



Reverse Transfer Students and Postsecondary Outcomes: A Potential Opportunity

Eric J. Lichtenberger, Ph.D.

Executive Summary

Moving from a four-year institution to another four-year institution has been described in recent research as a lateral transfer, while moving from a four-year institution to a community college has been described as a reverse transfer. These types of transfers have been depicted as the two primary forms of mobility among students enrolling at four-year colleges; however, since reverse transferring is associated with extremely low rates of bachelor's completion, it is the form of student mobility most deserving of attention (Goldrick-Rab & Pfeffer, 2009). Recent research has established that nearly one-fifth of college going students reverse transfer; but more alarmingly, less than a quarter of reverse transfer students eventually earn a bachelor's degree and even fewer earn a certificate or associate's degree while at their respective community college (Smalley, Lichtenberger, and Brown, 2010; Goldrick-Rab and Pfeffer, 2009).

Understanding the predictors of reverse transferring and what happens to reverse transfer students once they move to a community college could help policymakers as they develop strategies to increase the proportion of individuals with quality postsecondary degrees within the state of Illinois. As argued by Adelman (2005) and Goldrick-Rab and Pfeffer (2009) it would be helpful if community colleges and "parent" feeder four-year institutions of reverse transfer students established joint monitoring and advising systems for potential reverse transfers at early stages of their college careers. The results of this study could be used to help identify

the risk factors related to reverse transferring as such monitoring programs are developed.

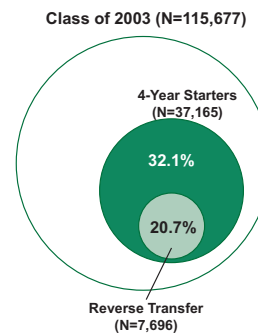
The study starts by establishing the factors associated with reverse transferring. It then provides the outcomes of the reverse transfer students at each transition point. The outcomes include the move from the initial four-year institution to the community college, potential certificate and associate's degree attainment at the community college, the potential return to a four-year institution, and bachelor's completion at the four-year institution conditional upon return.



Key Findings

Overall, roughly one-third (32.1%) of the Illinois High School Class of 2003 enrolled at a four-year institution the fall semester following high school graduation. Of those four-year starters, approximately one-fifth (20.7%) reverse transferred during the study (fall 2003 through spring 2010).

Figure A:
The Proportion of Four-Year Starters and Reverse Transfer Students from the Class of 2003



Predictors of Reverse Transferring

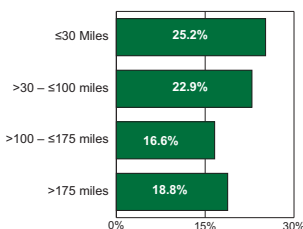
There were stark gender differences, as male students were significantly more likely to reverse transfer in a timeframe closer to their initial enrollment at a four-year institution than their female counterparts.

The factors related to financial aid played a significant role in the likelihood of reverse transferring. Expecting to receive financial aid and expecting to work while enrolled were both related to increased odds of reverse transferring. Also, the size of one's family was positively related to reverse transferring. Parental income was a significant factor and students in the middle income categories had a higher likelihood of reverse transferring when compared with their peers in the high income category.

In terms of academic preparation, high school GPA significantly factored into the likelihood of reverse transferring; odds ratios indicated the lower the GPA, the greater the odds of reverse transferring. Regarding performance on the ACT, scores on the English and Mathematics tests were both significant and higher scores indicated lower odds of reverse transferring. However, scores on Reading lacked statistical significance and higher scores on Science were associated with greater odds of reverse transferring.

In terms of the selectivity of the initial four-year institution, students who enrolled at the most and highly competitive institutions were less likely to reverse transfer. Regarding the sector of the institution, students enrolling at a public four-year institution were significantly more likely to reverse transfer, as were students who initially enrolled in-state, as opposed to out-of-state. Generally speaking, if a student enrolled closer to home they were more likely to reverse transfer (see below).

Figure B:
Rate of Reverse Transfer by Distance between High School and Initial 4-Year Institution for Four-Year Starters (N=37,165)

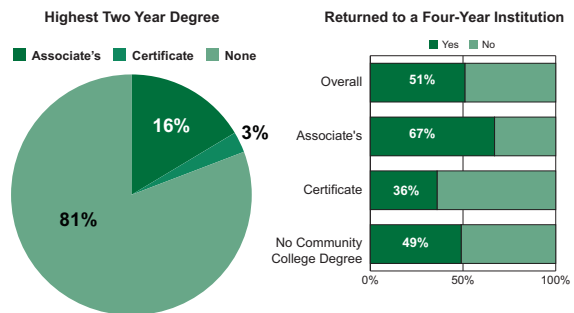


The descriptive results indicated that most reverse transfer students gravitate towards home when moving to a community college; however, a sizeable group of reverse transfer students who initially enrolled farther from home (between 15% and 22%) are opting to utilize a community college in the same area as their initial four-year institution.

Outcomes at Community Colleges

Sixteen percent of reverse transfer students earned an associate's degree, while 3% earned a certificate as their highest degree (see Figure C). There were differences in the likelihood of returning to a four-year institution based on the highest degree attained at a community college. Two-thirds of those earning an associate's degree returned to a four-year institution, roughly one-half of those not earning an associate's degree or certificate returned; and slightly more than one-third of certificate earners made it back to a four-year institution.

Figure C:
Outcomes at Community Colleges for Reverse Transfer Students (N=7,696)



Returning to a Four-Year Institution

Overall, half of reverse transfer students returned to a four-year institution; however, only 28.9% returned to the same institution. When comparing the selectivity of the four-year institutions if they differ, a reverse transfer student is much more likely to return to an institution that is equally or less competitive, rather than more competitive relative to their initial four-year institution.

Earning an associate's degree was among the most important factors in predicting a timely return to a four-year institution. Regarding race, Asian and African-American reverse transfer students were more likely to return to a four-year institution relative to their white

peers. The size of a reverse transfer student's family was also related to the likelihood of returning; the larger the family, the lower the odds of making it back to a four-year institution.

Nearly all of the variables related to academic preparation were insignificant in predicting an accelerated time to return. On the other hand, many of the characteristics of a reverse transfer student's initial four-year institution were statistically significant in terms of predicting the likelihood of returning. Reverse transfer students who initially enrolled at a highly or most competitive institution were more likely to return to a four-year institution, as were those who initially enrolled out-of-state, and those who initially enrolled a greater distance from home.

Bachelor's Completion

One-quarter of all reverse transfer students eventually earned a bachelor's degree. When looking at the bachelor's completion rate conditional upon one's return to a four-year institution, it was slightly less than 50%.

Once again, males were outperformed by their female peers as they were significantly less likely to complete a bachelor's degree. Although African-American students were significantly more likely to return to a four-year institution when compared with white students, they were significantly less likely to complete their respective bachelor's program.

Not a single factor specific to a student's preparation for college was statistically significant in terms of a timely bachelor's completion. Earning an associate's degree was related to an increased odds of bachelor's completion.

Returning to the same four-year institution or an equally rather than less competitive institution was related to an increased odds of completion. Returning to an institution within Illinois, rather than out-of-state, was also related to greater odds of bachelor's completion, all else being equal.

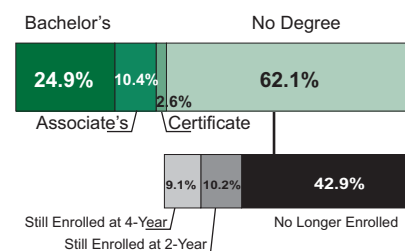
Overall Patterns

Gaining a better understanding of this form of student mobility is important in that reverse transfer students have an extremely low likelihood of completing a bachelor's degree when compared with other four-year starters. In fact, if reverse transfer students are removed from the

larger group of four-year starters, the overall bachelor's completion rate for four-year starters increases from 72% to 84%. What was more striking was that among all four-year starters, roughly half of the dropouts (non-completers who were no longer enrolled at the end of the study) were reverse transfer students. Therefore reverse transfer students make up a disproportionately low number of bachelor's completers and a disproportionately high number of dropouts.

When outcomes at the community college are taken into consideration (see Figure D), the overall postsecondary outcome picture slightly improves but remains somewhat bleak. In total, 37.9% of reverse transfer students earned a postsecondary certificate or degree before the end of the study period and an additional 19.3% of reverse transfer students were still enrolled at a community college (10.2%) or four-year institution (9.1%) at the end of the study. Therefore, slightly more than 42.9% reverse transfer students had no degree and were no longer enrolled at the end of the study.

Figure D:
Highest Degree and End of Study Status for Reverse Transfer Students (N=7,696)



Performance on the ACT and Reverse Transferring

Most of the factors related to academic preparation during high school and college readiness were statistically significant in predicting reverse transferring; however, only a few of those factors remained significant as the outcome measures advanced to predicting a student's return to a four-year institution and none of the factors were significant in terms of bachelor's completion. Regarding performance on the ACT, which has been used to develop measures of college readiness, only three out of four of the ACT subtests were significantly associated with reverse transferring. Notably, one of those subtests—ACT Science—had a positive relationship with

the outcome measure, so as ACT Science scores increased, so did the odds of reverse transferring. It should be noted that scores on ACT English and ACT Mathematics were significantly related to a decreased likelihood of reverse transferring, while scores on Reading lacked statistical significance. Although the current study used a different outcome measure (reverse transferring), the results were somewhat similar to a recent study conducted by Bettinger, Evans, and Pope (2011). Bettinger et al. (2011) explored the relationship between the four ACT subtests and college achievement and found that scores on English and Mathematics were significant and positively related to college achievement, while scores on Reading and Science were sometimes negatively associated with the same outcomes, but most of the time lacked statistical significance.

Policy Implications

Reverse Transferring of College Credit along with the Student

Within the last couple of years the reverse transferring of credit from a four-year institution to a community college has received more attention, particularly for the purpose of retroactively awarding associate's degrees to forward transfer students who earn a minimum number of credits at a community college before transferring in good academic standing to a four-year institution (Garber, Kleeman, Marshall, Parke, & Wunderle, 2010; Mangan, 2011). It would be beneficial if this retroactive

policy could be expanded to facilitate the active transferring of credit from the initial four-year institution to the community college for reverse transfer students to increase the likelihood of associate's degree completion. If a reverse transfer student fails to return to a four-year institution, as only half are able to do, at the very least they would have an easier time earning an associate's degree, which could increase their employability and/or salary. More importantly, the current study demonstrated the positive impact of earning an associate's degree, not only in terms of increasing the likelihood of returning to a four-year institution, but also for completing a bachelor's degree in a time-frame closer to return.

Longitudinal Databases and Research

Even though the current study was limited in the fact that information specific to student academic performance during one's stay at a four-year institution was unavailable, it represents a vision of what could be accomplished as more states develop longitudinal data systems bringing together student-level information from K-12 schools, community colleges, and four-year institutions. Furthermore, this limitation, in addition to the policy recommendation mentioned above, both reinforce the need for cooperation and collaboration between educational entities from various levels and across sectors as longitudinal databases are developed and comprehensive research agendas are set.

The full report is available at <http://ierc.siue.edu/iercpublication.asp>

For further information, contact the IERC toll-free at 1-866-799-IERC (4372)
or by email at ierc@siue.edu.



The Illinois Education Research Council, housed at Southern Illinois University Edwardsville, was established in 2000 to provide Illinois with education research to support P-20 education policy making and program development. The IERC undertakes independent research and policy analysis, often in collaboration with other researchers, that informs and strengthens Illinois' commitment to providing a seamless system of educational opportunities for its citizens. Through publications, presentations, participation on committees, and a research symposium, the IERC brings objective and reliable evidence to the work of state policy makers and practitioners.