Promoting College Access among Underrepresented and Underprepared Students through Supportive Career-Technical Dual Enrollment Programs

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Concurrent Courses Initiative:
Pathways to College and Careers
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• Supports 8 secondary/postsecondary partnerships in CA as they develop, enhance and expand career-focused dual enrollment programs
  – Target population: low-income youth who are struggling academically or within populations underrepresented in higher ed
  – 5 core components

• What is DE and why use this as a strategy?
CCI Partnerships

• Hail from across the state of CA
• Significant numbers of minority, limited English proficient, or first generation college-going
• Variation in specific features of partnerships and delivery of services
Student Supports

• Crucial feature of the Initiative, particularly given the target population
• Supports provided before as well as during course enrollment
• Academic and non-academic services (8):
  – Orientation (initiative, college, and/or career)
  – Academic preparation and/or support
  – Work-based learning
  – Supplemental financial support
  – Leadership activities
Purpose and Questions

– Program evaluation and analysis of student outcomes
  • Provide evidence as to the effectiveness of career-focused dual enrollment in promoting positive outcomes

– Research Questions
  • Is the program reaching the intended student population?
  • What are students’ participation patterns?
  • What are participants short-term outcomes?
Data

• Administrative data provided through Cal-PASS
  – Student background, academic achievement, and high school and college course taking

• Custom data file collects data on students’ CCI experiences
  – DE course location, type of instructor, support services received
Treatments and Outcomes

- **Treatment Options:**
  - CCI dual enrollment with supplemental support
  - CCI dual enrollment only
  - CCI supplemental support only

- **Treatment option that is the focus of today's presentation is CCI dual enrollment, with or without supplemental support**

- **Outcomes:**
  - Performance in dual enrollment course
  - High school grade point average
  - High school graduation (12th grade sample)
Methodology

• Descriptive statistics on CCI participation and performance in dual enrollment courses

• Regression analysis with controls and Propensity Score Matching
  – Used to examine the impact of CCI dual enrollment on high school GPA and high school graduation
  – Controls include: Gender, race/ethnicity, primary language spoken at home, parental education, grade level, prior standardized test scores, and prior grade point average
Enrollment in CCI

• When compared to their respective district enrollment, CCI dual enrollees are more likely…
  – to be members of minority groups
  – to come from families with lower levels of parental education
  – to be English language learners

• There exists variation by site in enrollment by gender, average test scores, GPA, and HS graduation rate
Enrollment in CCI

• 1,594 CCI dual enrollees across 6 sites
• 97% of CCI dual enrollees also received supplemental support
• Enrollment varied by site: from 1,149 at the largest to 32 at the smallest
• On average, students took 1.2 DE courses
• 64% of DE courses taught by college professors
• 39% of DE courses taught on a college campus
Results

Performance in CCI Dual Enrollment (DE)

• **Grades Received**: Across all six sites, 87% of students passed their DE course.

• **College Credits**: Attempted an average of 2.6 college credits and earned 2.5.

• **Performance by type of Instructor**: No clear pattern of which produces better passing rates.

• **Performance by Location**: No clear pattern of which produces better passing rates.
Results

Effect of CCI DE on student GPA

• Regression with Controls
  – Positive and statistically significant effect for 3 sites—equivalent to going from a 3.0 to 3.3 GPA
  – Small negative and statistically significant effect for one site—equivalent to going from a 3.0 to a 2.9 GPA
  – No statistically significant effect for two sites

• Propensity Score Matching
  – Positive and statistically significant effect for 2 sites—equivalent to going from a 3.0 to a 3.5 GPA
  – No statistically significant effect for all other sites
Results

Effect of CCI DE on high school graduation

• Regression with Controls
  – Positive and statistically significant effect for three sites
  – No statistically significant effect for three sites

• Propensity Score Matching
  – Positive and statistically significant effect for one site—The graduation rate for CCI dual enrollees is 22.5 percentage points higher compared to similar district students
  – No statistically significant effect for all other sites
Discussion

• This initial investigation of CCI should be regarded as illustrative and preliminary

• Outcomes analyses are based on first year of implementation
  • Initiatives were still unfolding and were small scale in many sites

• However, while preliminary, results indicate several positives associated with CCI
Next Steps

- Next step is to incorporate year two data into the analysis. This will allow us to explore:
  - Which program model or approach is more correlated with improved student outcomes
  - Impact of the intensity of treatment (number of courses and support services)
  - Post-secondary enrollment and outcomes
The Community College Research Center

http://ccrc.tc.columbia.edu

Concurrent Courses Initiative

http://concurrentcourses.org