The Impact of Dual Credit on Key Postsecondary Outcomes in Illinois

NACEP

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Illinois Education Research Council Illinois Board of Higher Education



Presentation Outline

- The Illinois Policy Context
- Illinois Dual Credit Data
- Analysis of Dual-Credit/ Dual-Enrollment for the Class of 2003
 - Participation
 - Postsecondary enrollment
 - Time to bachelor's degree completion (contingent upon enrolling at a four-year college)



The Policy Context



The Completion Agenda

- Is embraced by the Obama Administration, the National Governor's Association, the Governor's Office, the IBHE, Illinois P-20 Council, and numerous advocacy groups.
- US ranks 15th in degree attainment among G-20 countries for ages 25-34.
- 64-67% of jobs in Illinois will require post secondary training by 2020.
- 43% of working age adults in Illinois currently hold a post secondary credential.
- The Illinois goal is 60% of working age adults holding postsecondary credentials by 2025.



Illinois Public Agenda for College and Career Success

- Master plan for Higher Education in Illinois
 - Originated with HJR 69 Spring 2007 adopted December 2008
 - 1. Increase Educational Attainment.
 - 2. Ensure college affordability for students, families, and taxpayers.
 - 3. Increase the number of high-quality post-secondary credentials.
 - 4. Better integrate Illinois' education, research, and innovation assets to meet economic needs of the state.



The Leaky Pipeline



Source: The Illinois Public Agenda for College and Career Success Full Report http://www.ibhe.org/masterPlanning/materials/070109 PublicAgenda.pdf



State Initiatives to Achieve the Completion Agenda

- Incorporation of Common Core Standards into the Illinois Learning Standards
 - Aligns student outcomes to career and college readiness
- Implementation of improved teacher and school leader standards and preparation programs
- Implementation of Performance Funding for colleges and universities
- Establishment of a statewide P-20 Longitudinal Data System
- Alignment of curriculum to Common Core throughout P-20
 - Vertical and horizontal curriculum alignment projects
 - PARCC assessment
 - Illinois Articulation Initiative
 - Dual Credit Quality Act 2009



P-20 Longitudinal Data System

- P-20 Longitudinal Education Data System Act 2009
- State Board of Education, Board of Higher Education, Community College Board
 - Illinois Higher Education Consortium
- Governance in development
 - P-20 Council
 - Federated model
 - Linkages P-workforce

ILDS information available at http://www.ibhe.org/ILDS/default.htm



Dual Credit Task Force

- Dual Credit Task Force 2008
 - Potential Benefits
 - Reducing college costs
 - Speeding time to degree completion
 - Improving the curriculum for high school students
 - Facilitating the transitions and connections between high school and college
 - Opportunities for improving degree attainment for underserved student populations

Task Force materials available at http://www.ibhe.org/DualCredit/default.htm

Dual Credit Quality Act of 2009

- Emphasizes that the course is a college credit bearing course first and foremost
- Combined standards from
 - Existing ICCB administrative rules
 - National Alliance of Concurrent Enrollment
 Partnership Standards (NACEP)
 - Faculty
 - Students
 - Course Content



Illinois Dual Credit Data



IBHE Dual Credit Fall 2010 Survey

Term	Institutions	Sections	Courses	Dual Credit Enrollment*	Total Enrollment	
Fall 2009	13	59	40	966	1426	
Spring 2010	9	45	30	640	1659	
Summer 2010	1	15	4	388	388	

* Enrollment numbers are duplicated if the same student enrolls in more than one course.

- Although not required to report on dual enrollment activity, 29 institutions indicated they had such enrollments.
- Only Illinois State University and Northeastern Illinois University reported offering dual credit courses
- The University of Illinois at Urbana- Champaign reported dual enrollment



Community College Dual Credit Enrollments



SOURCE: ICCB SU/SR Data

13

Community College Per College Average Dual Credit Enrollments





14

FY11 Community College Dual Credit Courses, by enrollment



SOURCE: ICCB SU/SR Data

Dual Credit Count



Community College Dual Credit/ Dual Enrollment Course Pattern





Analysis of the Class of 2003



Illinois High School Class of 2003

- Includes 115,677 public high school students
 - Took the ACT in spring of 2002
 - Graduated high school in spring of 2003
- Does not include
 - Graduates of private high schools in Illinois
 - Students from other states who migrated to postsecondary institutions in Illinois
- Study period-fall of 2001 to spring of 2010



Sources of Data

- ACT-Prairie State Achievement Examination and the Student Information
- National Student Clearinghouse-covers 92% of all postsecondary enrollment
 - Supplemented with information from the Illinois
 High School Report Card, Barron's, IPEDS, and the
 Illinois Board of Higher Education



Definitional Issues

- Included all pre-high school graduation college-level enrollment.
 - Made the distinction between enrollment via community colleges and four-year institutions.
 - Used the number of semesters enrolled rather than the traditional binary participation marker.
- Could not distinguish between high school-based and college-based enrollment.
 - More of the CC enrollment is dual credit
 - Most of the four-year enrollment was dual enrollment
- Could not distinguish between CTE courses and traditional transfer courses.



Other Factors

- AP participation (scores were not available)
- Performance on the ACT
- High school GPA
- Family size
- Gender
- Race/Ethnicity
- Completed core curriculum
- High school context

Research Questions

By income category-

- Controlling for other factors, what effect did dual credit/dual enrollment have on postsecondary enrollment?
- 2. Controlling for other factors, what effect did dual credit/dual enrollment have on time to bachelor's degree completion?



Methods

- Research Question #1: Multinomial Logistic Regression
 - Used with a categorical outcome (dependent).
 - Provides an estimate of the treatment effect (odds ratios) on each outcome category after adjusting for the factors and covariates.
 - Outcome of reference was not being enrolled during the study period.
- Research Question #2: Survival Analysis (Cox Regression)
 - Traditionally used in medical and epidemiology research.
 - Used to explore the relationship between a set of explanatory variables and a time-based event of interest (number of semesters until reverse transfer).
 - Provides an estimate of the treatment effect (odds ratios) on survival.





Dual Credit/ Dual Enrollment Participation over





Enrollment Outcomes by the Number of Semesters Dually-Enrolled via Illinois Community Colleges





Enrollment Outcomes by the Number of Semesters Dually-Enrolled via Four-Year Institutions





Predicting Enrollment Patterns*

	High Income Model		Mid-High Income Model		Mid-Low Income Model		Low Income Model	
	Four-Year	Two-Year	Four-Year	Two-Year	Four-Year	Two-Year	Four-Year	Two-Year
	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio
Semesters Dually Enrolled CC	4.124	5.305	3.349	4.026	2.966	3.631	2.500	2.953
Semesters Dually Enrolled 4-yr	9.121	4.187			10.909	2.422	13.844	5.754

- Dual enrollment at a community college significantly increased the odds of enrolling across all income groups.
- Dual enrollment at a four-year institution increased the odds of enrolling for lowincome students only.

(Southeast to Chicago)	.366	2.008	.343	1.173	.256	1.748	.243	1.193
High School Mean Composite ACT	1.075	.935	1.111	1.005	1.101	1.018	1.066	1.043



Predicting an Accelerated Time to Bachelor's Degree Completion*

	High Income	Mid-High Income	Mid-Low Income	Low Income
	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio
Semesters Dually Enrolled ICCB	1.034	1.014	1.046	1.098
Semesters Dually Enrolled 4-yr	1.027		1.123	1.173

 In terms of predicting an increased likelihood of bachelor's degree completion, dual credit was only significant for low income students.

Conclusions

- Dual credit/dual enrollment was related to a significant increase in the likelihood of postsecondary enrollment regardless of family income.
- Dual credit/ dual enrollment was only significant in terms of a decreased time to bachelor's degree completion for low-income students.

Further Investigation

- Better control for selection bias.
- Explore the outcomes for students enrolling at community colleges.

Questions

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