

# Dual Enrollment: Research Update

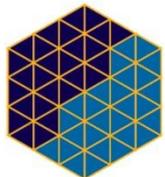
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Community College Research Center

Teachers College, Columbia University

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National Center for Postsecondary Research

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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?



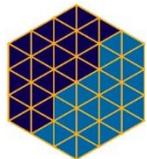
# Findings

- 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 1<sup>st</sup> semester GPA
  - Credit accrual



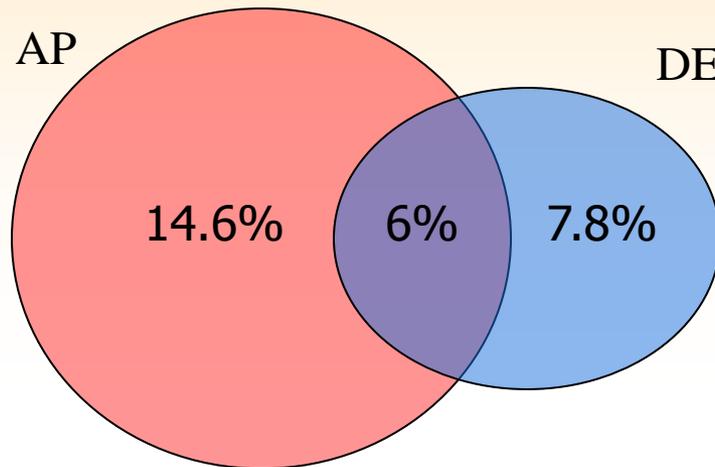
# New Evidence from Florida and California

- **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

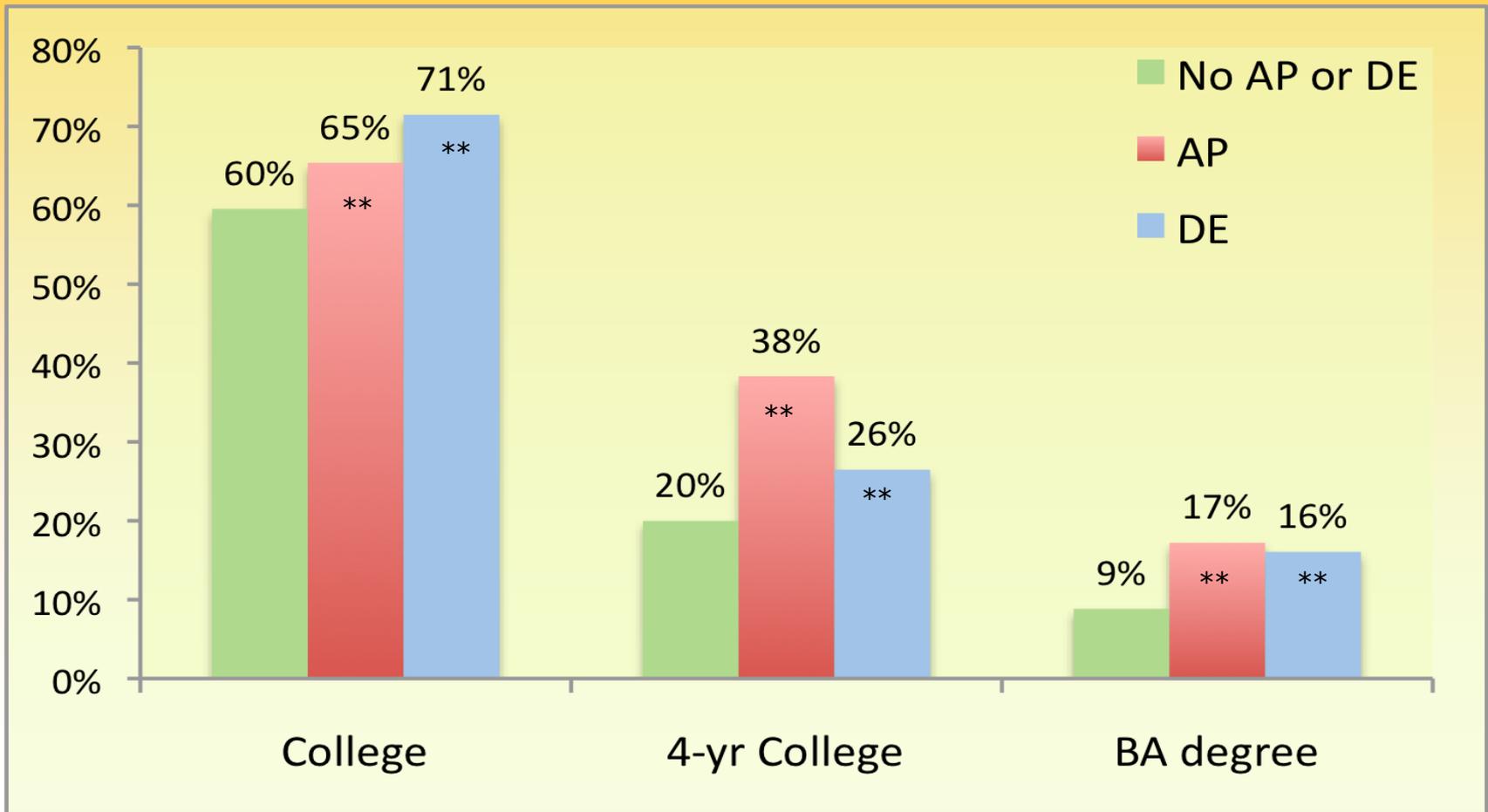
- Two public HS senior cohorts (2000 & 2001); approx. 230,000 students
  - Student transcripts in HS & college (till 2006)
  - National Student Clearinghouse data (enrollment only)
- Participation rate:



No AP or DE= 72%



# Study 1 (FL): Predictive effect of AP and DE

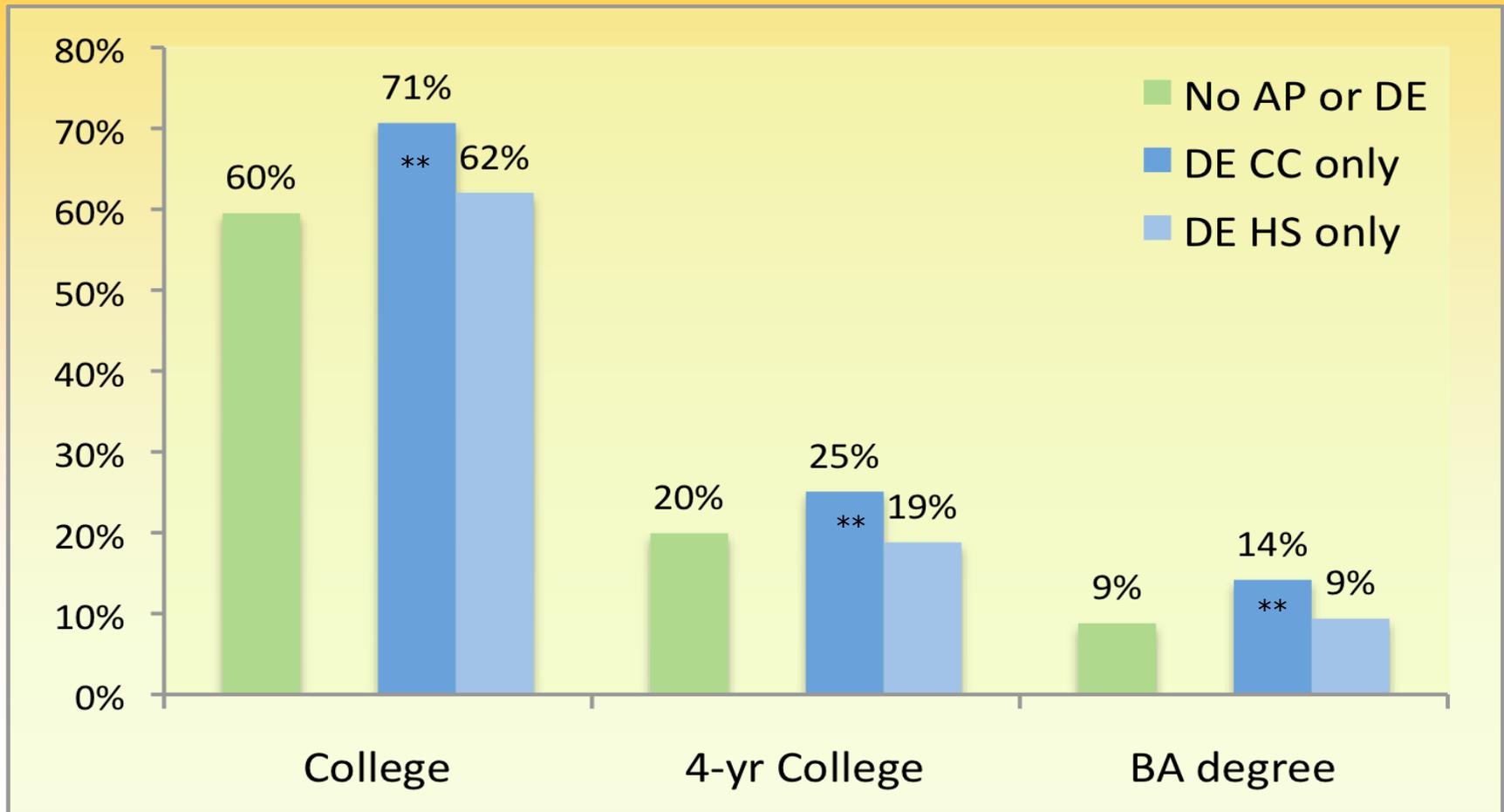


\*\* Significant at 1%

Regression control for student characteristics (including prior measures of achievement: 10<sup>th</sup> grade FCAT standardized scores and GPA), and high school and district characteristics.



# Study 1 (FL): Predictive DE effect by location



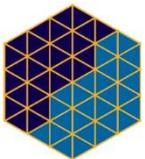
\*\* Significant at 1%

- 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:

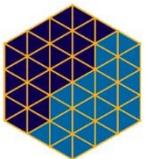
## California Concurrent Courses

- 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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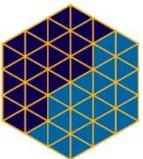
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# *Conducting Research to Answer Your Questions about Dual Enrollment*

- 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

