Examining the Chicago Early Childhood Teacher Pipeline
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Executive Summary

Continued calls for increasing investments in Early Childhood Education abound. Nobel Prize-winning economist at the University of Chicago, James Heckman, recently told business leaders at the St. Louis Federal Reserve, “The money spent on Early Childhood Education far outpaces investments in high school and college” (Cambria, 2009). President Barack Obama’s Early Learning Challenge Fund would provide funds to states to help them improve preschool and Early Education programs for at-risk children (Paulson, 2009). One aspect of the Early Learning Challenge Fund includes “an evidence-based system of professional development to prepare an effective and well-qualified workforce of early educators” (U.S. Department of Education, 2009). Thus, the need to examine the higher education pipeline of Early Childhood teachers is critical to the overall goal of improving Early Childhood Education.

Current Study

In this study, we examined the higher education pipeline of Early Childhood teachers in Chicago in order to make recommendations for strategies to increase the number of qualified Early Childhood teachers. Previous IERC research examining the supply of and demand for Early Childhood teachers in Illinois (Presley, Klostermann, & Whire, 2006) found that the city of Chicago will need to rely more heavily on the new certificant pipeline because the reserve pool of already qualified Early Childhood teachers is much less robust in that region. Further analysis revealed that there are large leakages in this higher education pipeline—especially from the “interest” to the “program enrollment” stages of institutional enrollment. This study focused on these leakage issues using a two-pronged approach:

1) a detailed analysis of enrollment and one-year persistence data of ten Chicago institutions; and 2) a survey with Early Childhood Education students, from the ten participating institutions, examining barriers preventing them from progressing in their program.

Methodology

An Advisory Group of Education Deans, Early Childhood Education program faculty, and institutional researchers from ten Chicago higher education institutions provided guidance and assistance for this study. The ten Chicago institutions included: Chicago State University, Columbia College Chicago, DePaul University, Dominican University, Erikson Institute, Northeastern Illinois University, National-Louis University, Roosevelt University, St. Xavier University, and University of Illinois at Chicago. We worked with these institutions to conduct a detailed analysis of their enrollment and one-year persistence data of Early Childhood Education (ECE) students to more accurately describe the pipeline in terms of characteristics of these students and factors that influence their progression through the pipeline.

We also examined what conditions hinder students’ progress through the education pipeline by surveying students in Fall 2008 about challenges and barriers they faced, supports they received to overcome them, conditions of the program designs themselves that prevent completion, and students’ personal circumstances that impede their progress. We oversampled and surveyed all students (n=207) classified with a 2007 enrollment status of Pre-candidate (interested, but not officially enrolled in the ECE program); Enrolled in the institution.
but not in the ECE program; or Not enrolled in the institution because these individuals were the students of primary interest for this study. We randomly selected one-half of the students (n=299) with a 2007 enrollment status of Candidate (officially enrolled in the ECE program) and Graduated from the institution between Fall 2006 and Fall 2007. We used both a web survey and a paper follow-up survey, obtaining a 23% response rate. Due to a lower than desired response rate and issues with students’ misperception about their 2007 enrollment status, the survey responses were not weighted based on the sampling design. Therefore, the survey results presented in this report relate only to the students who responded to the survey. We examined the survey response patterns and determined they were similar to the population of ECE students for gender, race, program level, and full-time status. Consequently, we believe the survey results are informative in terms of learning more about students’ persistence in Early Childhood Education programs and identifying areas to focus on to address these issues.

**Profile of Early Childhood Education Students**

Using the enrollment and one-year persistence data provided by the ten participating Chicago institutions, there are approximately 1,300 students in the pipeline for Early Childhood Education teachers in Fall 2006 (991 in undergraduate programs; 317 in graduate programs). The students are predominantly female and represent a mix of racial/ethnic groups—primarily white, black, and Hispanic. Undergraduate programs have a slightly higher percentage of Hispanic students than graduate programs. Undergraduate students are older than traditional age students, with an average age of 27.7 (median age is 24, compared to state median age of 21.1). The average age for graduate students is 32.7, with a median age of 29 that matches the state median age. A large percentage of undergraduate students are enrolled part-time (43%) and one-third (31%) of students at the Bachelor’s level are lower division students. When students are separated by candidacy status, we find that the majority (65%) of undergraduate students are Pre-candidates (interested, but not officially enrolled in the ECE program). On the other hand, the vast majority (89%) of graduate students are Candidates (officially enrolled in the ECE program). Regardless of degree level, Candidates are more likely to progress to their next step (graduation) and less likely to leak to another major or leak out of the institution by Fall 2007. Early Childhood Education programs at these ten institutions vary considerably in terms of number of students enrolled, demographic and enrollment characteristics, and percent of students identified as Pre-candidates and Candidates.

**Results and Recommendations**

The Chicago Early Childhood Education pipeline for undergraduate students is slow moving due to the large percentage of Pre-candidates, many of whom are enrolled in eight or fewer semester hours.

Pre-candidates have many risk factors impeding their progress, including racial minority, older age, lower incomes, and part-time enrollment status. Pre-candidates face financial challenges and difficulty completing prerequisites, including the Illinois Basic Skills Test. Many have other responsibilities (e.g., work and childcare) that do not allow them to attend full-time. Policies directed at reducing the financial burden (e.g., scholarships, loan forgiveness for community service, subsidies for books, need-based grants, and subsidies for internet access) and decreasing work/class time conflict (e.g., free childcare services, flexible schedules, online or condensed courses, and trading intern hours at institution’s childcare for childcare services) would likely increase the number of full-time students, thus accelerating the production of Early Childhood Education graduates eligible for certification. At the graduate level, the pipeline of ECE teachers is slow due to the number of students attending part-time for financial reasons. Most graduate students fund themselves without receiving financial aid or support. Anticipated increased requirements for Early Childhood teachers to obtain an English as a Second Language (ESL) credential by 2014 will put additional strain on the pipeline of qualified ECE teachers. Providing funding opportunities, particularly for Hispanic students, would increase the number of students attending full-time and speed up the flow of students graduating with advanced degrees in Early Childhood Education.

Under-preparedness is one of the most significant challenges for students moving through the pipeline.

This issue, which was identified during our planning process with the Advisory Group and student focus groups, was confirmed by our student survey results. Some students may need intensive support to be prepared, while others may need only short-term review sessions to be ready for college level work. Students with poor academic preparation may not be able to
pass regular coursework or they are often required to take remedial coursework; thus, their progress is often delayed. Although many Pre-candidates and students who “leaked” from the ECE program were aware that their institution provided academic support, less than half of those who were aware actually used these services. Interestingly, students who “leaked” were significantly less satisfied with the services they received for Basic Skills test assistance. Increasing utilization of support programs may require universities to modify their offerings to meet the students’ needs by, for example, offering advising or tutoring services in the evenings, online, or at more convenient locations. Other improvements might include providing childcare services and bi-lingual tutoring, particularly for assistance with the Basic Skills test. Further exploration is needed to determine factors impeding students from taking advantage of support services. Many of the universities participating in this study provided assistance with the Basic Skills test within their Colleges of Education. This policy should be continued and encouraged at other institutions to help students feel part of the larger community of education as early in their college career as possible. Lastly, members from the Advisory Group, as well as higher education experts interviewed for a recent article in *The Chronicle of Higher Education* (Berger, 2009) concerning college and career decisions, reported that students’ ability to persist and progress to graduation.

**Undergraduate students’ reasons for not being enrolled in the ECE program in Fall 2007 are related to prerequisites (including passing the Illinois Basic Skills Test) and financial issues; however, specific reasons vary depending on the group.**

The majority of Pre-candidates cited not having completed all prerequisites (76%), followed by work/class time conflict (33%) and personal financial issues (24%). Students who switched to another major or students not enrolled in the institution in Fall 2007 are more diverse in terms of having differing reasons for not being in the ECE program. Inability to pass the Illinois Basic Skills Test (32%) and no longer interested in the ECE field (24%) were within their top three reasons. Similar to Pre-candidates, this group cited not completing all prerequisites (22%) and personal financial issues (22%) within their top three reasons. Both groups identified “unsatisfactory advisor/academic counselor” as a reason; however, fewer Pre-candidates believed this was an issue (19% vs. 22%). As stated above, increasing utilization of support programs and decreasing the financial burden would help improve students’ persistence. In addition, addressing students’ reasons for dissatisfaction with academic advisors may also influence students’ decision to continue with the ECE degree.

**Students “own desire and determination” was the primary reason for Candidates and Graduated students’ ability to persist in or graduate from the ECE program.**

Candidates and Graduated students ranked “my own desire and determination” far above other factors influencing their persistence in the ECE program—98% for undergraduates and 96% for graduate students. Several factors (e.g., support from family or friends, quality of ECE program, faculty support, financial support, and flexibility) also influenced students’ ability to persist and progress to graduation. Several of these factors are under the control of the ECE program, such as assigning an ECE faculty mentor to students and increasing flexibility by offering courses at more convenient times and locations, as well as in different modalities. Pairing successful students as peer mentors with struggling students would help create a supportive environment for students who might be less likely to continue in the ECE program.

**Students who “leaked” from the ECE program appear to be exploring the ECE major and are not yet committed to the field of Early Childhood teaching.**

Some students (18%) from the Enrolled, but not in ECE and Not enrolled in the institution group cited taking classes to consider the ECE major as their primary reason for attending college in Fall 2006, rather than seeking a Bachelor’s degree. In addition, students do not yet seem committed to this education path (at this point in time): 26% had no intentions and 18% were undecided on seeking the Illinois ECE teaching certificate. We also found that fewer students who “leaked” from the ECE program were aware of programs to help them with college and career decisions. Early identification of these students to improve efforts to meet their academic needs and provide career guidance may increase their satisfaction with the institution and ECE program and encourage them to commit to the field of Early Childhood Education. Coordinated efforts between the College of Education and the institution’s admissions and central advising staff prior to official enrollment in a degree may solidify students’ decisions to major in ECE and facilitate their course taking and progression.
through the program. Increasing participation in orientation may also improve their engagement and commitment. A recent article in *Inside Higher Ed* (Matthews, 2009) suggests colleges should expand their orientation programs to include college readiness training in months prior to the beginning of the academic year in the autumn to help students with their transition, which may improve retention rates.

Large disparities exist in students’ perceptions and the institutions’ records of the 2007 enrollment status.

Only 56% of students’ survey responses matched the institutional record for their 2007 enrollment status. The most inconsistency occurred when students identified themselves as Candidates, whereas the institutional data recorded them as Pre-candidates (35 out of 61 students). Possible explanations for the misperceptions include: 1) students may be admitted into the College of Education without having completed requirements for the Early Childhood Education program; 2) students may have junior or senior standing at the institution without having completed requirements for the Early Childhood Education program; and 3) delays in processing paperwork. Detailed analysis of institutions’ enrollment data by candidacy status and increased communication with students about their progress would help improve consistency between students’ perception and institutional data regarding students’ enrollment status.

Further research studies would provide details on additional factors that affect attendance patterns.

Opportunities to extend the current study include examining institutions in the wider Chicago region and across the state, as well as including other teacher preparation programs. Examining more points in time (semester to semester) over a longer timeframe would help differentiate enrollment patterns of “stop outs” and “drop outs.” More detailed analysis of such program designs as course taking patterns might provide additional insight into students’ enrollment patterns. Multivariate analysis with additional factors (e.g., course patterns, total hours completed, and public or private institution) would shed more light on college persistence of Early Childhood Education students. The recently announced Chicago Teacher Pipeline Partnership, a Teacher Quality Partnership grant from the U.S. Department of Education to develop the pipeline for high quality elementary and preschool teachers for Chicago Public Schools, offers a tremendous opportunity to further explore and improve students’ teacher preparation experiences. Three of the four institutions participating in the Chicago Teacher Pipeline Partnership contributed to this study. We believe our findings and recommendations will be beneficial as efforts to transform teacher preparation in Chicago move forward.

The full report is available on our website http://ierc.siue.edu

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