Dual Enrollment: Research Update

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Dual Enrollment

- Allows high school students to enroll in college courses and potentially earn college credit
- May or may not be for dual credit
- Broad participation (2002-03 school year):
  - At 71 percent of public high schools, students took courses for dual credit
  - Over 800,000 high school students took a college course
- Participation appears to be increasing rapidly
- Many program models
Why the interest in and expansion of dual enrollment?

- Growing importance of postsecondary education, but problems with retention and completion, particularly for disadvantaged students

- Presumed benefits from dual enrollment include:
  - Increased engagement and motivation of HS seniors
  - Students better understand the demands of college
  - Students enter college with credits already accumulated
  - Potential cost savings to families and education systems
  - Creation of connections between secondary and postsecondary institutions
Early evidence?

- Although a great deal of interest and participation, no rigorous research until relatively recently
- Need longitudinal data systems – to be able to follow students from secondary into postsecondary school
- Need to control for pre-existing student characteristics
Prior CCRC Research (2007)

- Analyses of dual enrollment outcomes in Florida and New York City
  - With controls for student and school characteristics
- Research Questions:
  - Did dual enrollment participants have better postsecondary outcomes than non-participants?
  - Did CTE students who took dual enrollment have better outcomes than CTE students who did not take dual enrollment?
Findings

- FL: Participation positively related to:
  - Enrolling in college, and enrolling full-time
  - Persistence in college
  - Higher GPA one year after HS graduation
  - More credits earned three years after HS graduation

- Male and low-income students benefited more from dual enrollment participation than their peers

- NYC: Participation positively related to:
  - Pursuit of a BA
  - Higher 1st semester GPA
  - Credit accrual
New Evidence from Florida and California

- **Study 1**: Assess relative power of AP and DE for predicting students’ college access (college enrollment overall, and enrollment at a 4-yr college) and success (BA degree w/i 5 yrs) (Florida data)

- **Study 2**: Examine the causal effect of DE and the effect of DE college Algebra for college access and completion (Florida data)

- **Study 3**: Analyze associations between CTE-focused DE and students’ outcomes, for students participating in California’s Concurrent Courses Initiative
Florida Administrative Data

- Two public HS senior cohorts (2000 & 2001); approx. 230,000 students
  - Student transcripts in HS & college (till 2006)
  - National Student Clearinghouse data (enrollment only)

- Participation rate:
  - AP: 14.6%
  - DE: 7.8%
  - No AP or DE: 72%
Study 1 (FL): Predictive effect of AP and DE

** Significant at 1%

Regression control for student characteristics (including prior measures of achievement: 10th grade FCAT standardized scores and GPA), and high school and district characteristics.
Study 1 (FL): Predictive DE effect by location

- ** Significant at 1%

- DE effect is driven by courses taken at the community college
- Limitation: non-experimental study
Study 2 (FL): DE effect

- Florida’s eligibility requirements for DE participation:
  - 3.0 un-weighted GPA and College Placement Test (CPT)
- Regression-discontinuity (RD) intuition: compare outcomes of students around eligibility cutoffs
  - Limitation: effect for students with a level of ability close to eligibility requirements

Findings of two RD analyses:

1) No evidence of any effects of taking dual enrollment
2) Large positive effect of taking college algebra as dual enrollment (increase of 16 percentage points on college enrollment and 23 percentage points on degree attainment (AA/BA), for students on the margin of eligibility
Study 3: California Concurrent Courses

- 8 CTE high school-college partnerships in CA
- Students are primarily minority, limited English proficient, or first gen college-going
- Students took dual enrollment courses and received support services
- Students tracked through Cal-PASS system (voluntary, statewide data-collection effort)
- 2009 & 2010 cohorts followed for up to 2 years into college
Study 3 (CA): Results

- Two methods used: Regression and Propensity Score Analyses, using students in the same school districts as comparisons

- Participation in the Concurrent Courses Initiative related to:
  - Higher high school graduation rates
  - Higher 4-year college enrollment rates (though no effect on college enrollment generally)
  - More college credits accumulated up to 2 years into college
  - Better persistence through college
Summary and Conclusions

- DE&AP are both strong predictors of students’ success

- DE can have strong positive effects on college enrollment and completion, but the FL studies find that **where** students take DE classes and **what** classes they take seem critical

- Integrating DE into CTE pathways seems a promising strategy for academically struggling and underrepresented students in higher education

- We now have a growing body of evidence on dual enrollment, using different student populations and different methodologies
For more information:

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Conducting Research to Answer Your Questions about Dual Enrollment

- Develop a comprehensive state data system that assigns each student an ID code and collects transcript info for every level of schooling
- Develop human infrastructure for using the data system
- Policymakers should fund and publicly support research, and use research to drive decisions