Dual Credit/ Dual Enrollment and Data Driven Policy Implementation: Reform Initiatives and Postsecondary Credential Attainment

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Presentation Outline

- The Illinois Policy Context
- Illinois Dual Credit Data
- Analysis of Dual-Credit 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, Illinois P-20 Council, numerous advocacy groups and matches the goals of the Illinois Public Agenda for College and Career Success.
- 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 post-secondary credentials by 2025.

Sources: Complete College America http://www.completecollege.org/docs/Illinois.pdf /
Georgetown Center on Education and the Workforce http://cew.georgetown.edu/jobs2018/

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

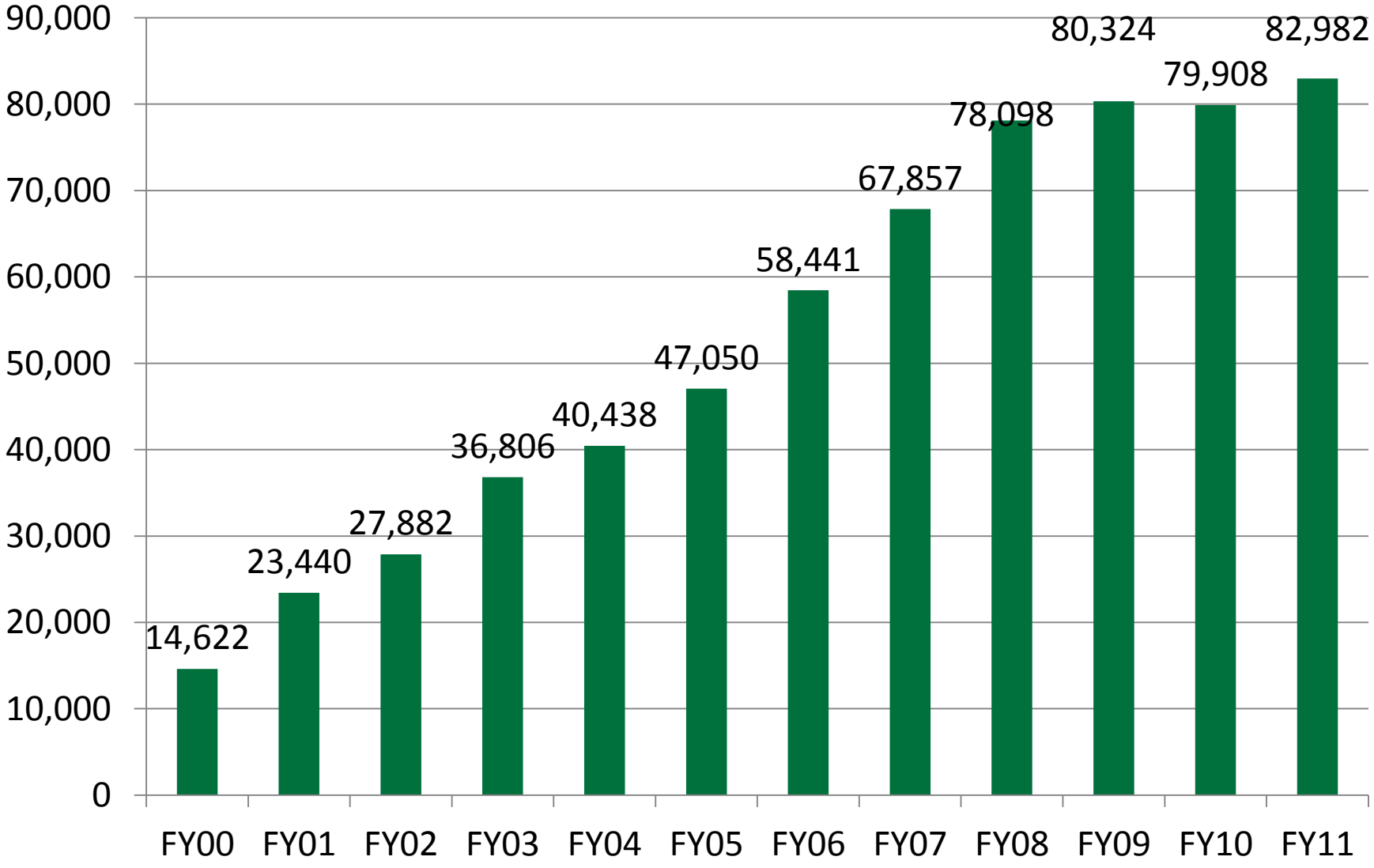
Task Force materials available at http://www.ibhe.org/DualCredit/default.htm

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

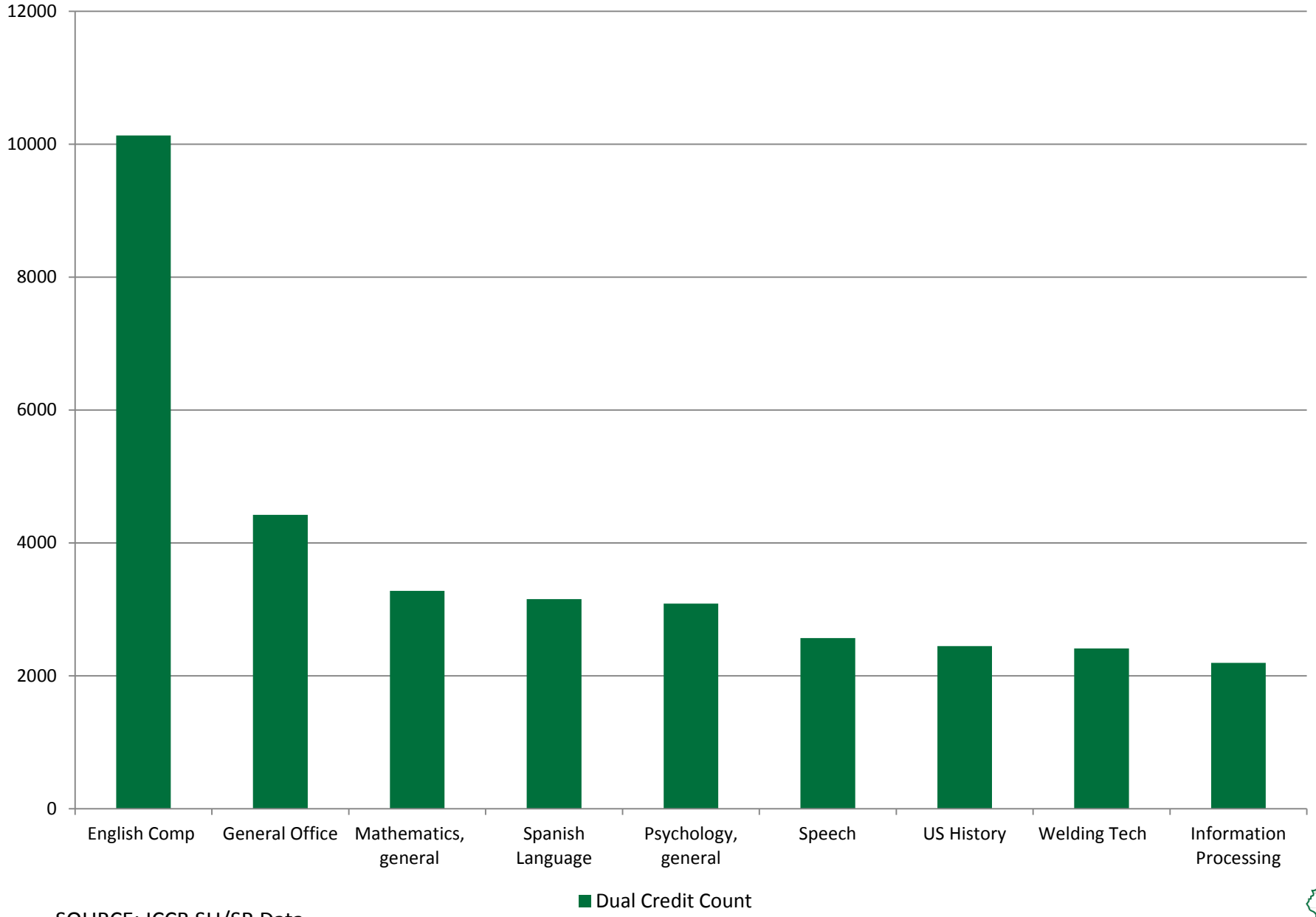
Illinois Dual Credit Data

Community College Dual Credit Enrollments



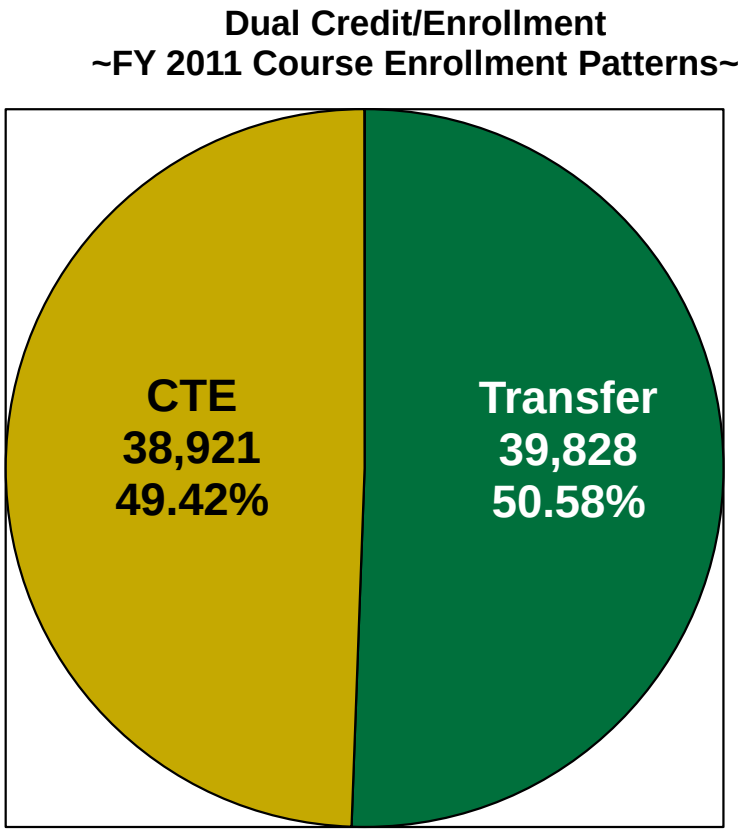
SOURCE: ICCB SU/SR Data

FY11 Community College Dual Credit Courses, by enrollment



SOURCE: ICCB SU/SR Data

Community College Dual Credit Course Pattern



SOURCE: ICCB SU/SR Data

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

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 other explanatory variables.
  - 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 bachelor's completion).
  - Provides an estimate of the treatment effect (odds ratios) on survival.

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

Research Questions

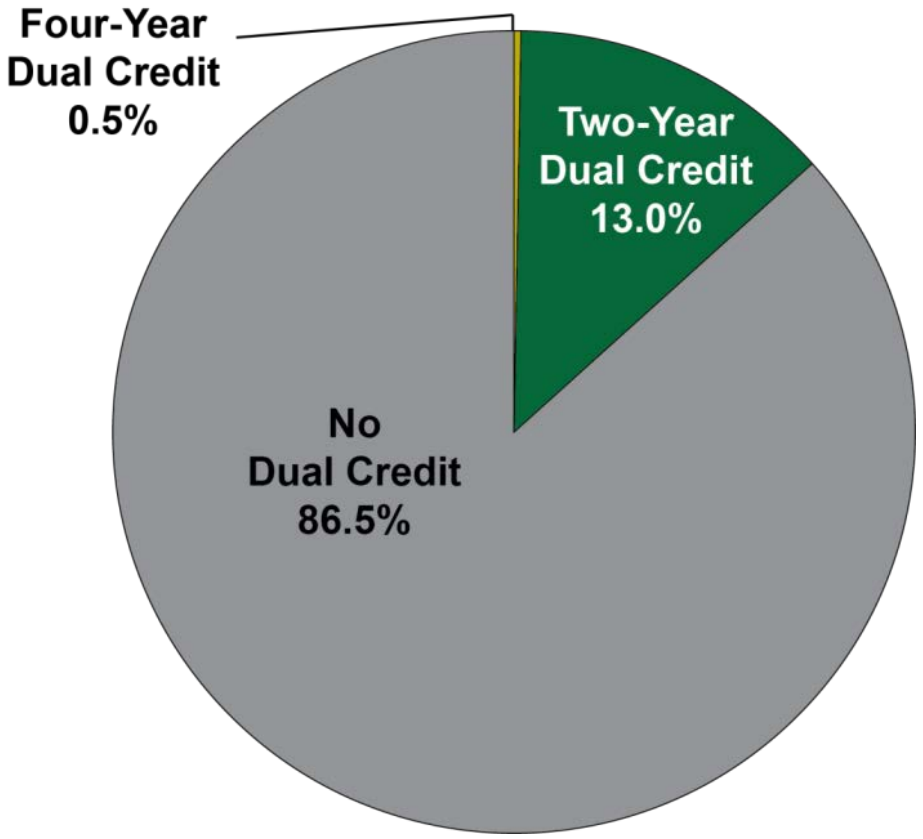
By income category-

1. Controlling for other factors, what effect did dual credit have on postsecondary enrollment?

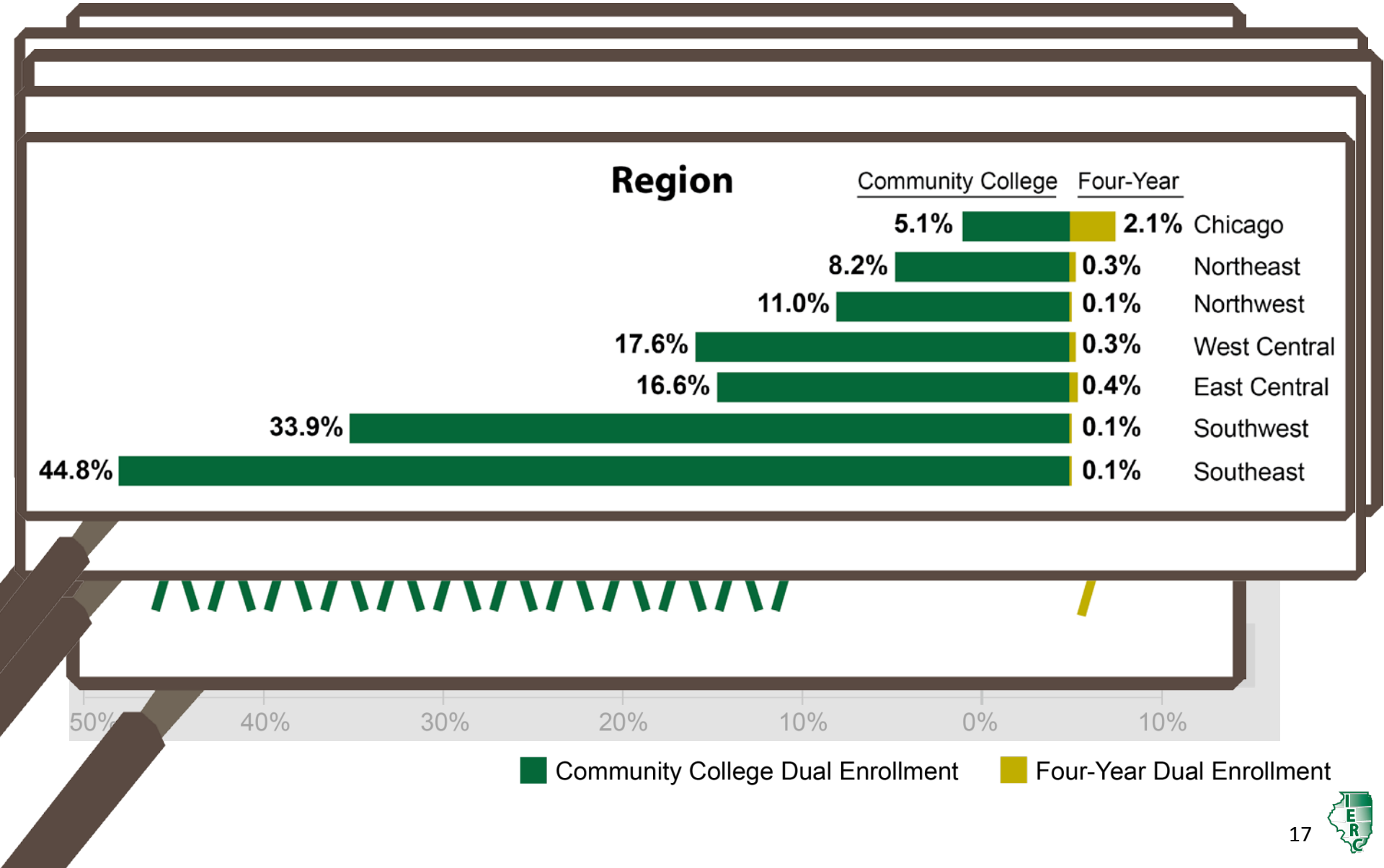
2. Controlling for other factors, what effect did dual credit have on time to bachelor's degree completion?

Dual Credit by Sector

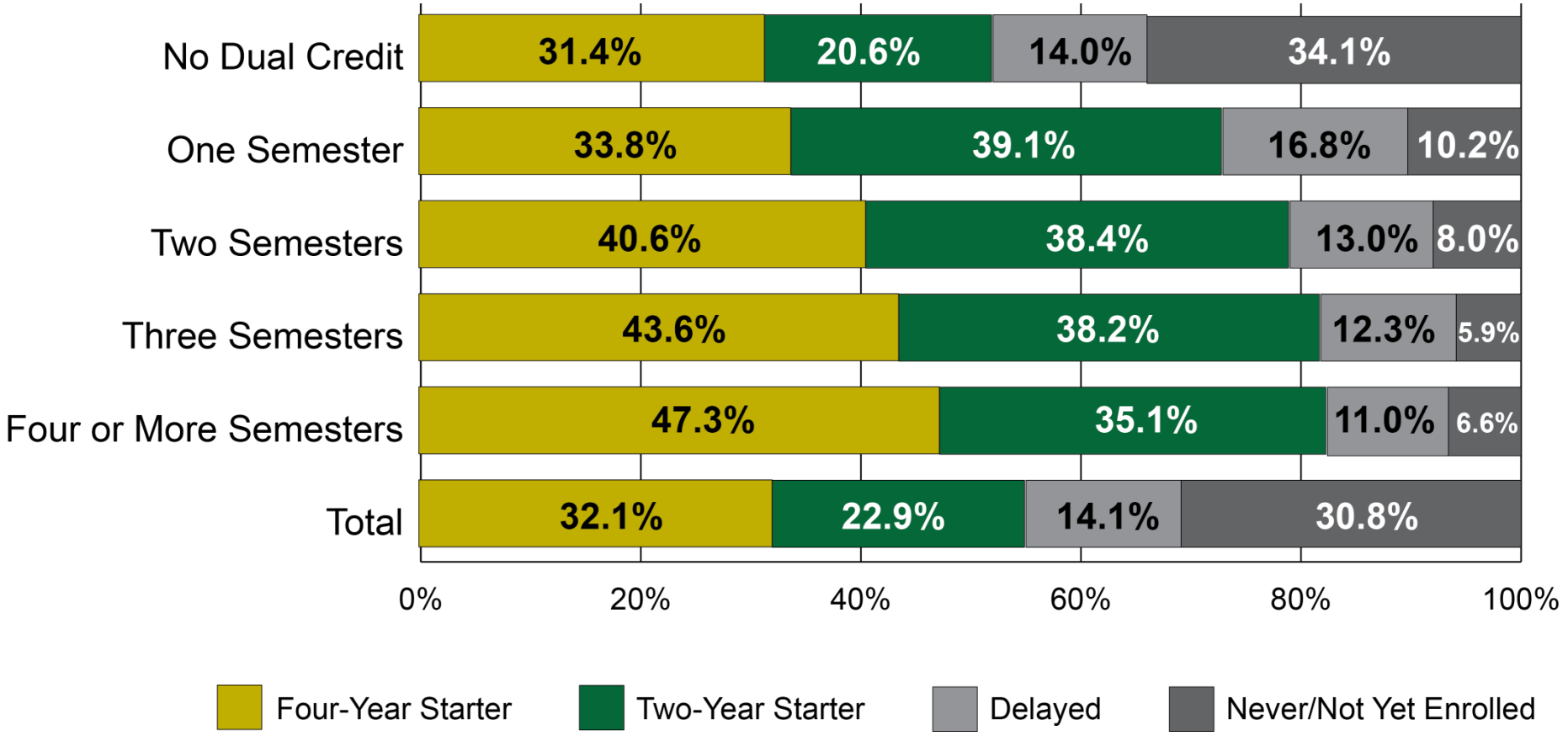
Illinois community colleges have traditionally played a more dominate role in dual credit.



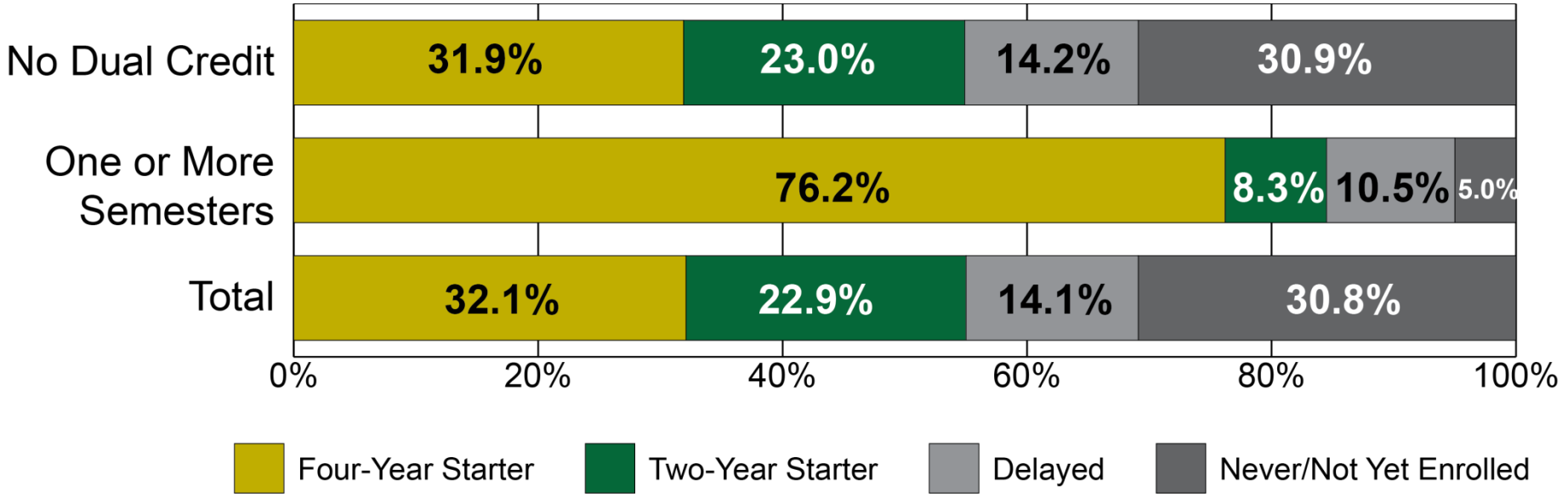
Dual Credit and Select Demographics



Enrollment by the Number of Semesters of Dual Credit via Illinois Community Colleges



Enrollment by the Number of Semesters of Dual Credit via Four-Year Institutions



Predicting Enrollment Patterns*

	High Income Model		Mid-High Income Model		Mid-Low Income Model		Low Income Model	
	Four-Year Odds Ratio	Two-Year Odds Ratio	Four-Year Odds Ratio	Two-Year Odds Ratio	Four-Year Odds Ratio	Two-Year Odds Ratio	Four-Year Odds Ratio	Two-Year Odds Ratio
Semesters Dually Enrolled ICCB	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

*shaded cells indicate statistical significance at the p≤.001 level.

(3.0-3.4 to ≤2.4)	3.512	1.187	3.733	1.394	3.943	1.495	3.732	1.483
(3.5-4.0 to ≤2.4)	3.568	.721	3.984	.988	4.456	1.098	3.986	1.099
ACT English	1.034	.986	1.057	.994	1.059	1.008	1.078	1.014
ACT Math	1.031	.958	1.028	.978	1.021	.978	1.044	.985
ACT Reading	1.011	.996	1.018	.996	1.017	.997	.998	.987
ACT Science	1.009	1.011	1.019	1.007	1.047	1.017	1.073	1.026
Completed ACT Core	1.391	1.118	1.475	1.172	1.339	1.194	1.491	1.132
HS Program (CTE to College Prep)	.540	1.074	.429	.703	.546	.830	.722	.837
(General to College Prep)	.739	1.133	.614	.935	.647	.879	.644	.782
Expecting to Work While Enrolled	.900	1.265	.928	1.012	.837	.829	.804	.869
Expecting to Receive Financial Aid	1.161	1.172	1.272	1.010	1.465	1.123	1.659	1.273
Number of Siblings	.921	.972	.938	.962	.923	.950	.928	.930
Region (Northeast to Chicago)	.905	1.929	.944	1.376	.848	1.950	.682	1.473
(Northwest to Chicago)	.538	2.179	.567	1.490	.514	2.197	.374	1.362
(East Central to Chicago)	.618	2.078	.546	1.232	.454	1.427	.445	1.074
(West Central to Chicago)	.622	1.994	.688	1.594	.482	2.050	.337	1.449
(Southwest to Chicago)	.662	1.500	.625	.965	.460	1.506	.444	1.012
(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
Gender (Male)	.808	.843	.831	.825
Race (African-American to White)	.840	.830	.834	.708
(Hispanic to White)	.804	.767	.828	.705
(Asian to White)	.942	.925	.941	1.109

*shaded cells indicate statistical significance at the p≤.001 level.

Expecting to Work While Enrolled	.968	.962	.895	.955
Expecting to Receive Financial Aid	.988	.929	.994	.776
Number of Siblings	.969	.973	.975	.910
Region (Northwest to Chicago)	1.051	.971	.846	1.007
(Northwest to Chicago)	.995	1.035	.910	.884
(East Central to Chicago)	1.028	.972	.977	.984
(West Central to Chicago)	.973	.891	.844	.837
(Southwest to Chicago)	.968	.848	.979	.910
(Southeast to Chicago)	.739	.941	.814	1.050
High School Mean Composite ACT	1.042	1.049	1.046	1.050
Distance between HS and College (>30-74 to <30)	1.047	1.059	1.142	1.222
(75-174 to <30)	1.101	1.175	1.166	1.385
(175+ to <30)	1.113	1.074	1.106	1.296
Sector (Public)	1.040	.980	1.014	.964
Selectivity (Highly Selective)	1.068	1.134	1.122	1.161
Selectivity/ College Readiness Alignment (Undermatched to Aligned)	.920	.984	.868	.850
Overmatched to Aligned	1.130	1.161	1.139	1.322

Policy Implications

- Dual credit has a positive impact on completion.
  - For low income students, a dual credit course was associated with a 10% greater likelihood of completing a bachelors degree.
- Four year institutions should engage in dual credit, particularly in subject areas not available at community colleges.
- Restoration of funding for dual credit is an appropriate investment towards completion goals.

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