The Student Has Become the Teacher: Tracking the Racial Diversity and Academic Composition of the Teacher Supply Pipeline

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RESEARCH HIGHLIGHTS 2013-3

Rationale:

Research shows that teachers with strong academic skills boost student performance and that a diverse teacher corps is particularly important for improving the outcomes of racial/ethnic minority students. [ii] As a result, the academic skills and racial/ethnic diversity of the teacher force are at the forefront of local and national policy concerns. [iii]

Purpose:

The purpose of this study is to inform the design of policies and/or practices to improve the supply of academically skilled, diverse individuals into teaching in Illinois public schools.

Methods:

We use a unique, longitudinal state database to track two Illinois high school cohorts (classes of 2002 and 2003, N= 225,296) through five stages in the new teacher supply pipeline—college entry, enrollment in a four-year college, completion of a bachelor's degree, teacher certification, and employment as a teacher in an Illinois public school.

Analysis:

Using descriptive statistics, we examine how each stage in this pipeline affects the composition of new entrants to K-12 public school teaching in Illinois, with particular attention to academic skills and racial/ethnic diversity.

Findings:

Only a small percentage (3.2%) of Illinois public high school students across two high school cohorts became public school teachers in the state by roughly a decade after high school. Somewhat surprisingly, the transition from certification to teaching appeared to be one of the most critical stages in this pipeline. Although more than one in five (21.4%) bachelor's degree completers from these cohorts earned teacher certification, less than half (45.5%) of these certificants actually ended up teaching in Illinois public schools.

The students who became teachers differed substantially from those who did not become teachers. The teachers who emerged from these cohorts were stronger academically but much less racially/ethnically diverse than their high school peers. Teacher certificants had notably weaker academic qualifications compared to other bachelor's degree earners, but those who actually became teachers were quite similar academically to non-teaching college graduates. However, the teachers from these cohorts were also considerably less racially/ethnically diverse than other four-year college completers.

Aspirations matter. Substantially higher proportions of the students who aspired to become teachers while in high school advanced to each successive stage in the teacher pipeline, and more than half of the aspirants who received bachelor's degrees continued on to earn teacher certification (compared to fewer than one in six baccalaureate recipients who did not aspire to teach while in high school). Moreover, these differences continue to emerge even as individuals transitioned from certification to the teaching stage, indicating that high school aspirations play a large role in the development of the teaching force all the way through the employment.

The compositional changes to the teacher pipeline by race/ethnicity and academic qualifications occurred to a greater or lesser extent at each stage. College enrollment and bachelor's degree completion also had a negative impact on racial/ethnic minority representation, in part due to the stronger academic preparation required at those stages and the relatively weak academic backgrounds of non-Asian minority high school students from these cohorts (Presley & Gong, 2005). But, regardless of academic preparation, minority high school students still aspired to teach at lower rates, minority bachelor's degree recipients were less likely to have earned teaching certificates, and minorities with teaching certificates were less likely to become teachers in Illinois public schools, compared to Whites—all indicating that factors besides academic preparation also have a large impact on the relatively low representation of minorities among new public school teachers in Illinois.

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Recommendations:

Based on the findings in this study, we conclude that efforts to improve recruitment into the teaching profession and initiatives to increase college enrollment and completion among racial/ethnic minority students are needed in order to have a significant impact on the diversity and academic composition of the state's teaching force. We emphasize that any efforts that focus on boosting teacher diversity must not neglect teacher academics, just as any initiatives intended to increase the academic qualifications of teachers should not neglect teacher diversity. Examples of such policies and programs include:

- Recruitment efforts beginning at least as early as high school, and continued recruitment once students enter college;
- Improving the educational opportunities and outcomes for all minority students, from early childhood through postsecondary education;w
- Scaling up selective alternative certification programs that have proven successful in attracting high-achieving, diverse candidates;
- Incentives to lure out-of-state graduates to return to teach in Illinois public schools or programs to retain talented minority students in Illinois from the outset; and

 Holding teacher preparation programs more accountable for both the quality and diversity of the teachers they train and the creation of a statewide initiative to fund teacher preparation programs targeting high-achieving minority candidates. [iii]

Further investigations are needed to help understand students' transitions (or lack thereof) from certification to the employment stage and the role that student finances play in Illinois' new teacher pipeline, from college affordability through the role of teacher salaries on students' career choices. We also note that the recent Illinois high school cohorts profiled in this study are just one component of the teacher pipeline, which also includes additional sources that could also improve the diversity and academics of our teaching corps and should not be neglected among the state's broader recruitment efforts. We close with a reminder that getting these diverse, academically talented teachers through the pipeline and into the classroom is only the first step—once there, we also need concerted efforts to keep high-quality educators in profession.

^[1] Rice, J. K. (2003). Teacher quality: Understanding the effectiveness of teacher attributes. Washington, DC: Economic Policy Institute.; Rockoff, J. E., Jacob, B. A., Kane, T. J., & Staiger, D.O. (2011). Can you recognize an effective teacher when you recruit one? Education Finance and Policy, 6(1), 43-74; Villegas, A. M., and Irvine, J. J. (2010). Diversifying the teaching force: An examination of major arguments. Urban Review, 42, 175-192. doi: 10.1007/s11256-010-0150-1; Dee, T. (2004). The race connection: Are teachers more effective with students who share their ethnicity? Education Next. 4(2), 52-59; Hanushek, Hanushek, E., Kain, J., O'Brien, D., & Rivkin, S. (2005). The market for teacher quality. Working Paper 11154. Retrieved from http://www.nber.org/papers/w11154; Goldhaber, D., and Hansen, M. (2010). Race, gender, and teacher testing: How informative a tool is teacher licensure testing? American Educational Research Journal, 47(1), 218-251.

[[]ii] Bacolod, M. P. (2007). Do alternative opportunities matter? The role of female labor markets in the decline of teacher quality. *The Review of Economics and Statistics*, 89(4), 737-751; Corcoran, S. P., Evans, W. N., & Schwab, R. M. (2004). Women, the labor market, and the declining relative quality of teachers. *Journal of Policy Analysis and Management*, 23(3), 449-470. doi: 10.1002/pam.20021; Karp, S., and Harris, R. (2011). Bridging differences. *Catalyst, XXII*(2), 5-9; Villegas, A. M., and Lucas, T. F. (2004). Diversifying the teacher workforce: A retrospective and prospective analysis. *Yearbook of the National Society for the Study of Education*, 103, 70–104. doi: 10.1111/j.1744-7984.2004.tb00031

[[]iii] Illinois P-20 Council. (2010). *P-20 report on teacher effectiveness: Policy priorities to increase teacher effectiveness*. Retrieved from http://www2.illinois.gov/gov/P20/Documents/Teacher%20and%20Leader%20Effectiveness/Teacher_Effectiveness_Committee_Report.pdf; Bireda, S. and Chait, R. (2011). *Increasing teacher diversity: Strategies to improve the teacher workforce*. Washington DC: Center for American Progress. Retrieved from http://www.americanprogress.org/issues/2011/11/pdf/chait_diversity.pdf