College & Career Access, Persistence and Success Statewide

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August 3, 2015
CCAPS Donors Forum,
Chicago Community Trust
Chicago, IL

Illinois Education Research Council

Our Mission

To provide objective and reliable evidence for Illinois P-20 education policy making and program development.

Ensuring Research-Informed Education Policy for Illinois
Illinois Education Research Council

• Founded in 2000 to provide research support to state educational agencies in policy and programmatic decisions

• Support to P-20 Council
  – Council Coordinator under Chair, Beth Purvis
  – Research arm of the Illinois P-20 Council

• Advisory Board with broad statewide representation

• Sit on P-20 Council & subcommittees and JELC

• Housed within the Graduate School at Southern Illinois University Edwardsville

Impacts on Policy Related to Today’s Talk

• The information from College Readiness and the Postsecondary Outcomes of Illinois High School Students (IERC report 2012-1) has been used by Advance Illinois and ACT to help frame college readiness at the state and national levels.

• An early study on the outmigration of college students in Illinois (IERC report 2006-1) and its recent follow-up study (IERC report 2014 – 1) have been used by IBHE and others in citing the need to recruit students back to the Illinois workforce and the economic impact of this loss.

• The 2014 outmigration report
  – was submitted to the national WDQI community of practice site as an exemplar of good practice
  – was also used by ISAC in the Pay It Forward, Pay It Back study that it delivered to the General Assembly on December 1, 2014.
Overview of Studies

- **College Readiness and Postsecondary Outcomes**
  - 2003 Cohort Study
    - following students for 7 years
  - 2009 Two IL universities (1 public, 1 private) study
    - following students for 3 years

- **Outmigration Study**
  - 2003 Cohort
    - All students who received a Bachelor's degree within 7 years
    - Graduates of both private and public high schools
    - Selected matched pairs based on propensity scores

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**IERC Data Map**

- IL H.S. Cohorts
  - 1999 through 2009
  - ACT test and background questionnaire
- IL H.S. Data
  - K-12 School Data
    - Public Illinois
    - Common Core of Data (CCS)
    - School Report Cards (SRC)
- National Student Clearinghouse
  - HS class of 2009: Fall 2009-Spring 2013 enrollment and awards
  - HS class of 2010: Fall 2009-Spring 2010 enrollment and awards
- Illinois Student Assistance Commission Data
- Illinois Department of Employment Security
  - Unemployment System files
- College Data
  - National
    - IPEDS (old data)
    - Bernier's Selectivity File
    - Institutional Data
- IL Higher Education Consortium (HEC)
  - Demographic information and degree completion data
  - Public, private, and proprietary Illinois institutions
  - Financial aid makers
2003 Cohort Studies

- Reverse Transfer Students and Postsecondary Outcomes (2011-5)
- College Readiness & Postsecondary Outcomes (2012-1)
- College Confidence (2012-2)
- College Readiness & Overlapping Outcomes of Community College Students (2012-3)
- Community College Penalty & Bachelor’s Degree Completion: Fact or Fiction (2013-1)
- Who has Access to Dual Credit in Illinois? (2013-4)
- Outmigration and Human Capital (2014–1)

RELATIONSHIP OF COLLEGE READINESS TO COLLEGE OUTCOMES
College Readiness and the Postsecondary Outcomes of Illinois High School Students (IERC 2012-1)

• Goal is to describe college outcomes related to college readiness

• If we meet ACT college readiness benchmarks in subject areas:
  • 50% chance of getting C or better in corresponding college course without remediation
  • 75% chance of getting a B or better in corresponding college course without remediation

Distribution of College Readiness

- English benchmark met by 58.7% of the cohort
- Overall college readiness (meeting all four) is almost entirely predicated on the test with the highest benchmark-Science.
- 80% of the students meeting the science benchmark, met all of the benchmarks.
Relationship of College Readiness to Persistence

- All Four: 86%
- 3 of 4: 80%
- 2 of 4: 71%
- 1 of 4: 66%
- None: 55%

Relationship of College Readiness to Bachelor's Degree Completion

- All Subjects: 81.8% Bachelor's or Higher, 12.3% Bachelor's or Above
- 3 or 4 Subjects: 75.6% Bachelor's or Higher, 16.7% Bachelor's or Above
- 2 of 4 Subjects: 64.0% Bachelor's or Higher, 24.4% Bachelor's or Above
- 1 of 4 Subjects: 56.4% Bachelor's or Higher, 29.7% Bachelor's or Above
- None: 37.8% Bachelor's or Higher, 44.1% Bachelor's or Above
College Readiness, Institutional Selectivity, and Bachelor’s Completion

- Students meeting two of four benchmarks from the most competitive institutions had similar rates of bachelor’s completion as students meeting all four benchmarks enrolling at very competitive institutions.

- The least prepared students enrolling at the most competitive institutions outperformed the best prepared students at less competitive institutions.

### Interaction of Institutional Selectivity & Race/Ethnicity

- For the most-ready Hispanic students, there was only a moderate difference between those enrolling at competitive or better institutions.

- However, among the most-ready Hispanic students there was a sharp decline in BA completion at non-competitive institutions.

- Enrolling at a highly selective institution narrows the racial gap for African-American students.
Two Institution Study

Developing Indicators Toward a College Degree – IERC 2013

• Proof of concept study for the ILDS
• Examined relationship of college readiness and other factors to retention and progression at 2 IL institutions

Follow-up study was a quasi-experimental study investigating how college readiness itself was related to retention and progression

Distribution of IERC College Readiness Index

<table>
<thead>
<tr>
<th>ACT Comp</th>
<th>Self-Reported High School GPA</th>
<th>≤2.4</th>
<th>2.5 - 2.9</th>
<th>3.0 - 3.4</th>
<th>3.5 - 4.0</th>
<th>Missing</th>
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<td>&gt; 25</td>
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<td>2.6%</td>
<td>5.5%</td>
<td>17.3%</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

Relationship of College Readiness Level to Retention & Progression

Retention

Progression

Quasi-Experimental Design

Demographic Variables
- Underrepresented Minority
- Gender
- Home Language

Family Finances
- Expect to Receive Financial Aid
- Expect to Work in College

High School Experience
- Family Income
- Expect to Receive Financial Aid
- Expect to Work in College

College Expectations
- College Degree Aspirations

School Level
- School Factors
- Present LEP
- Percent Low Income
- Percent Chronically Truant
- Met ACT Math
Matching Example

- Latina female
- Expect to work in college
- Family in mid-income bracket
- Took HS core curriculum
- Attended high percent LEP and high percent low income HS
  - Not college ready

- Latina female
- Expect to work in college
- Family in mid-income bracket
- Took HS core curriculum
- Attended high percent LEP and high percent low income HS
  - College ready

Retention vs. Progression Differences due to College Readiness
GPA Differences due to College Readiness

Substantive Findings

- College readiness itself is not related to retention, once other student and school factors are controlled.
- However, college readiness is related to on-time progression, controlling for student and school factors.
- Implies that different forces operate to increase retention and on-time progression. Most common retention strategies used in colleges are:
  - academic clubs, pre-enrollment orientation, career counseling services, recreation/intramurals, internships, and cultural activities programs.
  - Yet academic activities, e.g., study skills labs, tutoring, summer bridge programs, enhanced advising practices, are more likely to increase college readiness.
Predicting College Success

Adaptive College Patterns

• Good college readiness in HS, particularly in English and math
• Taking dual credit courses
• Going to most selective college possible
• Not reverse transferring

POST-DEGREE EMPLOYMENT
Outmigration and Human Capital: Homeward Bound or Gone for Good (2014–1)

• Each year the state of Illinois experiences a net loss of roughly 11,000 students.
  – Summit
  – Plano
  – Minooka

• Outmigrants tend to be among the best and brightest Illinois high school graduates

• This represents a significant loss of human capital.

Outmigration Patterns
**Outmigration Status**

- **Outmigrant**
  - N=41,929
  - 32%

- **Stayer**
  - 68%

**Study Group Composition Prior to Matching**

- **Stayers**
  - 69%
  - (n=13,416)

- **Outmigrants**
  - 31%
  - (n=6,087)
Conceptual Model Predicting Outmigration

Pre-College Characteristics

Environmental Factors

Geography

Involvement

Pathways

Treatment vs. Control
(Probability of being an Outmigrant)

Example of a Matched Pair

Outmigrant

• Aurora
• 62% likelihood of being an outmigrant
• Graduated from The Ohio State University
• Majored in Chemical Engineering

Stayer

• Aurora
• 62% likelihood of being an outmigrant
• Graduated from the University of Illinois at Urbana-Champaign
• Majored in Chemical Engineering
Overall Rate of Post-Bachelor’s Illinois Employment

Stayers
- 8% Employed in Illinois at Least One Quarter
- 92% Never Employed in Illinois

Outmigrants
- 33% Employed in Illinois at Least One Quarter
- 67% Never Employed in Illinois

Quarterly Wage Thresholds: Absolute and Conditional Upon Illinois Employment

Overall

Conditional Upon Illinois Employment
Major Findings

• Outmigrants were significantly less likely to gain employment in Illinois relative to stayers.
• Among the outmigrants, those with stronger academic profiles were less likely to obtain Illinois employment.
• Further, the outmigrants with the degrees deemed most important for the Illinois economy were even less likely to return to Illinois for employment.

Consequences of Outmigration

• Outmigrants experienced significantly lower rates of Illinois-specific employment relative to the stayers resulting in substantially lower aggregate Illinois wages among the outmigrant group.
• Relatedly, substantially fewer outmigrants reached the various Illinois-specific earnings thresholds.
• This in turn, represents some of the negative economic impact that outmigration has on the state of Illinois.
Current Studies

Have 2009 Illinois HS cohort for public school students and linked to college outcomes

Initial study (Baber & Holt) of relationship of institutional aid factors on college completion for stayers. What role student factors, e.g., college readiness and family income, play in this relationship.

Findings to date:

• Institutional debt is negatively related to retention but not to 4-year completion
• Barron’s selectivity is related to both retention and completion
• More differential effect of income level on retention for students at non-profit privates
• Less difference in completion between students at publics and non-profit privates if from higher income family

2015, 13th Annual Focus on Illinois Education Research Symposium

• Theme: Pathways to an Affordable College Education
• October 8 & 9, Sheraton in Lisle IL
• Keynotes:
  – Dr. David Figlio, Director of the Institute for Policy Research at Northwestern University
    The Importance of Instructors and Instruction in Introductory Courses
  – Dr. Laurie Elish-Piper, Acting Dean, College of Education, Northern Illinois University
    Creating a Mentoring Continuum to Support Student Success

• Guest Speaker:
  – Dr. James Pellegrino, Co-Director of the Learning Sciences Research Institute, University of Illinois at Chicago
    To Test or Not to Test? — That is Not the Question: Thinking Productively About Educational Assessment

Breakfast panel on Affordability Across the P-20 Spectrum
APPENDIX
Reverse Transfer Students and Postsecondary Outcomes: A Potential Opportunity (IERC 2011-5)

- Sample size of 2003 graduating cohort, \( N = 115,677 \)
- About 1/3 enrolled in a 4-year college the fall after graduation
  - Of those, about 1/5 reverse transferred, \( n = 7,696 \)
Reverse Transferring vs. Reverse Articulation

Reverse Transfer
• Pertains to students who start at a four-year college and later transfer to a community college.
• The term has been used in educational research for the past 20 years.
• The definition usually excludes concurrent enrollment and summer school enrollment.
• A transfer takes place.

Reverse Articulation
• Pertains to students who start at a community college and later transfer to a four-year without earning an associate’s degree.
• Involves the post-transfer articulation of credit from the four-year college to the original community college.
• The emphasis is on the ex post facto awarding of associate’s degrees for vertical transfer students by using credits earned at the four-year to fulfill associate’s degree requirements.

Factors Relating to Reverse Transfer
• Male
• Middle income family
• Less college readiness in English & Math
• More college readiness in Science
• Proximity to home
• Less selective college
• Public college
Distance in Miles Between High School and Initial Four-Year Institution

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<th>Reverse Transfers</th>
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<th>&gt;30 – ≤100</th>
<th>&gt;100 – ≤175</th>
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<th>&gt;100 – ≤175</th>
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<td>20.7%</td>
<td>29.3%</td>
<td>26.1%</td>
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Reverse transfer students tend to initially enroll closer to home.

Outcomes for Reverse Transfer Students

- 16% earned an Associate’s degree; 3% earned a certificate
- Over ½ returned to a 4-year university
- Only 29% returned to the same university
- Tended to return to an equally or less selective college
- ¼ earned a Bachelor’s degree
Reverse Transfer and End of Study Status

<table>
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<tr>
<th>End of Study Status</th>
<th>Non-Completers</th>
<th>Bachelor’s Degree or Higher</th>
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<th>Still Enrolled at 2-yr</th>
<th>No Longer Enrolled</th>
<th>Total</th>
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Highest Degree and End of Study Status for Reverse Transfer Students

- Bachelor’s Degree: 24.9%
- Associate’s Degree: 10.4%
- Certificate: 2.6%
- No Degree: 62.1%

- Still Enrolled at 4-Year: 9.1%
- Still Enrolled at 2-Year: 10.2%
- No Longer Enrolled: 42.9%