lowest-achieving feeder schools. Both the college and school district would like to continue and scale up the ¡HACER! program, expanding it to additional schools, but future funding is uncertain. Also, the campus with this program primarily draws from six public schools, plus a few charter and private schools. Other campuses of this college have as many as 20 feeder schools, making it considerably more challenging to expand the initiative.

Impediments to increasing collaboration

Despite examples of collaboration around the FCCRI, there are some challenges limiting greater cooperation. The most significant barrier to increased collaboration between high schools and colleges is that CRS high school teachers are left largely on their own in developing lesson plans and materials. In most high schools, because no person is responsible for developing curricula, pacing guides, and materials, the CRS courses are not taught in a uniform way, contrary to dev-ed courses at the state colleges.

"[There is] a disconnect between college and high school. I thought this initiative would connect us, but that hasn't happened….But I think we would all benefit. I hope that trend will change."

—State college developmental education instructor

Respondents also mentioned a lack of staffing and funding to devote to partnerships as impediments to collaboration. Many of the examples of more formal and intensive collaboration between colleges and high schools described in the previous section were possible only with the support of external funding or grants. It is uncertain whether these initiatives will be sustained when these resources are no longer available.

Time is another resource colleges and high schools lack. Stakeholders at all levels must address competing priorities, leaving limited time available for collaboration. One college administrator said her school would like to increase collaboration with high schools, but faculty are currently too focused on implementing changes in the developmental education program associated with SB 1720. She also cited a lack of adequate staff at the college available to reach out to high schools to the extent she would like. Because high schools and districts are so focused on the Common Core State Standards and courses in tested subject areas, they often lack the resources or capacity to establish partnerships with colleges. Teachers may not have the time to attend professional development or workshops on CRS courses.

A final impediment to increasing collaboration is the lack of alignment between the high school and college curricula, goals, and regulations. Several college faculty and staff would like to see improved vertical alignment between high school and college curricula. In fact, one high school teacher would like additional collaboration and

alignment not only between high schools and colleges, but between middle schools and high schools, as well. Such alignment would be a step toward ensuring that students are more prepared for college-preparatory courses in high school. A college instructor was optimistic that the implementation of the Common Core State Standards would begin to bridge the gap between high school and college curricula.

High school curricular and accountability requirements are sometimes barriers to course and curriculum alignment. One college faculty member said high school teachers appear receptive to making changes to their courses, but ultimately focus more on the FCAT and other accountability requirements. Two high school teachers agreed that accountability requirements have lessened the focus on overall college readiness. A college developmental math instructor noted, "The biggest disconnect is the way we operate as a faculty here and they operate as a faculty there." For example, school teachers must administer a certain number of assessments in specified form, whereas college instructors have more instructional autonomy.

Another problem is that high schools are constrained by guidance from districts and the state. One college faculty member said his department communicated only with district-level staff, and had no direct contact with high school teachers. "There is a hierarchy of the flow of information that seems a little weird," he noted. Often it is the case that collaborations with high schools occur without formal district sanction, and these collaboration are not occurring district wide.

Some similar barriers affect collaboration among teachers and administrators within schools or between schools and districts. Major problems include not having enough time to complete demanding basic assignments, and no one having a clear mandate to facilitate collaboration. One teacher said CRS courses receive limited attention from administrators, citing a high rate of administrator turnover in her district. Some smaller schools had only one CRS teacher in each subject area, and they lacked opportunities to network with other CRS teachers in their district.

Suggestions from educators for increasing collaboration

The research literature suggests that greater collaboration between K–12 and postsecondary education may help to smooth post–high school transitions (e.g., Bangser, 2008). Even though collaboration around the FCCRI is limited currently, educators offered several suggestions to improve this. Some of the college interviewees mentioned that they provide professional development on other topics for local high schools, but they lack similar programs for CRS courses.

Yet both high school teachers and college faculty members would like colleges to offer additional professional development workshops on college readiness topics. One college instructor said additional professional development for high school teachers would help "bring the college experience into the 12th grade." A developmental English faculty member suggested the college create a course for high school teachers on how to teach college-prep courses. The class would cover differences between high school and college courses and expectations, the skills students need to be successful in college, and the technology used in college classrooms. The course also would include suggestions for high school teachers on revising their instructional approach to improve college readiness, such as providing students with a syllabus and more structure.

Developmental education instructors at a different state college suggested CRS teachers would benefit from summer professional development workshops at the college focused on sharing promising practices. Some of these college faculty also had taught teacher-preparation courses at the state college level that incorporated relatively new classroom engagement strategies, such as integrating technology or using manipulatives to make abstract concepts more concrete (e.g., using algebra tiles to help students visualize how to multiply and factor algebraic expressions). Experienced high school teachers who have been out of college for a long time may not have been exposed to these approaches and often do not have time to research them independently. The college instructors suggested a two- to three-credit summer institute focused on engaging classroom activities, where the faculty could share such effective instructional techniques with high school teachers.

Additionally, CRS teachers and school and district administrators suggested that it would be beneficial for schools and districts to provide more opportunities for CRS teachers to interact with one another. Within schools, administrators can help by ensuring teachers have common planning time at which to exchange information and ideas. Most teachers who reported high levels of collaboration at their schools take advantage of common planning periods. In addition, some of the districts provide one-day professional development workshops for teachers of CRS courses, but many teachers would like these types of activities to be ongoing throughout the school year.

RQ4. What Types of Promising Practices Do Florida's State Colleges Use to Prepare Students for College and Careers?

Another topic we focused on during our site visits was determining which strategies employed by the state colleges might be transferable to a high school setting—even though high schools are faced with impediments that sometimes prevent those practices from being adopted. This includes strategies in dev-ed programs, as well as practices used throughout a college to support all students academically and in preparing for their careers.

This chapter first discusses how developmental education is structured and delivered at the state colleges versus at the high schools. It then identifies those state college practices we believe merit consideration for implementation by high schools. It concludes by highlighting several impediments that would prevent adoption of these promising practices by high schools. Overall, we find that:

- Both high schools and state colleges are tasked with providing developmental education. The way dev-ed is organized, funded, and taught in Florida is fundamentally different at the two levels, however, making it difficult for districts and high schools to adopt promising practices from state colleges.

- Our interviews with state college faculty and staff highlighted several lessons learned, falling into three areas: academic preparation, the development of soft skills, and helping students choose careers and courses that help them enter those careers.

  o State colleges have several methods of providing academic preparation that differs from most high schools:

    ▪ The courses are standardized, with a common syllabus and materials used by all dev-ed instructors within each college, and the materials are specially developed to align with the curriculum.

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- ▪ The state college instructors and academic advisors closely monitor student performance and follow up with struggling students.

- ▪ State college instructors have the resources necessary to enable them to maximize the use of supplemental resources such as online diagnostic programs in their courses and extensive free tutoring.

- o Colleges have several methods to assist students with developing the soft skills; among them are integrating study skills into dev-ed courses, providing separate study skills classes, and including soft skills components in the colleges' orientation and advising programs.

- o Colleges have several methods to help students select careers and courses that will help them enter those careers, including providing students with opportunities for career assessments, orientations, and counseling.

- Several issues hinder high schools' ability to adopt the lessons learned from state colleges:

  - o High schools have fewer financial and infrastructure resources than state colleges do. At the high schools, other goals (such as helping students pass the FCAT and graduate from high school) often receive a higher priority than does preparing students for college and careers.

  - o Students in college courses are more mature and more motivated to succeed than are CRS course students, who often are forced to take the course, not engaged in school, and uninterested in succeeding in college.

  - o Colleges have been improving the structure of dev-ed programs since their inception more than 20 years ago. CRS courses were not offered to large numbers of students at most Florida high schools until 2 years ago.

Developmental education at colleges compared with CRS courses at high schools

One barrier to high schools adopting state college strategies is the difference in the way that dev-ed is structured and delivered at the state colleges versus the high schools. Put simply, college dev-ed is far more standardized. Florida's postsecondary Chancellor's Office is responsible for setting uniform developmental education policies that apply to all 27 state colleges in Florida. The CRS courses in high schools also have common statewide course standards that are similar to those in the dev-ed

courses; however, each of Florida's 67 school districts acts independently on many decisions about how to implement PERT testing and the CRS courses. As a result, policies can vary widely across districts. For most of the smaller and more rural districts, the lack of district-level staff, expertise, and funds greatly inhibits their ability to structure college readiness programs.

A second, more recent barrier is that college dev-ed programs are undergoing rapid and far-reaching changes due to passage of Senate Bill 1720 in 2013. These changes have caused college dev-ed programs, which previously mirrored the FCCRI, to change in important ways.

Prior to passage of SB 1720, entering college students were tested using the PERT and then placed into college math and ELA courses based on their results. In math, students were placed into courses at one of four levels: lower-level dev-ed, higher-level dev-ed, a "gateway" course (Intermediate Algebra), or a requisite for-credit math course (e.g. College Algebra) that counts toward the math requirement for an associate's degree.[12] The students then were expected to move from their starting point through the sequence until they completed a second for-credit math course, and thereby satisfied the associate's degree requirements. The procedure for ELA was similar; however, there were only two levels of ELA courses prior to the first for-credit course.

In contrast, high school teachers reported substantial heterogeneity in the academic preparation of students in their CRS courses prior to SB 1720. In most schools, all students scoring below college-ready on the PERT in reading/writing or on the Algebra I EOC exam were placed in the same CRS course regardless of how far they were from the college-ready cut-score. CRS courses also might include students who had not passed the grade 10 FCAT, at one extreme, as well as students who had already demonstrated college readiness, at the other extreme.

SB 1720 substantially altered the traditional dev-ed sequence. The key changes are, first, that colleges no longer can require recent high school graduates to take the PERT. Second, recent high school graduates are no longer required to enroll in dev-ed courses, even if they scored below college-ready. Now college students can self-select themselves into a wider range of courses, including newly developed accelerated or co-requisite courses that focus on identifying and developing the skills needed to pass College Algebra (or a similar course). For example, "modularized" courses use diagnostics to identify a student's strengths and weaknesses and employ computer-aided instruction to more quickly develop necessary skills. Other options, such as co-

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[12] College dev-ed courses are not for credit, but still require payments of the usual fees. A "gateway" course is for credit but does not fulfill the math requirement for an associate's degree.

requisite courses, provide developmental instruction and tutoring as part of credit-bearing courses. The addition of these new developmental strategies is a welcome change for students with scores near the cut-off of college readiness.

A third major change is that colleges now are able to offer two math tracks: one for students pursuing degrees in quantitative fields (e.g., math, science, business) and the other for students pursuing a degree that does not require significant quantitative knowledge (e.g., communications, creative writing, literature). The math courses in the second track focus primarily on practical skills such as probability, financial math, and the quantitative skills needed to succeed in social science courses. High schools do not have the same ability to group students based on their postsecondary plans. Instead, they must prepare students for postsecondary work that, due to SB 1720, will not be necessary for most students to master in order to obtain degrees and enter occupations of their choice.

A fourth important change is that since SB 1720, students are required to select a meta-major[13] upon college entrance or soon thereafter. This change complements the implementation of math tracks because it helps students determine whether they are, or are not, interested in quantitative subjects, so they take the math sequence that is right for them. It also increases awareness that students benefit from thinking about what subjects and careers they are most interested in, so as to take courses that engage those interests and set a course through college and into those careers.

The state college instructors and administrators we interviewed recognize the benefit of the SB 1720–related changes. One interviewee indicated his college had already taken steps toward making many of the changes to its developmental programs, albeit at a slower pace, before they were mandated by the state.

Drawbacks were also noted, however. In particular, there is concern that students who opt out, but would previously have tested into the lowest-level math course, will have a much harder time completing any college-level courses. One academic advisor described this challenge by noting, "I'm not usually the hand-holding type when it comes to advising, but there is an element

"We are doing our best to encourage students who need it to take dev-ed, but it is harder when they don't have to and they are paying out of pocket."

—College administrator

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[13] SB 1720 requires students to select a "meta-major," which is a collection of programs of study or academic discipline groupings that share common foundational skills. The required courses are the same for all degrees within a meta-major, which ensures that students are completing courses that will count toward their degree even if they change their program of study within the meta-major.

of saving them from themselves. I'm pro–Senate Bill 1720 for students who just missed the cut-score, but students with the lowest PERT scores have no business going into credit courses. They may be struggling." It appears, however, that more-intensive counseling is encouraging some of the lowest-performing students to voluntarily enroll in dev-ed courses.

SB 1720 mandated analogous changes in English/language arts dev-ed, but those changes required less reorganization and caused fewer concerns among college staff. This is because entering college students generally have mastered the basics of reading and writing, and it was relatively easy to integrate into the required Freshman English course the assistance needed by students who were low-performing in language arts. For example, the instructors who otherwise would be teaching dev-ed reading could be assigned to co-teach Freshman English and focus on helping the lower-performing students. In most cases, all students could be given the same reading assignments, but the lower-performing students would be assigned more-basic analysis and writing tasks and be given more help in identifying and developing the skills required to pass Freshman English and perform well in other courses dependent on those skills.

Another difference between high school CRS and college dev-ed courses is that all of the college courses are highly standardized within each college and have been carefully developed over many years. Administrators monitor results and make changes to the course content and delivery when problems are identified. When adjunct professors teach these courses, they are given packets of materials they are required to use in structuring and teaching the course and are closely supervised to ensure that they follow the guidance provided. In contrast, high school teachers receive limited curricular resources for the CRS courses, and there is considerable variation in how these courses are implemented across schools.

Finally, all state college students (in dev-ed or not) have access to an abundance of resources designed to provide a lot of high-quality additional support—resources that are generally not available at high schools. These include computer labs with extended hours, professors with set office hours (including in the evening), peer tutoring, and help with study skills.

Promising practices at state colleges

Our interviews with state college instructors and staff illuminated several promising practices that could be implemented by Florida high schools to improve students' planning and preparation for college and careers. Many of these are things that colleges do to help support all students, not just those in their dev-ed programs. The lessons fall into three areas: academic preparation, the development of soft skills,

and preparing students for post-school plans. We discuss each below, as well as impediments to transferring such practices to high schools.

Academic preparation

Dev-ed courses are standardized and have a common curriculum, which ensures smooth transitions into credit-bearing courses

As discussed above, a big advantage of the college dev-ed program is that it is standardized across all Florida state colleges. The dev-ed classes are well developed, with the goal of ensuring that students move smoothly into credit-bearing courses. The courses also are standardized with a common syllabus and materials used by all dev-ed instructors within a college. For example, the Dean of Developmental Math at one college said, "I give adjuncts everything they need.... We have a common syllabus that every instructor uses. We all use ALEKS® [a computer diagnostic program]. We all use the same instructional materials. We use the same presentation materials." We asked one high school teacher who is also an adjunct how teaching at the college is different from teaching at the high school. He responded that the primary difference is that "everything [at the college] is prepared. [At the high school] you have to prepare and deliver.... You're responsible for everything from beginning to end."

Some of the resources available to college faculty are third-party materials developed by publishers to explicitly meet the goals of the Florida dev-ed and gateway courses. Other materials (including textbooks) are developed in-house to ensure alignment with the curriculum. For example, instructors at one state college developed their own resources from scratch or from free materials available online to align with the course standards. In the 2014/15 school year, the college is making all of these resources available free of charge to high school teachers.

Recent changes to the standard dev-ed course structure, passed as part of SB 1720, have allowed colleges to use new, innovative delivery methods for dev-ed courses in order to better meet the needs of students. For example, one state college developed four different methods of delivering the high-level dev-ed math course (MAT 1033). The individual strengths and weaknesses of students are evaluated and then used to advise them about the benefits and costs of each alternative.

Instructors monitor performance and follow up with struggling students

State college instructors closely monitoring student performance and following up with struggling students is another promising academic practice (e.g., Bettinger & Baker, 2011; Community College Research Center, 2013). The Chair of Developmental Reading at one college attributed its 95 percent dev-ed pass rate to the quality and dedication of the faculty, citing as an example an instructor we also interviewed being "really good at what he does. He keeps up with his students: 'Where are you?'

'Why aren't you in class?' We send emails and make phone calls, send progress reports."

A different state college has a retention management system in place and a practice of connecting a tutor to each dev-ed student. Another college plans to roll out a software system that monitors students and provides an early warning to advisors to help them identify when they need to meet with students who may be struggling. The advisors also can refer students to the Learning Commons, where faculty serve as tutors, or to other college support services.

Both math and writing instructors use computer-based assessments and instructional materials to individualize instruction

Making extensive use of computers, including using computer-based assessments and instructional materials, is a third promising academic practice. Study participants at all six colleges noted allocating funds for this purpose and having instructors work together to identify the best computer resources. The specific resources used include programs such as ALEKS Connect™ Math, and Pearson's MyMathLab™ for math; and Connect™ Reading, Pearson's MyFoundationsLab™, and Virtual Vocabulary Center for ELA. In addition, some instructors at one of the colleges in a medium-sized county employ a flipped classroom model in which class time is devoted to labs and assignments, while lectures are delivered online as homework. Modularized instruction also has been cited in the research literature as a promising practice for dev-ed programs (Bassett & Frost, 2010; Epper & Baker, 2009).

Colleges provide significant access to tutoring services to give students additional academic support

Free tutoring programs specifically for dev-ed students is a fourth promising academic practice available at all six state colleges we visited. Peer tutoring also is widely used, and two colleges have tutoring labs specifically for math dev-ed students. For example, a rural college has a tutoring center where peer tutoring is provided by high-performing students, and dev-ed faculty hold regular office hours at the center. The entire budget was cited as $55,000 per year for the tutors. Staff at all levels of the college spoke highly of the program.

In another example, a state college in a small city has a tutoring center that is also available to high school students. Staff at the college said they believed its students were feeling overwhelmed by the number of different resources available online, so they pulled together the most suitable and effective ones to make it easier for students to quickly locate the resources that would help them the most.

A college in a large city holds test-prep sessions for students in dev-ed courses, although staff admitted that they have problems getting students to take advantage of the help. The college also provides supplemental computer lab instruction for

MAT 1033, but course faculty assign a grade for the labs to entice students to complete them. They also offer several PERT test-prep options before students begin college, including a self-paced computer program for the math portion of the PERT and a summer "boot camp" that focuses on PERT test content. Now that Senate Bill 1720 prevents colleges from requiring the PERT, they are promoting the boot camp as "an enrichment program for students who want to get off to a good start in college." A similar summer program is offered at the other college we visited in a large city, to provide students with an academic refresher before they start college.

Development of soft skills

Colleges have several methods to assist students with developing the soft skills needed to succeed academically and post-school. These include the integration of study skills into dev-ed courses, special study skills classes, and including soft skills "lessons" in orientation and advising programs.

Many college instructors integrate soft skills into their dev-ed courses

Instructors at three of the colleges we visited mentioned that they integrate soft skills training into their dev-ed courses. One reading instructor explained,

> [Incoming students] really don't understand college. We teach more than just reading. Our courses help prepare them for college. We teach skills like how to study, note-taking strategies, selective highlighting—things like that they can carry on to their content courses that they are very unfamiliar with.

Another instructor mentioned that he brings in someone from the college's tutoring office to do a presentation on organizational skills.

Others mentioned that the way they structure classwork and homework develops students' soft skills. For example, one instructor said that a modular math course requires students to learn how to take notes and maintain an organizational system. Another mentioned that lab requirements necessarily teach students how to manage their time.

Colleges offer separate study skills courses for dev-ed students

There is some evidence that Florida college students who enroll in student life skills courses are more likely to persist in college, complete credentials, and transfer to a four-year university (Zeidenberg, Jenkins, & Calcagno, 2007). All of the colleges we visited offer, or have offered in the past, classes on study skills. At five colleges, a

> "[Incoming students] don't know how to learn. They don't have any study skills. It is important that they take the student success course."
>
> —College developmental education instructor

study skills class is mandatory for dev-ed students. These classes cover topics such as time management, study skills, and financial planning. One urban college used to require the soft skills course only for dev-ed students, but now requires it of all incoming students. A state college in a small city is considering making the study skills course mandatory for all incoming students due to the success it has seen with dev-ed students. Another urban college is piloting a student life skills course that would be a co-requisite for all incoming students.

Soft skills classes even have been tried at the high school level, although they are much less common there. At one high school we visited, all 9th- and 10th-graders take a mandatory Life Skills Academy class. Another school district created a "tools for success" curriculum—not a full semester course, but designed for guidance counselors to visit students' classrooms and deliver short lessons. The district noted, however, that the program is not being fully implemented due to competing demands on guidance counselors' time.

Some colleges integrate soft skills into their advising programs

In addition to having a student life skills class for all incoming freshmen, one college also integrates soft skills "lessons" into its orientation and advising programs. During these sessions, advisors work with students on time management and career exploration. Another college's advising program includes 12 modules that focus on essential skills.

Helping students choose careers and relevant courses

Several college instructors and staff noted that planning for careers was a big issue for many students. Many students become disengaged from college because they do not see the value of the courses they take. Other students' choices are not in keeping with their interests and skills. According to one academic services administrator, students "tend to have pie-in-the-sky ideas about what their life plans are. They do not realize the requirements of the job. They also tend to choose majors based on what is popular or what they see on TV."

Colleges use career assessments and counseling to help students identify their areas of interest

All of the colleges we visited offer students assistance with selecting a career and taking courses that will help them enter those careers. Only one college, however, has a staff specifically assigned to providing students with career assessment, orientations, and counseling. More typically, colleges offer only "academic" counseling, primarily designed to make sure students take the courses required to obtain a degree in their field of choice, not to help students select a field based on

aptitudes and career interests. Importantly, many instructors and counselors we interviewed indicated that they know little about the extensive career programs offered at their college, but would like to know much more about them. Nevertheless, there is growing interest in career counseling and assessment.

One promising practice at colleges for helping students with their career development is the use of computer-based career assessments (Hughes & Karp, 2004). Three of the colleges we visited use an online program called Florida Choices, the state's career information delivery system (https://www.flchoices.org/), which includes assessments for interests, skills, and values, as well as information on careers and postsecondary education. One college is piloting a new program from the Educational Testing Service, called SIGI[3] (System of Integrated Guidance and Information), that it believes is more substantial than Florida Choices and will better assist students with choosing a meta-major. Prior to orientation, students are required to complete an assessment on SIGI[3], which provides a list of potential occupations they can discuss with their advisor.

Career assessment and counseling using well-trained staff and high-quality computer-aided instruction could be especially useful in high schools because teachers report many CRS course students are disengaged from school because they don't see the value of getting some type of postsecondary training. Staff at several high schools mentioned that Florida Choices is being used at their school.

Colleges provide orientation and counseling programs that include post-school planning

Also common at the state colleges we visited are orientation and counseling programs geared toward students selecting careers and aligning course taking to those careers. Staff at one state college mentioned that not only does it have a career and transition services center, but its mandatory student success course contains a component on career exploration. In addition, the college offers counseling sessions on specific career fields such as health science and information technology (IT).

At another state college, staff reported that their career counseling services are becoming more popular with students. They enter all students into an online career management system called Future Link. It includes an online job board and a virtual mock interview system. Students also can use the system to look for part-time or summer jobs while they are still enrolled in college. Staff noted that the system has become more popular than their traditional career counseling services.

Colleges participate in activities to improve articulation between majors and careers

Interviewees also noted that their colleges have worked to improve articulation between their programs and high-demand careers in the communities they serve. For

example, the new president at one rural college recognized the need to improve career planning support provided to students and is working to improve the school's career programs. The list of majors at the college is closely tailored to jobs in the community, with a particular push for education majors to provide high-quality teachers for local schools and for safety and security majors to provide well-trained public safety workers.

Another college has partnered with a local school district to develop 80 articulation agreements that allow students to receive college credit for courses taken at high school career academies. The agreements range from programs with one course to business programs that include a sequence of seven courses. A key part of this effort is ensuring that the learning objectives for the academies are appropriately aligned with the programs at the college.

Impediments to transferring promising college practices to high schools

Several issues hinder the adoption of promising practices at the high school level. These include a lack of resources, the younger age and relative immaturity of high school students, the inherent differences in how high schools operate versus colleges, and that CRS courses are newer than college dev-ed programs.

High schools lack financial and infrastructure resources

A lack of resources frequently was cited as a reason that many of the promising practices used by college dev-ed programs have not been implemented by high schools. For example, an urban college piloted a program to put its English basic skills course into five failing high schools in the local school district. An external grant allowed it to provide teacher training and the software needed to implement the course. In addition, instructors from the college visited the schools every two weeks, and it provided the textbooks and all the assessments needed for the course. Some of the schools were having good success, particularly the ones with robust computer labs that were available to students. Others of them had only one computer lab in the entire school, and those with dial-up Internet had trouble getting students engaged and getting teacher buy-in because the course had such an intensive online component. In the second year, the college wanted the schools to begin to take ownership of the course, and it asked that they pay for the course textbook. The project ended because the district decided it was cost-prohibitive to sustain the pilot without the additional support from the grant.

We also heard other examples of high schools lacking the funds to purchase curricular resources that could be used to support their CRS courses. Even staff at one of the colleges we visited noted that it was a challenge to convert its dev-ed math courses to a modularized format because the dev-ed math instructors had to use

computer labs in other departments. This challenge is even greater in many high schools and districts. In some cases, the lack of funds results in students having limited access to computers or access to computers that are outdated. One state college mentioned a school district that is attempting to implement a competency/lab model for math instruction. Staff pointed out that the district is having difficulty providing computer-based diagnostic programs because they require a working computer lab at all times and the schools' computer labs currently are used for other purposes.

Staff at several high schools stated that they do not have the money to buy textbooks or the online resources that accompany many textbooks. Others pointed out that high schools could use resources such as Smart Thinking, tutor.com, and SIGI[3], but insufficient computer infrastructure and the cost of licensing stand in the way.

Additional resource constraints include lack of support personnel, including tutors and counselors. This staffing shortage prohibits high schools from offering the same level of academic support outside of the classroom as the colleges do and from helping students to develop post–high school plans.

The age and motivation of the students at high schools versus colleges

State colleges also have an easier time with creating successful dev-ed programs than high schools do because their students are older and more mature. The high school and college staff we interviewed agree that college students are more motivated and work harder. College students choose to be there and are paying for their education; they also might better understand the importance of working hard, particularly if they had entered the workforce before returning to enroll in college.

According to one dev-ed math instructor, "Maturity has something to do with it. A student in 9th grade may not be motivated and make bad grades. Older returning students say 'I was bad in math,' but when they return [to college], they realize that they have the ability, but they didn't have the motivation [in high school]."

"Some students don't work hard. The motivation that they bring with them has a lot to do with that. Sometimes you see students who have been gone for several years, but then they come back and they have more maturity and finish. They get a job and find out that they can't sustain a family, and they realize the importance of getting a degree."

—College developmental education instructor

One college English instructor noted that even high school dual enrollment students do worse than recent high school graduates taking the same course. She said, "They are smart but have problems adhering to due dates and struggle getting assignments

in on time." A state college staff member noted that recent high school graduates need to understand

> They can no longer have a parent as an intermediary; they are responsible for initiating discussions with instructors if they have conflicts or questions. ... Even with very bright students, there is a lack of knowledge about how to navigate anything. It is a very dependent bunch—they are used to having people navigate for them. They lack maturity and soft skills that help them to be independent learners.

High schools face more restrictions on the structure and format of their courses

High schools are faced with unique restrictions. For example, high schools are not allowed to use a modular course format or to allow students to test out of units because the National Collegiate Athletic Association (NCAA) prohibits this practice for student athletes. High school class scheduling also poses difficulties. In one reading CRS course that we observed, there was supposed to be an online component through which students could take a full ACT practice exam. Their score would be used to generate a customized course of study based on their individual needs. Scheduling forced the test taking to be spread out over many course periods, however, which hurt the overall process, and consequently, students didn't take the test all that seriously. This hampered the school's ability to provide this part of the CRS course effectively.

High schools and colleges have different incentive structures

Colleges have an incentive to get students to complete dev-ed courses and move into gateway courses. For high schools, the main incentive is getting students to graduate; college readiness is often a lower priority, although this has improved over time. This is due in part to the school grading system in Florida, which provides bonus funding for high-performing schools.

A few years ago, the state accountability system was weighted heavily by student performance on the FCAT, but it has recently been modified to include other factors such as the percentage of students who are college-ready. According to one college administrator, "The more recent accountability framework has really been an impetus for getting students more prepared for college."

College dev-ed programs have matured over many years, while high school CRS courses are still relatively new

Finally, high school CRS courses are much newer than college dev-ed programs. This puts CRS courses at a disadvantage, while colleges have had more time to try alternative ways of delivering instruction and to refine their course content. At one college, the instructors noted that they struggled when they first switched to

modularized courses, but they have adapted the courses and the courses have improved over time.

Similar improvements could occur over time for the high school CRS courses. One math teacher noted that his CRS courses are "definitely more effective" this year because he has learned techniques to make the courses better as he has gained experience with them.

Suggestions for the FCCRI based on promising practices at state colleges

We do not want to give the impression that the college dev-ed programs are so effective that they invariably overcome all of the deficits in motivation, soft skills, and academic skills of their entering students; nor that if the resources available to sustain the college programs were made available to high schools, all their students' problems would disappear.

Instead, in the previous section we identified some promising practices from Florida's state colleges that potentially could be transferred to its high schools to improve students' academic preparation, development of soft skills, and preparation for post–high school plans. These suggestions included incorporating computer-based assessments and instructional materials, increasing the availability of academic supports such as tutoring, offering separate courses on soft skills, and providing career assessments to help students identify their areas of interest. We provide two examples of how this could be implemented below.

First, high schools do not have the same resources as state colleges to support large Learning Commons with extensive tutoring services. But we saw, for example, one college that had a great peer-tutoring program where more-advanced students provided tutoring to students in dev-ed and lower-level college courses. A similar program of peer tutoring could be implemented at the high school level. High school students applying for Bright Futures Scholarships need volunteer hours, so high schools could consider giving students in advanced math/ELA classes a chance to earn volunteer hours by tutoring students in CRS courses.

Second, high school guidance counselors are overwhelmed with tasks such as ensuring that students are fulfilling their graduation requirements. The student-counselor ratio in Florida is 451-to-1, nearly double the American School Counselor Association's (2011) recommended ratio of 250-to-1. It is not feasible for high school guidance counselors to start career centers and work one-on-one with all students on their career plans. But we found that colleges use free resources such as the Florida

Choices online assessment, which high schools could also give to their students if they are uncertain about their post–high school plans.

Another suggestion is that the Florida Department of Education and the state legislature might want to consider extending dual enrollment to include dev-ed courses for high school students who are not college-ready. Currently, dual enrollment is available only for credit-bearing college courses, and participation is limited to students who meet certain requirements for GPA and college placement test scores (per K–20 Education Code §1007.271[14]). Yet there could be benefits to allowing high school students the option of taking dev-ed courses through dual enrollment in lieu of CRS courses. Dual enrollment is thought to have a socialization effect on student outcomes by teaching students the norms, interpersonal interactions, and behaviors expected for college success (e.g., Karp, 2012). Florida's state colleges were required to redesign their dev-ed programs under Senate Bill 1720, and now provide options such as modularized courses. These types of courses could provide high school students who are close to college-ready with a less time-consuming alternative to a full-semester or full-year CRS course at their school.

This suggestion might be particularly timely, as now that participation in dev-ed is voluntary for recent high school graduates who enroll in state colleges, the colleges likely will have excess capacity available to support additional students in their dev-ed programs.

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[14] See http://www.flsenate.gov/laws/statutes/2012/1007.271

RQ5. What Do Students Think Could Be Done to Better Prepare Them for Post–High School Plans?

In Spring 2014, we solicited the views of CRS students through an essay contest administered by the CRS teachers we interviewed during our site visits. The essay contest asked students to write a two-page (500-word) essay that addressed three questions:

1. What are your plans for college and/or career after high school?

2.   In what ways has your high school helped shape your plans and your ability to successfully realize them?

3. In what ways could your high school have been even more helpful in shaping your plans and realizing them?

There was considerable variation in the thought and care that went into the writing of the essays, but in all schools there was a substantial group of well-written and revealing essays that provides considerable insight into what factors are important to getting students engaged in school and helping them develop realistic post–high school plans.

What the students have to say corresponds closely with what we learned from our interviews with teachers and staff, and with the state accountability grades given to the schools. In particular, the students were able to appraise the quality of a given school's programs. Interestingly, students attending schools in rural areas, where most students would be the first in their family to attend college, often were aware of the limitations of the opportunities their school offers. Students attending urban schools often recognized that not getting some type of postsecondary education or training will make it very difficult to get a good job.

Overall, we find that:

- About half of the CRS students had credible plans for attending a postsecondary institution after high school.[15] Of this group, roughly one-third planned to attend only a state college; one-third planned to start at a state college and transfer to a university; and one-third planned to start at a university.

  o The percentage of students who planned to attend a postsecondary institution is positively correlated with teachers' ratings of students' skills, as well with as the state accountability grade of the schools (A to F).

  o Students at the schools with the lowest state ratings had postsecondary plans that appear to be unrealistic given their skill level.

- The percentage of students who indicated that their high school was not helpful in developing their post–high school plans varies considerably across the high schools. Schools with the highest percentage of low-income students (those receiving free or reduced-price lunch) tend to have the lowest ratings for helpfulness.

  o Thus, the helpfulness rating of each school could largely be related to the proportion of students having the greatest need for help in developing their postsecondary plans. Low-income students would be expected to need the most help because they are least likely to have access to mentoring from family and friends who attended college.

  o Nevertheless, the percentage of students rating their high school as unhelpful is disproportionally high in a few schools with small populations of low-income students—suggesting that poor academic education and planning support, due to factors within those schools' control, contributes to student complaint levels.

  o The reverse also is true, however. Some schools with high proportions of low-income students are rated as helpful in developing students' post–high school plans.

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[15] Plans were defined as *credible* if student included sufficient detail in their essay to allow a reader to see that they had thought about their plans. For example, a plan was considered credible if the student listed a specific institution he planned to attend. An essay was not considered credible if the student said she was planning on "going to college" without providing any additional information. The essays were written by students in May of their senior year, by which point they should have been able to provide some detail about their college plans if they really did intend to enroll in college right after high school.

- The main differences between the high schools where students had positive attitudes about the helpfulness of their high school versus those where students had negative attitudes are the extent to which students have contact with:

  o Teachers and counselors who care about them as individuals and are dedicated to helping them develop realistic plans that will lead to successful careers.

  o College faculty, staff, and students who provide the students with information about the benefits of attending college and the fields of study that might be right for them.

- Additional differences between schools with high and low ratings for helping students develop post–high school plans include:

  o Mechanisms to help students see the connections among high school, college, and careers.

  o Courses that engage students' interests and use their talents, regardless of what those talents are.

  o A tone in the school such that students see teachers, counselors, administrators, and other staff as taking an interest in them as individuals.

Characteristics of the sample

We purposely chose sites to visit that included a wide range of student, school, and local labor market characteristics. As shown in Table 3 on the next page, four schools are in large cities, two in towns (smaller cities), and four in rural areas. (We visited two additional schools in a smaller city, but were not permitted to collect essays at those schools.) Two schools received A ratings from the state accountability system, three received B ratings, three C ratings, and two D or F ratings.

We also looked at data from the year 2 survey for teachers at the schools participating in the student essay contest. Teachers' estimates of the percentage of their CRS students with the academic and other skills needed to get a two-year college degree range from 10 percent to 60 percent.

Table 3. Characteristics of high schools that submitted student essays, by school (N=10), ordered by state accountability grade.

School	School Type	Essays (#)	Teachers Submitting Essays (#)	Title I School	Demographics		Performance factors		Students with Skills Needed for 2-Year College
					Students Receiving Free/Reduced-Price Lunch	Students from Minority Groups	State Accountability Grade	FCCRI Effectiveness Rating	
1	City	30	1	No	46%	92%	A	5.0	60%
2	City	124	2	Yes	56%	63%	A	4.0	40%
3	Town	18	2	No	39%	23%	B	3.7	58%
4	Rural	22	1	Yes	61%	13%	B	5.0	40%
5	City	15	1	Yes	82%	92%	B	2.0	40%
6	Town	15	1	Yes	66%	62%	C	2.5	45%
7	Rural	18	2	Yes	75%	92%	C	5.0	40%
8	Rural	15	1	Yes	63%	6%	C	3.0	40%
9	City	49	2	Yes	83%	99%	D	2.0	15%
10	Rural	23	1	Yes	75%	98%	F	2.7	10%
	Total or Average	329	14	—	65%	64%	C+	3.5	39%
By performance									
1–3	High-performing	172	5	——	47%	59%	B+	4.2	53%
4–8	Mid-performing	85	6	——	69%	53%	C+	3.5	41%
9–10	Low-performing	72	3	——	79%	99%	F+	2.4	13%

Sources: Number of essays and teachers submitting essays are based on author's calculations. Demographic data and state accountability grade are from the FLDOE school report cards (http://schoolgrades.fldoe.org/). FCCRI effectiveness rating is from the Spring 2013 CRS teacher survey. Percentage of students with skills needed for a two-year college is from the Spring 2014 CRS teacher survey.

In addition, we grouped the schools into categories based on a combination of their state accountability grade, teachers' rating of the effectiveness of the FCCRI, and percentage of students with skills sufficient for a two-year college. Schools 1 through 3, which have high ratings in each area, we categorize as "high-performing schools." Schools 4 through 8, which have middle-range ratings, we categorize as "mid-performing schools." Schools 9 and 10 have low ratings and are categorized as "low-performing schools." As might be expected, the low-performing schools also have the highest percentage of minority students from poor families.

Students' post–high school plans

On average, just under half (48 percent) of the CRS students in each school had credible plans to attend a postsecondary institution immediately after high school. Among these students who planned to attend a postsecondary institution, the distribution is fairly even among students who planned to attend a state college only, start at a state college and transfer to a four-year university, and attend a university only. About 13 percent of students planned to enter the military instead, although there is considerable variation; three schools have less than 7 percent of students entering the military, and four schools have between 17 percent and 25 percent of students. On average, about 7 percent of students planned to work instead of attending a postsecondary institution, and 8 percent planned to attend a trade school or vocational institution.

Some 24 percent of students did not have a specific or credible plan. By *specific* we mean that they include details about their plan in their essay, such as the specific name of the postsecondary institution or set of institutions they are considering. By *credible* we mean that they provide a reasonable explanation for their choice. Among the plans that are not specific or credible, we assume that some students were given the assignment of responding to the essay questions but had not seriously considered going to college, and so put down "college" rather than leave the question unanswered.

Table 4 (on the next page) lists the high schools from high to low on the percentage of students with postsecondary education plans. Across all schools, the percentage of students planning to attend a postsecondary institution (state college or university) ranges from 33 percent to 62 percent. The average is 59 percent in the three high schools with the highest college-going rates; 47 percent in the eight high schools in the middle of the distribution; and 37 percent in the two high schools with the lowest college-going rates.

Table 4. Characteristics of schools and students' postsecondary plans, by school (N=10), ordered from high to low on the percentage of students planning to attend any postsecondary institution.

School	School Type	State Accountability Grade	Demographics		FCCRI Effectiveness Rating	Students with Skills Needed for 2-Year Degree	Postsecondary Education Plans		
			Students Receiving Free/Reduced-Price Lunch	Students from Minority Groups			State College Only	University[a]	Any Postsecondary Institution
1	City	A	56%	63%	4.0	40%	20%	42%	62%
2	City	A	46%	92%	5.0	60%	7%	52%	59%
3	Town	B	39%	23%	3.7	58%	50%	6%	56%
4	Town	C	66%	61%	2.5	45%	0%	50%	50%
5	Rural	B	61%	13%	5.0	40%	19%	29%	48%
6	Rural	C	63%	6%	3.0	40%	13%	33%	47%
7	Rural	C	75%	92%	5.0	40%	14%	29%	43%
8	City	D	83%	99%	2.0	15%	13%	29%	42%
9	Rural	F	75%	98%	2.7	10%	5%	30%	35%
10	City	B	82%	92%	2.0	40%	13%	20%	33%
Total or Average		C+	65%	64%	3.5	39%	16%	32%	48%
College-Going Rate									
1–3	High	A-	47%	59%	4.2	53%	26%	34%	59%
4–7	Medium	C+	69%	54%	3.9	41%	12%	35%	47%
8–10	Low	D+	79%	95%	2.2	22%	11%	26%	37%

a. "University" includes University Only and Transfer from State College to University.

Sources: State accountability grade and demographic data are from the FLDOE school report cards (http://schoolgrades.fldoe.org/). FCCRI effectiveness rating is from the Spring 2013 CRS teacher survey. Percentage of students with skills needed for a two-year college is from the Spring 2014 CRS teacher survey. Postsecondary education plans are from the Spring 2014 student essays.

At schools 2 through 9, there is a consistent pattern, where the percentage of students with postsecondary education plans declines as the percentage of students with the skills needed for a two-year college declines.

- Schools 2 and 3 have about 59 percent of students with the skills needed for a two-year college, and about 58 percent of students planned to a attend postsecondary institution. This suggests that students have the skill levels necessary to support realistic plans for attending college.

- Schools 4 through 7 have about 41 percent of students with the skills needed for a two-year college, and about 47 percent planned to attend a postsecondary institution. This suggests that most students have realistic plans based on their skill levels, but their plans may be slightly less realistic than students in schools 2 and 3.

- Schools 8 and 9 have about 13 percent of students with the skills needed for a two-year college, and about 39 percent planned to attend a postsecondary institution. This suggests that many students in these schools have unrealistic plans for attending a postsecondary institution.

The two outliers to this pattern are the highest- and lowest-ranked school for the percentage of students with postsecondary plans (schools 1 and 10). At both of these schools, teachers estimate that approximately 40 percent of their CRS students have the skills needed for a two-year college. School 1, which has the highest percentage of students who planned on attending a postsecondary institution (62 percent), is a vocational high school where many of its graduates attending college are planning to get career-oriented certificates, not associate's degrees. If teachers there base their estimates on the skills needed for associate's degree programs rather than for certificate programs, this may explain why the percentage of students planning on attending a postsecondary institution is higher than their teachers' estimates of their skills.

At school 10, it is unclear why it has a low percentage of students with postsecondary plans relative to teachers' estimates of students' skills. At this school, however, 40 percent of students did not have credible plans—the highest rate of any school. It could be that teachers didn't allow students enough time to develop coherent plans in their essays.

Students' satisfaction with the role their high school plays in shaping their plans

Overall, about half of the CRS students submitting essays (52 percent) indicated that they found their high schools "helpful" or "very helpful" in shaping their

postsecondary plans. About 10 percent expressed negative opinions, and one-third expressed no opinion or a neutral opinion.

Table 5 (on the next page) displays those percentages, with the schools ordered from most to least helpful. The school helpfulness ratings range from a high of 80 percent (school 1) to a low of 10 percent (school 10). The top four schools receive a helpfulness rating of 76 percent on average and are categorized as "most helpful." This group has the highest averages for the state accountability grade (B+), FCCRI effectiveness ratings (3.9), and percentage of students with skills needed for a two-year college (49 percent).

School helpfulness ratings are associated with student characteristics

We find that schools with high ratings for helpfulness tend to have low percentages of students who are low-income or from minority groups. The differences in these characteristics are especially large across the three categories of "most helpful," "moderately helpful," and "least helpful" schools shown at the bottom of Table 5 on the next page.

- The schools with the highest helpfulness ratings (schools 1–4) have an average of 51 percent free and reduced-price lunch students and 46 percent minority students.

- The "moderately helpful" schools (schools 5–8) have an average of 71 percent free and reduced-price lunch students and 65 percent minority students.

- The with the lowest helpfulness ratings (schools 9–10) have an average of 79 percent free and reduced-price lunch students and 99 percent minority students.

There are two potential hypotheses for why the helpfulness ratings are lower in schools with a high percentage of low-income students:

- That lower-income students have less access to college attendees—The degree to which students are able to receive the mentoring needed to develop sound post–high school plans from their family and community is associated with family income. Having access to adults who have attended college is critical to formulating sound plans (Lareau & Conley, 2008; Rowan-Kenyon, Bell, & Perna, 2008).

- That the quality of the planning assistance is lower in schools with a high percentage of low-income and minority students (McDonough, 2005; The College Board, 2012).

Table 5.   Characteristics of schools and students' rating of helpfulness of their high school with their postsecondary plans, by school (N=10), ordered by total helpfulness rating.

| School | School Type | State Accountability Grade | Demographics | | FCCRI Effectiveness Rating | Students with Skills Needed for 2-Year Degree | Students' Helpfulness Rating | |
			Students Receiving Free/Reduced-Price Lunch	Students from Minority Groups			Helpful + Very helpful	Very helpful
1	Town	B	39%	23%	3.7	58%	80%	80%
2	Rural	C	63%	6%	3.0	40%	80%	50%
3	City	A	46%	92%	5.0	60%	73%	27%
4	City	A	56%	63%	4.0	40%	73%	59%
5	City	B	82%	93%	2.0	40%	63%	17%
6	Rural	C	75%	92%	5.0	40%	47%	13%
7	Town	C	66%	62%	2.5	45%	43%	36%
8	Rural	B	61%	13%	5.0	40%	33%	22%
9	City	D	83%	99%	2.0	15%	21%	19%
10	Rural	F	75%	98%	2.7	10%	9%	0%
	Total or Average	C+	65%	64%	3.5	39%	52%	32%
By Helpfulness Rating								
1-4	Most helpful	B+	51%	46%	3.9	49%	77%	54%
5-8	Moderately helpful	C+	71%	65%	3.6	41%	47%	22%
9-10	Least helpful	F+	79%	99%	2.4	13%	15%	10%

Sources: State accountability grade and demographic data are from the FLDOE school report cards (http://schoolgrades.fldoe.org/). FCCRI effectiveness rating is from the Spring 2013 CRS teacher survey. Percentage of students with skills needed for a two-year college is from the Spring 2014 CRS teacher survey. Helpfulness ratings are from Spring 2014 student essays.

Based on what we learned from the site visits, the first hypothesis seems the more likely. Helpfulness ratings tend to be highest in schools where students are able to get the information and counseling needed to make sound post–high school plans from sources outside of school. In other words, the amount of help offered from the schools could be about the same, but the need for that help decreases as family income rises. Thus, it could be that when students have a clear idea of their postsecondary plans, they are able to get the help they need to realize that goal from their school; but when students don't have a clear view of their options, their school is less able to help them formulate their plans.

There also is variation across the schools in the quality of both academic and counseling services provided, holding constant external factors such as the characteristics of the students and the local labor market. In schools with the lowest helpfulness ratings, it could be that not only do they have higher proportions of students needing help, but the schools do not provide the academic preparation or planning assistance students need to realize their college and career goals.

Thus, the schools with the lowest helpfulness ratings may reflect a combination of (1) the schools having a more disadvantaged population, which makes it more challenging to help students select post–high school paths, and (2) the schools having weak academic and counseling services, which makes it difficult for students to realize the college and career goals they select. This also provides a basis for understanding the source of many of the comments students made about whether they were sufficiently engaged by school, and whether they were working hard enough to have the background needed to be prepared for a variety of college and career options.

Even schools with disadvantaged student populations show promising practices for helping students with their post–high school plans

A central theme in this chapter is that even though some schools have high proportions of low-income and minority students, they have developed ways to engage students' interests, get them to work hard to master the skills needed to succeed in college, and help them develop concrete postsecondary plans.

One way to do this is by giving students the option of attending magnet schools with specialized career and technical education programs (Kemple, 2008; Stern, Dayton, & Raby, 2010). One of the schools with the highest ratings for helpfulness is the only vocational/technical high school that submitted essays. It is an urban magnet school offering career-oriented programs in health-related occupations, education, childcare, IT, auto repair, skilled manufacturing crafts, aviation, clerical work, and personal services such as cosmetology. The majority of students at this school were very

satisfied with the education they received. One student reported, "The teachers and students actually like being here, rather than at normal public schools. … I have a much better focus here than at my previous high school."[16]

Moreover, many of the students in this school planned to get further training in the career field they studied in high school at a community or technical institute, and some students in the more academically challenging fields such as IT planned to attend a four-year college. A few students got internships directly related to their high school field of study; a few planned to get jobs with certificates they received that qualified them for employment immediately after high school in fields such as child care; and a few planned to build on the skills learned in high school in the military.

Another school that received high rankings for helpfulness is a "regular" urban high school. Students at this school also showed high levels of satisfaction with their high school preparation. This school requires all students to take special courses dealing with career planning and development of soft skills required for success in high school and college, starting in the ninth grade. It also is one of the few schools visited where students reported that their parents, teachers, and school staff had high academic aspirations for them, even though most of the parents had not attended college themselves and held blue-collar jobs.

The remainder of the regular high schools vary considerably in their state accountability grades and levels of student satisfaction, regardless of their locale (rural, town, or city). Almost all of the students at the schools with low ratings believed strongly that their school did not do nearly enough to engage their interest and prepare them adequately to have a range of viable college and career choices.

Many students at schools with low helpfulness rankings noted that military recruiters were the only adults they encountered who took an interest in them as individuals and who provided them with an opportunity to discuss their post–high school plans and the connections among their engagement in school, academic preparation, and the type of jobs and training they could get after leaving high school.

Some of the students who participated in the Junior Reserve Officer Training Corps (JROTC) praised the program for providing strong direction both academically and socially. One student reported:

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[16] Except as indicated by ellipses or brackets, all excerpts from student essays are reproduced exactly as written, including their original spelling, grammar, and usage.

> I've had a great experience not only from the school itself but, also, from the JROTC Program. This program has helped me build and develop into a whole new person. Sometimes I feel robotic, but most of the time, I feel like a human being because of where this has taken me … most of this is credited to my Army Instructor.

In addition, students noted that the JROTC program gave them strong reasons to improve their academic performance on the Armed Services Vocational Aptitude Battery, so they could get more-demanding training in the military, which also would qualify them for interesting and highly paid civilian jobs. Students also reported that JROTC was the only program at their high school that offered highly effective, computer-aided instruction that helped them improve their academic and other skills. As one student stated:

> In the JROTC class on Wednesdays we do an activity on the internet that's called "March to Success" [which] helps me out about reading, math, science, and writing and also about the real world. … The class [has] been a lot of help. I now know what things I want to do within the military and know now my goals and plans will persevere.

Factors related to how high schools shaped, or could have shaped, students' plans

Among the essays that answered our three questions completely and coherently, students who found their school helpful in developing their post–high school plans and in engaging their interest noted the same factors that were noted as being absent by students who reported their school was not helpful and did not engage their interest.

The difference between the high schools where students had positive views versus those where students had negative views is the extent to which students had contact with:

- Teachers and counselors who cared about them as individuals and were dedicated to helping them develop realistic plans that would lead to successful careers.

- College faculty, staff, and students who provided them with information about the benefits of attending college and what fields of study might be right for them.

In only a few schools are such efforts organized and led by principals or other administrators. In all schools, however, there are at least some teachers who take it

upon themselves to encourage students in a way that is valuable to them. Also in each school, a few students take it upon themselves to find the help they need on their own. But regardless of which of the two sources cited above provide it, students are more likely to have positive views of their school and be more optimistic of their futures when they make the connections among working hard in school, getting the right type of postsecondary education, and the types of jobs and family life they would have subsequently.

In the next several subsections, we discuss what the students wrote about key factors that contributed positively or negatively to helping shape their post–high school plans and being engaged in school (Appendix Table 13 and Table 14). We conclude by describing the policy implications of what the students told us about how their school helped or what the school could have done to be of more help.

The role of parents and peers in shaping students' plans and increasing their engagement

To varying degrees, students recognized in their essays that their attitudes toward mastering high school subjects and the importance they attach to preparing academically for college are largely shaped by the attitude of their parents and their peers.

Among the students planning to attend a university, most cited family members, especially parents and older siblings, as playing a crucial role in their decision to attend college, their choice of college, and the selection of what to study in college. Some students planning to attend state colleges also cited the influence of family members, but this is less likely than in the first student group.

In a few cases, students noted that no one in their family had attended college, their family was not especially interested in seeing them attend college, and family members doubted they could complete a college program. Nevertheless, these students were intent on going to college and proving their family was wrong to have low expectations. In some of these cases, the students noted that a teacher or coach gave them the encouragement and confidence needed to work hard enough in high school to make college a realistic choice. As one student wrote:

> My teachers saw no hope for me except one. That was my biology teacher. Ironically, she was also my only African American teacher out of seven others. She said to the class one day "I believe no students shall fail my class, and if that's the direction they're going, I won't let them!" It almost felt she was talking directly to me. I felt like she understood. After that day, I would stay after to talk to her about my problems. She told me that being a young black male especially with dreads and being at the

school I was at with predominantly Caucasians, they would see me differently. But I couldn't let that stop me. I had to prove to not just everyone who doubted me, but to myself that I was better so that's what I've done.

Some of the CRS students whose plans do not include attending college noted that this decision partly was based on their academic performance being considerably lower than most college-bound students. They also sometimes noted that their family (and teachers) did not expect much of them, and they would be working in a family business.

The role of school and district leaders in shaping students' plans and increasing their engagement

Many of the essays noted that support from academic or other programs in their school provided the encouragement students needed to attend college or to develop realistic post–high school plans. Many of these programs would not be possible without efforts of school or district leaders such as high school principals, district superintendents, and curriculum directors. That includes fostering CRS courses, developing curricular programs that integrate college and career planning, and providing opportunities for students to interact with college faculty and staff.

Supporting CRS courses

One way that school leaders can create an environment that helps to shape students' plans is to support CRS courses. In several of the schools, the students described the CRS courses as a motivator by providing the encouragement and information they needed to attend college and prepare for careers, as described below:

College and Career Readiness classes have made a huge impact on the way I study. Last year, my mind wandered when I had my book in front of me, cramming for a test. My grades would plummet and so would my GPA. I no longer qualified for Bright Futures scholarships. Since I've begun my 12th grade year, my grades have improved tremendously and so have my studying skills. I can honestly say, I'd be lost without these college preparatory classes.

In my College Readiness class I have learned what to expect in college classes and how to handle the "college life". Also, the class has prepared me to fill out job applications and successfully complete job interviews.

A big help is the college readiness classes refreshing me on things I forgot about and giving me pointers [to] really get ready for collage.

> Mathematics for College Readiness has helped me to get one step closer to my desired goal. I have never been knowledgeable about math, but this course has helped me break it down and simplify it so I can better understand and further in my upcoming career.

> After high school I plan on going to college shortly after I graduate and what will help me get there is my college success class. I have learned a lot in high school, but my college success class has taught me more about how to prepare for a college placement test [than any other class].

Developing curricular programs that integrate college and career planning

A second way that school leaders can create an environment that helps to shape students' post–high school plans is to integrate college and career planning into the school's curriculum. As noted earlier, we visited two schools that have unique programs to integrate college and career planning this way. The first is a vocational magnet school in a large district. As one student in the program noted,

> I think [my high school] has really help me prepare for life after highschool. All of the staff, like our senior graduation coach, and all of my teachers have really helped me shape my plans. I used to be scared and nervous about not really knowing what I was going to do after I graduation. Then my school began having all these different seminars and other programs for us to attend that really helped me alot.

These college and career planning activities are unique to this one school; other schools in the district lack similar programs. In contrast, the second school we visited with college and career planning courses is in a large district where all schools are supposed to have such programs. It appears, however, that the duration and quality of the programs largely are a result of the efforts of individual principals and other school administrators.

In other districts, several high schools integrated attempts to engage students' interest and help students develop sound college and career plans into regular classes, including some CRS courses.

Providing opportunities for students to interact with college faculty and staff

A third way that school leaders can create an environment that helps to shape students' plans is to provide opportunities for students to interact with college faculty and staff. This suggestion is common in the research literature on transitions from high school to postsecondary education (e.g., Tierney, Bailey, Constantine, Finkelstein, & Hurd, 2009), and it also came up during the site visits. Examples include schools that have contacts with local colleges for on-campus visits and career

days, as well as regular visits from college recruiters. Several high schools also provide dual enrollment opportunities in collaboration with local state colleges, which are mentioned in several student essays as beneficial in helping students to prepare academically for college. For example, one student wrote:

> High school was a great way for me to get on track with where I want to be. They offered plenty of dual enrollment classes which led me on the path to achieving my Associates Degree sooner. … Overall, I feel extremely blessed and accomplished. I was able to put several dual enrollment classes under my belt along with many computer class electives. High school was a great experience and my plan is for college to be the same, if not better.

A few students provided positive reports related to having the opportunity to participate in programs where college students and faculty work with high school students on a regular basis. As one student noted:

> I attend this program with [my local college] called the Talent Search Program, which … is built to shape students' future plans and make sure the students are on track to graduate and to help the students decide on which college they want to attend. This program is helpful by the directors make sure you take the ACT and SAT and on Saturdays you wake up and go to [the college] to the TRIO Building. They also have directors to come out [to my high school] on Tuesdays and do college applications, scholarships, financial aid and housing. If [my high school didn't have this program] I would not have an idea or thought about [college] and I would be lost in my future.

Lack of support from school and district leaders

There are also several essays were students noted that their high school suffered from high turnover of principals who did little to help students become engaged in school or develop meaningful post–high school plans. As one student put it, "If a school had three principals in three years that should tell you something." Another student wrote, "At our school we don't have any programs that can help us with our future plans." These high schools do not even take advantage of opportunities offered by their local colleges to inform students about the programs offered by the colleges and how to identify programs that would be the best match for students' interests and preparation.

It is in these high schools where several students reported that military recruiters and Junior ROTC programs were the only sources of contact with adults who showed an interest to them as individuals, described the attributes of a range of careers and the skills needed to enter those careers, and explained how those skills could be acquired in high school, college, and the military. Some of these essays even

demonstrate an understanding of the tradeoffs between entering the military directly from high school and entering as an officer after obtaining a college degree.

The role of high school teachers in shaping students' plans and increasing their engagement

The actions of principals and guidance from the districts are important factors in setting a school's tone, developing students' engagement and skills, and developing programs to help students develop sound post–high school plans. Nevertheless, it is primarily the job of teachers to develop the relationships and procedures that would lead to many students providing positive, rather than negative, views about the helpfulness of their high school.

Ways that teachers support students and their post–high school plans

Teachers are noted most frequently in those essays that indicated a relationship with others was a primary motivator for the students' post–high school plans (see Table 15 in the Appendix). As one student noted,

> This is the fourth year of my high school education and I can say that overall high school experience has been wonderful. All of teachers and staff are willing to help me work to successfully achieve my goals. … I feel that they all care about me as a person as well as my career and academic success.

Even among the schools with the lowest ratings for helpfulness, a few students reported having positive relationships with teachers, which in some cases were life-changing. In one of the most moving essays, a student reported an experience similar to those portrayed in the movie *Mr. Holland's Opus*:

> The first two years of my high school career were an absolute joke. I was just a normal student, who wasn't involved in any sort of extra-curricular activities at all. This all changed the following year. After a couple weeks, [my music teacher] realized that I knew how to play my instrument and that I wasn't just some beginner. Over the course of the year, this relationship of mentor and apprentice began to develop. Now, I'm a senior and our friendship remains unscathed. … I became motivated to join the jazz band, the advanced choir and formed a small jazz ensemble to represent the school. Because of that man, I am going to become a music teacher, because if I can change someone's life the way my teacher changed mine, then I'll have true happiness.

Several other essays reported similar experiences where students who felt insecure and unsure that they possessed any special skills had their attitudes completely

altered by taking a course in an area of interest. The teacher brought out their talents by believing in them and by helping them see the value of working hard enough in high school that they could further develop their skills in college. As one student described,

> Last year I did everything just to get by—my parents called it "skating." In one class [in] particular I gave up, English. I failed and had taken summer school to receive a credit for it. I ended up with the same English teacher [in my senior year]. As she recognize[ed] me coming in, she called me towards her to say "stay on top of your game this year; I know you can do it." Knowing she believed in me made me change my ways. I'm now more responsible, serious and dedicated to do better.

Several students also acknowledged in their essays that only in their senior year did they realize that their options were limited severely because they had not seen the value of working harder in earlier grades. They often took responsibility for not using their time more wisely, and with 20-20 hindsight, regretted the choices they made. For example, one student reported that "high school could have been a lot more helpful if I had just not been so lazy and unmotivated and tried a little harder in my science classes, and in general." Another wrote: "What I've realized about myself while looking back at my transcripts is that I didn't try hard enough. I did what I was expected. For my future I plan on being dedicated, hardworking, responsible, and determined." In a similar vein, a third student commented:

> During my [early] high school years I wasn't doing what I was suppose to do, but as I get in 12 grade I notice how much I should have did my work, listen to my teachers, and stay out of trouble. Teens/students: I just want to push the fact that you guys do what you have to do, stay focused, and stay out of trouble.

Ways in which teachers don't support students' post–high school plans

Despite the large number of essays that noted a positive influence from teachers, there were some essays in which students made comments about unsupportive staff. These essays are predominately from the low-performing schools where many students have not passed the FCAT. Because those teachers' jobs might be at stake if test scores did not improve, they focus heavily on helping students to pass tests, doing little to help students see the connections among high school, college, and careers.

For example, one student stated:

> I feel that my state puts too much pressure on schools through state testing than actual teaching students. Most teachers just teach us the material that will most likely help on the test. If I were in charge, I would start preparing students for college earlier in high school by requiring a

> class for exploring different careers, colleges, and certain requirements for these career paths.

A second commented:

> My high school has done nothing to help me realize what I want to do with my life once I graduate. High school could have been helpful if teachers cared enough to explain you a subject because they genuinely wanted you to learn, not just for test scores … it seems like everything and everyone is so caught up on getting a certain test score they do not end up learning anything well enough to reach their expectations.

The role of high school counselors in shaping students' plans and increasing their engagement

Among the essays that mentioned relationships with others as a motivator, only 8 percent identified a guidance counselor as helpful in shaping their post-high school plans. This seems to be because guidance counselors lack the time to work on this individually with most students. Some students commented that counselors were only there to tell them that they lacked the credits needed to get a diploma and which courses they needed to take. The counselors we interviewed during our site visits also commented that they would like to do more to help students with their career plans, but they are not able to due to their very large caseloads.

A few essays reported that counselors recommended participation in dual enrollment programs at local community colleges or participation in special high school programs designed to provide information and motivation to attend college. Several student athletes also indicated that counselors (and coaches) spent a lot of time reviewing college options with them and giving them concrete advice on what colleges would be best for them. Counselors also might have given similar assistance to students with strong academic qualifications, but very few of those students were in the CRS courses submitting essays.

Students' recommendations for removing key impediments

As already noted, the students in the high schools where few students are engaged or motivated to attend college pointed to the same factors as being absent that students in the schools where most students are engaged and motivated to attend college noted were present:

- Mechanisms to help students see the connections among high school, college, and careers.

- Courses and activities that engage students' interests and use their talents regardless of what those talents are.

- A school culture such that students see teachers, counselors, administrators, and other staff as interested in them as individuals and encourage them to develop skills and interests meaningful to them.

Below we describe specific recommendations from the student essays that address these three impediments. We focus on the suggestions that are actionable and could be feasible to implement. A complete list of suggestions is provided in Table 16 in the Appendix.

Fostering interactions with colleges

Many essay authors noted that lack of information about college was the major impediment to their developing better plans for attending college and getting more engaged in high school. One important recommendation to overcome this impediment is for high schools to arrange campus visits, starting no later than ninth grade, so students learn about the array of programs colleges offer, what skills are needed to do well in different programs, what help is available to select specific programs, what college life is like, and how to obtain financial aid and employment that would make college affordable.

These types of field trips were not commonly described in students' essays, but the trips seemed to make a big impression on students who had participated in them. As one student noted:

> Coming back from the field trip [to our local community college], I was in awe with all the information I had captured. My friends and the rest of our teachers had delightful, bright smiles because we could go back and put our knowledge to use with what we learned.

The students also noted that visits to their high school by recruiters and counselors from community colleges, four-year colleges, and for-profit career colleges also would be helpful, especially if visits were conducted on a regular basis, not just once or twice a year. For example, one student wrote:

> My school has invited and allowed representative from various colleges to come and speak to my class. Each presentation was unique and compelling, none were identical. There were local state colleges and community colleges. There was also a college all the way from Kentucky! Some of the colleges were specialized in a particular area, such as

> technology or auto repair. This helped me contemplate which colleges I was interested in, and gave me a notion on what to expect when I get to one.

Several colleges and universities have Upward Bound or similar programs that provide after-school enrichment programs where college students, faculty, and staff work with high schools students on a regular basis. While few CRS course students have the opportunity to participate in these programs, students who did were very appreciative.

Interviews with faculty and staff at the high schools and community colleges only reinforced the importance of direct interactions between high schools and colleges. But equally important, these discussions make it clear that community colleges consider outreach a very important function; make considerable efforts to reach high school students, especially academically talented students who might otherwise not attend college at all; and assign staff to work with high school students. School districts and high schools, however, vary with respect to the extent they are open to collaborations with the colleges. Some interviewees noted that some of the districts and high schools where students said they had the least information about college options have declined offers to work with their local community colleges.

Giving equal weight to career and college preparation

Among the essays that offered suggestions for how schools could be more helpful, a similar number suggested increases or improvements in college planning (N=60) and in career planning (N=59). Several essays as well as teachers interviewed raised the fundamental point that some students are so uninterested and/or so far behind academically that it is not realistic to believe they can test college-ready in their senior year. Nevertheless, they can develop plans for attending state colleges, which would improve their career prospects and might eventually even lead them to successfully pursue college degrees. In the words of one student:

> The school system needs to stop thinking about what they think will help us succeed and let us actually learn things that we think may help us in life. There should be a much wider variety in career paths or programs for us to choose from.

Another student stated:

> [We should] have classes or sessions with different types of careers that students may be interested in while going to school. If they would do this many people would have different options and/or choices in careers they could be interested in.

Suggestions from students about how to improve college preparation include more guidance on how to apply to college or for financial aid, offering more rigorous or college-preparatory courses, offering better preparation for tests such as ACT and SAT, and organizing more college visits and fairs. Suggestions from students about how to improve career preparation include providing more guidance on selecting careers, offering more vocational courses, providing more career training at the high school, and providing more opportunities to interact with employers. Some 9 percent of essays with suggestions indicated that schools need to help students start developing their post–high school plans earlier. This is consistent with literature in the field that recommends college and career readiness initiatives begin prior to high school or no later than grade 9 (e.g., Hein, Smerdon, Lebow, & Agus, 2012; Tierney et al., 2009).

Summary and Next Steps

Summary

In this second year of the evaluation of the FCCRI, we gained greater insight into program implementation, impediments to the effectiveness of the initiative, and recommendations for improvement. This feedback came from a diverse group of participants and was collected from site visits to high schools, district offices, and state colleges; a follow-up survey of CRS teachers; and feedback from CRS course students through essays. We summarize key findings from each of our research questions below:

How do educators perceive the effectiveness of the FCCRI and barriers to its implementation?

Teachers continue to see the FCCRI as moderately effective in meetings its goals; however, we find somewhat conflicting viewpoints from the K–12 and postsecondary sectors. The majority of CRS teachers believe that most of their students will test college-ready as a result of the CRS courses, while most college educators indicate that they have not seen any improvements in the college readiness of recent high school graduates. These findings are based on study participants' *perceptions,* as data are not currently available to empirically assess whether there has been any change statewide in the readiness of recent graduates.

Lack of student engagement for non-college-bound students and academic heterogeneity— classroom-level mixing of students with different levels of academic preparation—continue to be challenges to the effectiveness of the CRS courses. We also find opinions vary in how impediments to the FCCRI change over time; some teachers see certain impediments to the FCCRI as improving, while others see them as getting worse.

What do college readiness and success courses look like in practice?

Even though they are supposed to be similar across schools and follow the same state course standards, we find tremendous variation within the "black box" that is the CRS course. Teachers reported relying on their own experience predominately in developing materials for their CRS courses, and they all emphasized different goals.

Many teachers in both the interviews and the surveys reported struggling with student engagement in their courses. Reasons given for low student engagement levels include students lacking intrinsic motivation, not understanding why they are required to take CRS courses, teachers' own difficulty customizing activities for students with different levels of academic preparation, and difficulties with other life issues. Despite these challenges, teachers identified a number of promising practices that they use to try to increase student engagement, such as allowing students to explore career and postsecondary interests in the courses, having students participate in inquiry-based problem solving, and integrating technology.

How do high schools, districts, and colleges collaborate around the FCCRI?

We primarily find a lack of substantial collaboration around the FCCRI among high schools, districts, and state colleges, with particularly low levels of collaboration between the K–12 and postsecondary sectors.

Common impediments to increasing collaboration given include difficulty identifying leaders; insufficient manpower, funding, or time; and lack of alignment between high school and college curricula, goals, and regulations. Among the recommendations given for increasing collaboration are colleges to provide more professional development for CRS teachers on college readiness, and colleges and high schools to partner to create additional opportunities for faculty interaction.

What types of promising practices do Florida's state colleges use to prepare students for college and careers?

Florida's high schools and state colleges are fundamentally different, which makes it difficult to make direct comparisons between the two. We did, however, identify some promising practices from its state colleges that potentially could be transferred to its high schools to improve students' academic preparation, develop their soft skills, and help prepare them for their post–high school plans. Examples include incorporating the use of computer-based assessments and instructional materials, increasing the availability of academic supports such as tutoring, offering separate courses on soft skills, and providing career assessments to help students identify their areas of interest.

Impediments to transferring promising practices to high schools include lack of financial and infrastructure resources, differences in the age and motivation of students, greater restrictions on the structure and format of high school courses, and different incentive structures between high schools and colleges. In addition, college developmental education programs have matured over many years, while high school CRS courses still are relatively new; we may expect to see more improvements over time as CRS courses develop.

What do students think could be done to better prepare them for post–high school plans?

The percentage of students who voiced complaints about their plans being limited because of poor high school preparation and support varies considerably across the high schools. Schools perceived to be helpful to students in developing post–high school plans tend to have (1) teachers and counselors who care about students as individuals and are dedicated to helping them develop realistic plans that could lead to successful careers and (2) college faculty, staff, and students who provide the high school students with information about the benefits of attending college and what fields of study might be right for them.

Recommendations include providing more information about college and career options, starting in ninth grade, through campus visits, meetings with college recruiters, and information sessions from counselors or built into regular classes. In addition, teachers could place more emphasis on helping students develop plans that take into account their interests, so students can be more engaged in school and understand why passing the tests would benefit them.

Next steps

The feedback from our year 2 evaluation activities identified many specific actions and materials that might greatly increase the effectiveness of the FCCRI. In addition, our site visits and surveys identified many individuals who could describe "promising practices" that they have developed. As a result, we propose to develop a series of workshops during the 2014/15 school year, organizing them into a series of one-day forums to be presented in at least three of Florida's regions during the late summer of 2015. For the most part, we would have separate sessions for math and English/language arts CRS teachers.

Our tentative list of workshop topics includes the following:

- Lessons learned about the strengths and weaknesses of the FCCRI from the point of view of teachers and students.

- Identifying the elements that make for an effective CRS course: test preparation, development of academic skills and soft skills, college and career planning, and motivating students uninterested in college to reassess their plans.

- The content and structure of the PERT assessment.

- Teaching materials that high school teachers and college instructors have found useful in preparing students for college-level work. We also would

provide materials and write-ups on our FCCRI/Edmodo.com site in time for teachers to use them in preparing their CRS courses for SY 2015/16.

- Examples of collaborations within and between high schools, within and across districts, and between high schools and community colleges.

The forums would be designed to serve the very important purpose of widely disseminating what we've learned so that it could be used to improve the effectiveness of the FCCRI. Besides inviting high school teachers slated to teach CRS courses in the 2015/16 school year and other school personnel involved in the FCCRI, we also would invite officials and researchers from Florida and other states interested in learning about progress made in Florida in order to develop similar programs elsewhere.

Key findings from the forums also might later be presented at statewide conferences attended by high school math and ELA teachers.

Anyone interested in serving on a panel to develop the workshops or wishing to provide suggestions related to these activities should contact Dr. Christine Mokher, Principal Investigator, at mokherc@cna.org.

Appendix: Supplemental Tables and Figures

Table 6.   Amount of class time spent on writing for the student essay contest.

	Teachers
Less than 15 minutes or only described the contest and invited students participate	36%
15 minutes to 1 hour	27%
Between 1 and 2 hours	18%
Between 2 and 3 hours	—
3 hours or more	18%

Source: Responses from 11 teachers who participated in the Spring 2014 student essay contest.

Table 7.   Percentage of students in the class participating in the student essay contest.

	Teachers
More than 90%	20%
76-90%	30%
51-75%	20%
26-50%	10%
Less than 25%	20%

Source: Responses from 11 teachers who participated in the Spring 2014 student essay contest.

Table 8. Percentage of essays teacher reviewed prior to submission for the student essay contest.

	Teachers
All of them	45%
76%–99%	9%
51%–75%	9%
26%–50%	9%
1%–25%	—
None of them	27%

Source: Responses from 11 teachers who participated in the Spring 2014 student essay contest.
Note: Percentages do not add to 100 due to rounding.

Table 9. Rating by teacher of the helpfulness of the student essay contest in clarifying students' post–high school plans.

	Teachers
Very substantially	—
Substantially	50%
Moderately	30%
Slightly	20%
Not at all	—

Source: Responses from 11 teachers who participated in the Spring 2014 student essay contest.

Table 10. Rating by teacher of students' level of engagement in the student essay contest.

Rating	Teachers
Very substantially	10%
Substantially	40%
Moderately	40%
Slightly	10%
Not at all	—

Source: Responses from 11 teachers who participated in the Spring 2014 student essay contest.

Table 11.   Likelihood of teacher using the student essay assignment again next year in the CRS course, regardless of whether there is a contest.

Likelihood	Teachers
Definitely	60%
Probably	30%
Maybe	10%
Definitely not	—

Source: Responses from 11 teachers who participated in the Spring 2014 student essay contest.

Table 12.   Percentage of teachers responding that CRS course material is moderately or very useful, by subject area.

	Math	ELA
PERT practice tests	61%	30%
Textbooks	54%	41%
Pacing guides	39%	17%
Materials from colleges	39%	25%
ACT/SAT practice materials	29%	50%

Source: Responses from Spring 2014 (N=109) CRS course teacher surveys.

Notes: Survey question is "Rate the usefulness of the following resources."

Scale ratings are N/A = "did not have this resource," 1 = "of little use," 2 = "slightly useful," 3 = "moderately useful," and 4 = "very useful."

Table 13.   Ways high schools are unhelpful to students in developing their post–high school plans, as described in student essays (N=166).

	Responses	
	N	%
Cultural impediments	68	41%
Poor school culture	62	37%
Unsupportive staff	6	4%
Post-high school planning impediments	55	33%
Lack of guidance (general)	37	22%
Lack of college-preparation activities	11	7%
Lack of career-preparation activities	7	4%
Academic impediments	32	19%
Poor course content	15	9%
Lack of course opportunities	10	6%
Plans limited due to poor preparation	4	2%
CRS courses were not helpful	3	2%
Other impediments	11	7%
Lack of supplies or resources	8	5%
Other	3	2%

Source: Essays written by CRS students, Spring 2014.

Notes: Some essays included more than one response. There were 210 essays that did not provide any reasons why the student's high school was unhelpful.

Table 14.   Ways high schools are helpful to students in developing their post–high school plans, as described in student essays (N=332).

	Responses	
	N	**%**
Courses prepared students academically	114	35%
Teachers and staff were supportive	72	22%
Students received helpful career guidance	43	13%
Students received helpful college guidance	37	11%
Students received helpful guidance and support (general)	29	9%
Students learned life skills	21	7%
Other	6	2%

Source: Essays written by CRS students, Spring 2014.

Notes: Some essays included more than one response. There were 131 essays that did not provide any reasons why the student's high school was helpful.

Table 15.   Motivators described by students for developing their post-high school plans (N=422).

	Responses	
	N	**%**
Relationships with others	**177**	
Teacher	72	41%
Parents/family	49	28%
Guidance counselor or graduation coach	15	8%
Peers	12	7%
Military recruiters	9	5%
Coaches	6	3%
ROTC instructor	6	3%
Community members/ people in career field	5	3%
Principal or administrator	2	1%
College recruiters	1	1%
Personal reasons	**100**	
Personal confidence	49	49%
Want to follow in someone's footsteps	14	14%
Lifelong interest in career	8	8%
Faith	7	7%
Want to contribute to the community or help others	6	6%
Prove someone wrong	5	5%
Want to leave town	5	5%
Need money to support others	3	3%
Passion for subject area	3	3%
Support from the school	**117**	
Courses engaged students	45	38%
School helped student see connection between high school/college & career	56	48%
Supportive school culture	14	12%
Extracurricular activities or programs	2	2%
Other	**8**	
Students' poor academic record prohibits other plans	7	88%
Other	1	13%

Source: Essays written by CRS students, Spring 2014.

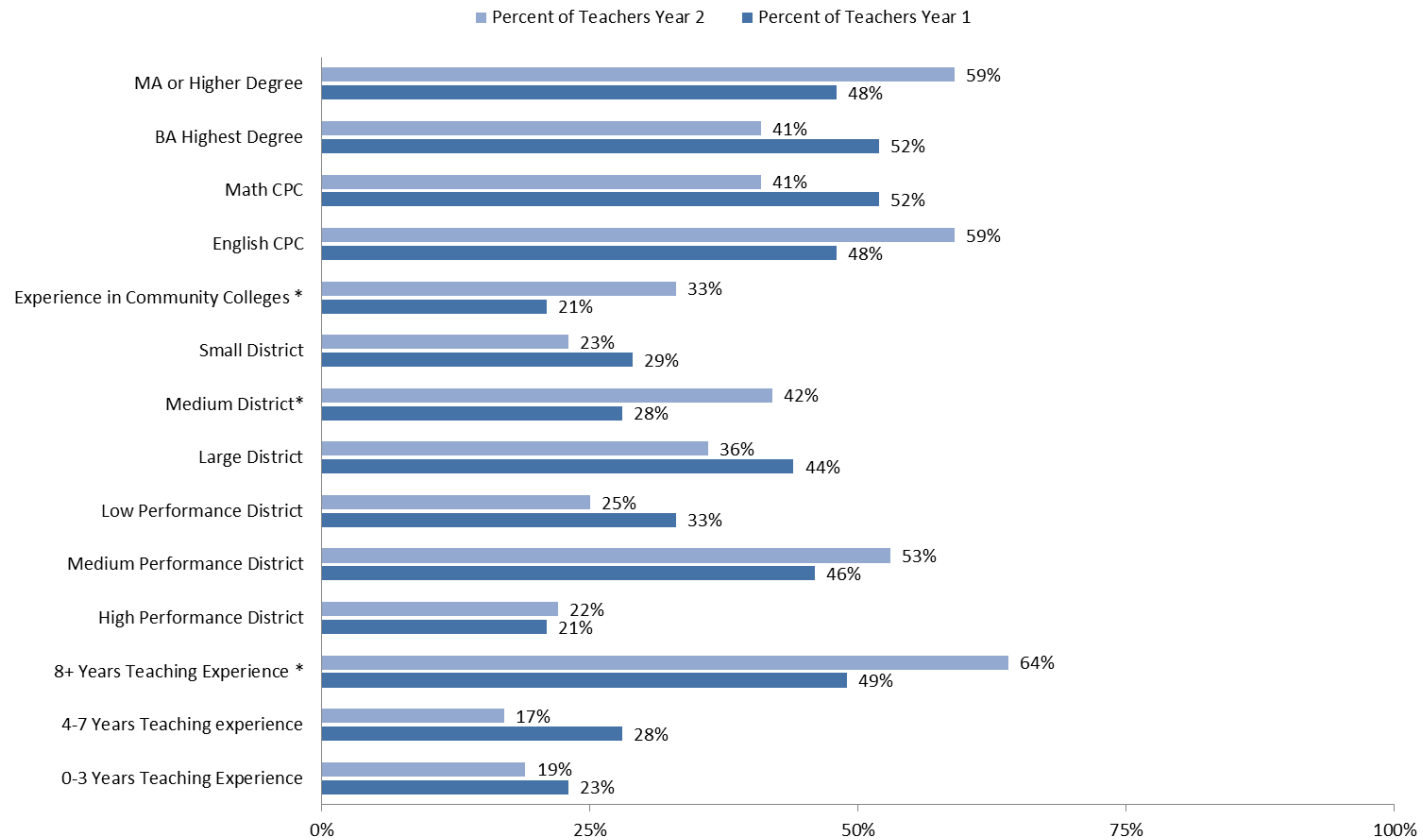Note: Some essays included more than one response.

Table 16.   Suggestions from students about how their how school could have been more helpful in their developing their post–high school plans (N=266).

	Responses	
	N	**%**
Improve or increase college preparation	**60**	
Provide more guidance on applying to college or for financial aid	24	40%
Offer more rigorous or college-preparatory courses	15	25%
Offer better preparation for tests such as ACT/SAT	7	12%
Organize more college visits	5	8%
Organize more college and career fairs	5	8%
Other	4	7%
Improve or increase career preparation	**59**	
Provide more guidance on careers	20	34%
Offer more vocational courses	21	36%
Provide more career training at the high school	12	20%
Provide more opportunities to interact with employers	3	5%
Other	3	5%
Improve school environment and culture	**48**	
Provide more individual attention for students	27	56%
Have more caring teachers	16	33%
Other	5	10%
Other	**99**	
Add specific class(es) suggested by students	26	26%
Increase or improve resources (computers/books)	10	10%
Place less emphasis on testing	9	9%
Start post–high school planning earlier	9	9%
Develop more soft skills or life skills	8	8%
Provide more hands-on activities or field trips	5	5%
Improve guidance (general)	3	3%
Make CRS courses optional	3	3%
Improve campus facilities	3	3%
Improve food services	3	3%
Other	20	20%

Source: Essays written by CRS students, Spring 2014.

Note: Some essays included more than one response.

Figure 16.   Characteristics of respondents in the Spring 2013 and Spring 2014 teacher surveys.

■ Percent of Teachers Year 2   ■ Percent of Teachers Year 1

Characteristic	Year 2	Year 1
MA or Higher Degree	59%	48%
BA Highest Degree	41%	52%
Math CPC	41%	52%
English CPC	59%	48%
Experience in Community Colleges *	33%	21%
Small District	23%	29%
Medium District*	42%	28%
Large District	36%	44%
Low Performance District	25%	33%
Medium Performance District	53%	46%
High Performance District	22%	21%
8+ Years Teaching Experience *	64%	49%
4-7 Years Teaching experience	17%	28%
0-3 Years Teaching Experience	19%	23%

Sources: Responses from Spring 2013 (N=225) and Spring 2014 (N=109) CRS course teacher surveys.

Note: Asterisk (*) denotes statistically significant difference from a t-test comparing means for year 1 and year 2 (p<.05).

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