A Longitudinal Study of the Illinois High School Class of 2002: A Six-Year Analysis of Postsecondary Enrollment and Completion

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The Study

• Who is included in the cohort
  - 113,135 public high school students from Illinois who took the Prairie State Achievement Exam (PSAE)/ACT in the Spring of 2001 and indicated that they will be graduating in 2002.

• Who is not included in this cohort
  - Private high school graduates
  - Out-of-State high school graduates who emigrated to Illinois higher education institutions
Conceptual Diagram of Study

High School Characteristics
- ITAC Score
- School Funding
- Location

Student Characteristics
- Demographics
  - Gender
  - Race
  - Parents' Income
- Academic Preparation
  - College Readiness
  - ACT Core

Initial College Enrollment
- Two-Year
- Four-Year
- Delay
- Never

Outcome Two-Year
- Certificate
- Associate's
- Transfer
- None

Outcome Four-Year
- Bachelor's
- None

Four-Year
- Bachelor's
- None
- Reverse Transfer

Footnotes:
1 Potentially malleable
2 By sector and selectivity
3 Two-year outcomes are not mutually exclusive, so more than one could occur
4 For two-year to four-year transfers
College Enrollment – Class of 2002

- 62% enrolled that initial fall semester.
- 17% delayed enrollment at either a two-year or four-year institution after fall 2002.
- 21% never enrolled in higher education over the six-year study period.
- Overall, 79% enrolled for at least one semester.
• 67% Grad rate over six years.

• An additional 10% were still enrolled in higher education.

• A little less than a quarter did not complete and were not enrolled.
Logistic Regression

• Two separate models

• Initial enrollment at four-year institution

• Bachelor’s degree completion for four-year starters

• Included all student and school characteristics included in the framework

• Determined each variable’s predictive importance regarding the outcome holding everything else constant
Predicting 4-Yr Enrollment and Bachelor Completion

Odds Ratios for Key Student Characteristics

- Definite Gender Gap (widens)
- For Race, the pattern varied across the comparisons
- Parental income was extremely important in both measures

<table>
<thead>
<tr>
<th>Variable</th>
<th>Initial 4-yr Enrollment</th>
<th>Bachelor Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female to Male</td>
<td>1.19</td>
<td>1.51</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
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<tr>
<td>African-American to White</td>
<td>2.17</td>
<td>.641</td>
</tr>
<tr>
<td>Hispanic to White</td>
<td>~</td>
<td>.721</td>
</tr>
<tr>
<td>Asian to White</td>
<td>1.48</td>
<td>~</td>
</tr>
<tr>
<td>Parental Income</td>
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<td></td>
</tr>
<tr>
<td>High to Low</td>
<td>2.28</td>
<td>1.76</td>
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<tr>
<td>Mid-High to Low</td>
<td>1.63</td>
<td>1.47</td>
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<tr>
<td>Mid-Low to Low</td>
<td>1.20</td>
<td>1.14</td>
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</tbody>
</table>

~no statistically significant difference at the p=<.001 level
Predicting 4-Yr Enrollment and Bachelor Completion

Odds Ratios Calculated for College Readiness and Region

- College readiness matters the most in both measures.
- All of the regions were more likely to enroll than the Southeast.
- However, only two of the regions were more likely to complete: Northeast and West Central.

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<th>Variable</th>
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<th>Bachelor Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Readiness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most to Not/Least</td>
<td>24.59</td>
<td>5.85</td>
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<tr>
<td>More to Not/Least</td>
<td>11.30</td>
<td>2.86</td>
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<tr>
<td>Somewhat to Not/Least</td>
<td>5.29</td>
<td>1.91</td>
</tr>
<tr>
<td>Minimally to Not/Least</td>
<td>2.91</td>
<td>1.29</td>
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<tr>
<td>Region</td>
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<td></td>
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<tr>
<td>Chicago to Southeast</td>
<td>4.44</td>
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<tr>
<td>Northeast to Southeast</td>
<td>2.10</td>
<td>1.40</td>
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<tr>
<td>Northwest to Southeast</td>
<td>1.51</td>
<td>~</td>
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<tr>
<td>West Central to Southeast</td>
<td>1.86</td>
<td>1.41</td>
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<tr>
<td>East Central to Southeast</td>
<td>1.72</td>
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</tr>
<tr>
<td>Southwest to Southeast</td>
<td>2.21</td>
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</tr>
</tbody>
</table>

~no statistically significant difference at the p=<.001 level
Total Initially Enrolling at a Two-Year Institution (28,875)

Transfer (11,076)

Certificate (1,713)

Associate's Degree (7,475)
- 38% Transferred
- 26% Associates
- 44% of Transfers had Associates
- 6% Certificates
- 51% At least one outcome

Unmet/Unknown Outcome 14,210

4,677
157
965
2,207
174
6,068
Bachelor Completion Rate for Two-Year to Four-Year Transfers

- **Overall**: 54% completed in 6 years, 22% still enrolled at 4-yr at end of study.
- **Transfer Only (A)**: 48% completed in 6 years, 23% still enrolled at 4-yr at end of study.
- **Transfer and Associate’s (B)**: 64% completed in 6 years, 20% still enrolled at 4-yr at end of study.
- **Transfer and Certificate (C)**: 28% completed in 6 years, 26% still enrolled at 4-yr at end of study.
- **Transfer and Associate’s and Certificate (D)**: 42% completed in 6 years, 33% still enrolled at 4-yr at end of study.

N=11,076

- **Completed in 6 years**
- **Still enrolled at 4-yr at end of study**
Gender Difference

- Overall Enrollment: 6 point gap
- Initial 4-Year Enrollment: 6 point gap, Females were 1.18 times more likely to enroll*
- Completing Bachelor's Degree: 7 point gap, Females were 1.50 times more likely to complete*
- Certificate Attainment: 2 point gap
- Associate's Attainment: 6 point gap
- Transfer 2-Year to 4-Year: 1 point gap
- Transfers Completing Bachelor's Degree: 4 point gap
- Enrolling at Most/High Competitive Institutions: 3 point gap

* Based on logistic regression.
Other Conclusions

• Generally speaking, Asian and White students had higher participation and completion rates compared with African-American and Hispanic students (the descriptive and predictive results varied).

• Students in the Southeast region have less access (due to proximity) to four-year institutions, so they use the community college system and out-of-state 4-yr institutions more than students from other areas of the state.

• The two-yr to four-yr transfer pathway is viable for bachelor degree completion. For students in the somewhat to the not/least ready college readiness categories, taking the two-year to four-year transfer pathway improved the likelihood that the student will graduate with a bachelor’s degree.
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