The School Board of Santa Rosa County, Florida

Proposal to Conduct Research

Project title: Assessment of the Florida College and Career Readiness Initiative (FCCRI)

Purpose and Research Problems

This study will use state administrative data to examine the central question: What is the effect of the Florida College and Career Readiness Initiative (FCCRI) on student outcomes? Short-term outcomes include passing the PERT prior to leaving high school; medium-term outcomes include completing at least three for-credit college courses, and long-term outcomes include obtaining a college credential.

In addition, the study will provide feedback for use by high school, district, and state educators to increase the effectiveness of each component of the FCCRI: (1) testing for college-readiness in the 11th grade; (2) counseling to understand the importance of testing college ready, formulating realistic plans for college or careers, and selecting appropriate courses in the 11th and 12th grades; (3) creating up to 5 new college readiness and success courses to be taken in the 12th grade; and (4) requiring taking of these courses by students testing below college-ready but above the threshold needed to receive a high school diploma. The feedback component will examine three central questions: (1) What are the perceived strengths and weaknesses of the FCCRI? (2) What are the primary impediments reducing the effectiveness of the FCCRI? and (3) How can those impediments be removed? These questions will be separately examined for high schools in large, medium, and small districts as well is in high schools with high, moderate, and low proportions of low-performing students.

Our discussion primarily focuses on the feedback component because this is the element where we are requesting assistance from the Santa Rosa County School District. Some information about the statistical analysis also is presented. These analyses will be conducted using administrative data provided by the Florida Department of Education (FL-DOE).

Instruments: Please see the attached survey instrument and small group discussion guide.

Procedures and proposed data analysis

    a. **Research design:**

The feedback analysis will examine the presence and severity of potential impediments to the implementation of the FCCRI and ways to overcome those impediments in high schools and districts with different characteristics. Information for this component will come from a web-based survey and small group discussions of teachers of the new college-prep courses associated with the FCCRI.

The statistical analysis will use an array of rigorous techniques including regression discontinuity designs (RDDs) and propensity score matching (PSM) designs to determine the effect of counseling, testing, and remediation on completion of for-credit college courses, college GPAs, long-term persistence, and credential completion. The data for this analysis will cover close to 500,000 students and come from the FL-DOE Data Warehouse, which is widely regarded as the nation's most comprehensive database of this type.

b. Definition of variables:

The descriptive analyses will collect information from surveys and small group discussions with teachers of the five new college readiness and success courses. For each teacher surveyed, key variables will include: (1) the number of sections the respondent currently is teaching of each of the five new college-prep courses associated with the FCCRI; (2) perceived effectiveness of each FCCRI component: (a) testing college-readiness; (b) counseling to develop plans to become college ready and select an appropriate college; and (c) developing the five new college-prep courses; (3) the effect of various impediments; (4) characteristics of students in the five new courses; and (5) priorities of the teacher's high school.

The small group discussions will delve more deeply than is possible in a survey into the strengths and weaknesses of the FCCRI's components, impediments, and perhaps most importantly, how impediments can be removed. Separate discussions will be held for teachers in high schools with different characteristics such as being in small, medium, or large districts and having small, medium, or large proportions of low-performing students.

The statistical analysis primarily will use person-level data from the FL-DOE data warehouse that includes high school and college transcripts, credential awards, test scores, demographics, and work histories. In earlier research we created key variables from the raw files that describe each student's major field of study, GPA, and highest credential.

The person-level files will be supplemented with school-level data from a variety of published sources (such as the National Center for Education Statistic's Common Core of Data) that describe school type; enrollment by grade; the percentages of students who are white, African-American, Hispanic, low-income, Limited English Proficiency, Students with Disabilities; and school location (urban, suburban, rural).

c. Data analysis procedures:

The surveys will automatically create analysis files from which all personal identifiers will be removed. A variety of statistical packages will be used to describe the responses to individual survey questions, the inter-relationships across the survey questions, and how the responses vary across high schools with different characteristics.

The notes from each of the individual small group discussions will be used to compile common responses to each of the topics covered by the discussion guides for high schools with similar characteristics, as well as all high schools together.

The statistical analysis of administrative data has four components: (1) acquiring data from the FL-DOE data warehouse; (2) creating analytic files from the "raw" data; (3) adding school level data from published sources; and (3) using a range of analytic tools (e.g. regression discontinuity design, propensity score matching) to conduct the study.

d. Participant selection:

The teachers who will be taking the survey and participating in the small group discussions will come from a stratified sample of 180 Florida public high schools out of the 463 regular high schools that are graded by the FL-DOE. One math and one language arts teacher of the five new college readiness and success courses will be asked to volunteer to participate in this study. We anticipate that 4 of the 180 high schools will be in Santa Rosa County. There will be nine strata derived by crossing district size (small, medium, or large) with students' academic performance (proportion of low-, medium-, or high-performing students). The data required for the stratification will come from an array of published and unpublished sources made available to us from the FL-DOE.

Principals of the high schools selected will be asked to separately identify the math and language arts teacher assigned to any of the five new college prep courses associated with the FCCRI. The principals will be asked to provide the phone number and an email address for each teacher and state their order of preference for inviting the teachers to participate. (The principal can delegate these tasks to other staff such as department heads.) An email will be sent describing the study, the characteristics of teachers who we are looking to volunteer, what the teachers will be asked to do; and the benefits and costs of participating. We anticipate the nominating process will take up less than one hour at each high school selected. If any principal declines to have his or her high school participate, we will pick a substitute school.

The statistical analysis will include data covering all high school students in four cohorts—those in the 11th grade in 2008/9, 2009/10, 2010/11, and 2011/12.

e. Participant recruitment:

We will contact nominees via email sequentially in order of preference specified by the principals or their delegates until we obtain the voluntary consent of one math and one language arts teacher at each school. Nominees will receive an explanatory email, and will be asked to complete a consent form when they take the online survey or attend the forum.

It will be clear in all of our communications with district and school staff that participation is voluntary. Our recruitment and consent materials also make it clear that participation is voluntary.

f. Cost to participants:

Teachers volunteering to participate will be asked to fill out a web-based survey. Time required: less than 30 minutes per teacher. Those completing the surveys will receive a $10 gift card.

Teachers also will be invited to attend a one-day forum that will be held late in the school-year after standardized testing is completed. Time required (including travel time) will be 8 hours per participant. High schools will be reimbursed for the cost of substitute teachers. Forum participants will be given lunch and will be reimbursed for their travel expenses. They may also receive a gift card up to $40.

Benefits to students/school system:
This study will provide information to high school, district, and state educators that can be used to increase students' college-readiness and college success. The feedback we provide will help teachers and administrators in Santa Rosa County increase the effectiveness of the FCCRI as well as suggest ways for the state to aid in the improvement efforts. In addition, the study could provide an effective way to improve college readiness in schools throughout the nation.