The Geography of the New Teacher Pipeline

Eric J. Lichtenberger & Bradford R. White, Illinois Education Research Council
Karen J. DeAngelis, Warner School of Education, University of Rochester

INTRODUCTION

- Student characteristics and college access, enrollment, and completion patterns differ widely among regions in Illinois
  - Students from Chicago are more diverse and have lower ACT scores, whereas students in southern IL are more likely to enroll in 2-year colleges and less likely to earn bachelor’s degrees
- Teacher labor markets are geographically constrained, considerably more so than those of similarly-aged college graduates in non-teaching occupations (Boyd et al., 2005; Reininger, 2012)
  - Urban teachers, non-White teachers, and teachers with weaker academic qualifications tend to be even less mobile
- New teachers also tend to choose schools with high proportions of students sharing their race and from similar socio-economic backgrounds (Cannata, 2008; Engel 2014)
  - Younger workers tend to have more geographic mobility than older workers, so initial sorting is likely to persist to some extent

RESEARCH QUESTIONS

1) Is there regional variation in the new teacher pipeline in Illinois?
2) What does the spatial geography of new teacher labor markets look like in Illinois?
3) Does the spatial geography of new teacher labor markets differ by the teachers’ demographic and academic characteristics?
4) What are the relationships between the demographics of teachers, the schools they attended, and the schools where they initially teach?

DATA

- Using data from ACT, National Student Clearinghouse, and state and federal education agencies, we track the 2002 and 2003 cohorts of Illinois high school graduates (N=225,196) for up to 10 years through college enrollment, bachelor’s degree completion, teacher certification, and teaching employment in an Illinois public school

- For the teachers emerging from these cohorts (N=7,299), we analyze the distance and demographic similarity between each individual’s high school, college, and initial teaching placement

- We also analyze the proportion who begin teaching in the same district (or a feeder) from which they graduated

- We classify Illinois into 7 geographic regions that differ by student demographics and college-going patterns.

RESULTS

Changing composition of the new teacher pipeline by region of origin

- Students from each region progress through the college and teacher pipeline at different rates, such that some regions substantially overproduce teachers relative to their share of students whereas others tend to under-produce teachers
- Regions that under-produce teachers - like Chicago - must import teachers from regions that overproduce - like the Northeast

Flow from home to college

- Most new teachers graduated from HS in the Northeast region
- Most earned their degree in the East Central region
- The second most popular college “region” for Illinois teachers was out-of-state

Flow from college to initial teaching employment

- Substantial movement from college to the East Central to teaching in schools outside of this region
- Substantial movement to teaching at schools in the Northeast from colleges outside of these regions

Flow from home to initial teaching employment

- The vast majority of the new teachers in each region graduated from high schools in that region... EXCEPT for Chicago - only a third of new CPS teachers graduated from CPS high schools
- Very limited movement into or out of the Southeast and Southwest regions

New CPS teachers from the Northeast had stronger academic qualifications than their counterparts who stayed in the NE (and much stronger than native CPS) and were more diverse than their peers who stayed in the NE (but much less diverse than native CPS teachers)

Demographic differences between former high school and initial teaching employment

- Across all Illinois regions, teachers tend to begin their careers at schools that are more disadvantaged (especially with regard to English proficiency and poverty) than the schools from which they graduated, even for teachers returning to the same school from which they graduated

REFERENCES


CONTACT

Brad White
Senior Researcher, Illinois Education Research Council
Southern Illinois University Edwardsville
http://iere.education
bwhite@siue.edu

Karen DeAngelis
Associate Professor and Chair, Dept. of Educational Leadership Program Director, Educational Policy
Warner School of Education and Human Development
University of Rochester
kdeangelis@warner.rochester.edu