



ABSTRACT

Many high poverty schools with which NAATE works experience attrition rates of high performing teachers that exceed 20 - 25% annually. Of all NAATE graduates, 94% remain working in school buildings; 77% in student facing roles and 17% in more formal leadership roles.

One of the core objectives of the NAATE program for experienced, high performing classroom teachers (along with deepened instructional practices and expanded leadership capacity) is retention in the profession, defined first and foremost as remaining in school buildings within student-facing and/or leadership roles, and secondarily, within non-school based roles within education.

Teacher attrition is a concern for all schools but especially for the high poverty schools with which NAATE partners. Historically, high-need schools have higher rates of teacher attrition than non-high need schools (Goldring & Greenfield, 2002). While a percentage of those leaving the profession are deemed not effective, many experienced and high performing teachers exit as well, limiting the capacity of schools to deliver high quality instruction (The New Teacher Project, 2012). The cost of losing these high performing

teachers has been well documented in state level studies in Texas and North Carolina (Barnes et al., 2007). Estimated costs per teacher lost range from \$8,000 to \$20,000 and include recruitment, selection, onboarding, and associated training expenses. These estimates do not account for the reduced teacher effectiveness or opportunity costs associated

NAATE has improved who I am as a teacher and has helped me to stay in the classroom and become an effective person to my students... to establish a safe cultural environment and improvement in academic performance. ... I believe this program establishes a foundation for teachers where we are able to learn in a variety of ways to become an effective leader in the classroom and among our peers. After NAATE I have seen a change in myself where I am reflective in everything I do, and always try to implement new strategies each day to keep my students motivated.

-Cohort V Teacher Fellow

with the loss of peer influencers when replacing a high performing teacher with a new entrant to the profession, which is commonly the case. Recent publications estimate the annual cost of teacher turnover nationally at more than \$2.2 billion (Haynes, Maddock & Goldrick, 2014).

Sanders and Rivers (1996) estimate that compared to having an ineffective teacher, having a highly effective teacher for three years in a row can account for up to a 50-percentage point improvement in student achievement. Kane, Rockoff, and Staiger (2007) estimate that the difference in effectiveness between the top and bottom quartile of teachers results in a significant difference in student gains over the course of a school year; Hanushek (1992) notes that a student with a high quality

Before coming to NAATE, I had filled out my applications to medical school. But something happened during those sessions. I realized there was more to do in the classroom. That was five years ago. I am still in the classroom today.

-Cohort I Teacher Fellow

teacher will achieve a gain of 1.5 grade-level equivalents, while a student with a low quality teacher achieves a gain of only 0.5 grade-level equivalents.

At the same time, we know that teachers' effectiveness increases with the number of years spent in the classroom. Harris (2008) found that eight of nine value-added studies display evidence of teachers improving with experience; Rockoff (2004) found that teaching experience significantly raises student achievement, particularly in reading. In general, first year teachers produce student achievement gains that are significantly lower than otherwise similar teachers with 10 to 15 years of experience. Experienced teachers matter.

But experienced teachers can only have impact if they stay. Data from the first seven NAATE cohorts who graduated through the summer of 2016 show that out of 229 NAATE Teacher Fellow graduates, 94% remain in schools, with 77% serving as classroom teachers, and an additional 17% serving in nonstudent facing leadership roles.

Broken down over time, the data shows that NAATE graduates remain in schools for multiple years after completing the program (Table 1). For the cohorts who graduated from NAATE more recently (IV-VII), in their first year following completion of the program, 97% remain in schools, with 89% serving as classroom teachers, 9% in leadership or other school-based roles, and 2% in non-school based roles in the field. For fellows in the first three cohorts who have completed their 3rd year after graduating from NAATE, 87% are working in schools, with 63% still serving as classroom teachers and 24% assuming leadership or other roles in their schools. Another 6% are serving in other non-school based roles, for example in district or network central offices.

NAATE's results are encouraging given the challenges high poverty schools face in retaining high quality teachers. Nationally, the attrition rate of schools with a student population with 75% receiving free and reduced priced lunch are approximately 50% higher than more affluent schools (Goldring, Taie & Riddles 2014).

Table 1. NAATE Teacher Fellow Graduates Working in Education

	1 Year After Program	3 Years After Program	All Graduates
School-Based Role	97.3%	87.3%	93.9%
Classroom Teacher	88.6%	63.3%	76.8%
School Leadership or Other School-Based Role	8.7%	24.1%	17.1%
District/Network Office or Other Education Role	2.0%	6.3%	3.5%
Total Working in Education	99.3%	93.7%	97.4%
<i>Number of Teachers in Education</i>	148	74	222
<i>Cohorts</i>	IV-VII	I-III	I-VII

Note: The data presented here is from two rounds of data collection conducted in the fall of 2015 and 2016. It represents information on 99% of the 229 graduates from NAATE Cohorts I – VII (2011-2016). Data was collected on where graduates were working and what kinds of roles they had for every year following their completion of the NAATE program.

NAATE partner organizations report annual attrition rates of all teachers of up to 30%. This is in line with findings of the Strategic Data Project at Harvard University which conducted a study of retention rates in several urban districts across the country and found that although highly effective teachers were retained at higher rates than less-effective teachers in their first year, attrition rates for these teachers increased to 19-42% by year three¹.

With the reported impact on student outcomes of having high performing teachers in student facing roles and the acute problems of retaining teachers in high need schools, many districts and CMO school partners see NAATE as an important part of their strategy for improving school performance by keeping their best teachers in their classrooms and school buildings. NAATE's differentiated advanced learning program for high performing teachers appears to have a positive impact on retaining such teachers. NAATE's thesis is that such tailored professional learning interventions can increase retention, foster stability and sustainability in schools, reduce the high cost associated with teacher turnover, and, ultimately, lead to higher quality learning experiences for students. In future research efforts, NAATE retention rate comparisons would ideally be made directly with rates of retention of effective experienced teachers serving exclusively in high poverty schools; however, such comparative data does not currently exist on a national level.

NAATE's Value to Partner Organizations

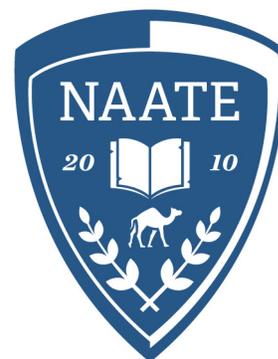
As important as evaluation and corresponding differentiated compensation are to retaining talented teachers, we also recognize the need to continue to develop top-tier teachers as both a growth and retention strategy. While [we have] a very strong set of professional development experiences for teachers, we recognize that we as an organization are not positioned to fully provide differentiated support for our most accomplished teachers. In turn, we have made it a priority to commit funding to enable our top-tier teachers to attend NAATE's Teacher Fellows program. Participants have consistently reported that NAATE dramatically shifts their views on their roles as educators, both with students and with their colleagues, and renews their commitment to serving their students and our communities.

-National CMO, NAATE Partner Organization

¹"Do Retention Patterns Differ Between the Most- and Least-Effective Novice Teachers?" Strategic Data Project, Center for Education Policy Research, Harvard University, 2012.

REFERENCES

- Barnes, Gary, and Edward Crowe, Benjamin Schaefer. "The High Cost of Teacher Turnover in Five School Districts: A Pilot Study." National Commission on Teaching and America's Future, Washington DC, 2007.
- Do Retention Patterns Differ Between the Most- and Least-Effective Novice Teachers? (Rep.). (2012). Retrieved June 29, 2017, from Strategic Data Project, Center for Education Policy Research, Harvard University website: <http://sdp.cepr.harvard.edu/files/cepr-sdp/files/sdp-spi-retention-memo.pdf>
- Goldring, Ellen, and William Greenfield. "Understanding the evolving concept of leadership to education: Roles, expectations, and dilemmas." Yearbook of the National Society for the Study of Education 101.1 (2002): 1-19.
- Goldring, R., Taie, S., and Riddles, M. (2014). Teacher Attrition and Mobility: Results From the 2012–13 Teacher Follow-up Survey (NCES 2014-077). U.S. Department of Education, Washington, DC: National Center for Education Statistics. <http://nces.ed.gov/pubsearch>. Retrieved March 6, 2016.
- Hanushek, Eric A. "The trade-off between child quantity and quality." Journal of political economy 100.1 (1992): 84-117.
- Harris, Alma, and James Spillane. "Distributed Leadership Through the Looking Glass." Management in Education. Vol 22 1 (2008): 31-34.
- Haynes, M., Maddock, A., & Goldrick, L. (2014, July). On the Path to Equity: Improving the Effectiveness of Beginning Teachers (Issue brief). Retrieved June 29, 2017, from Alliance for Excellent Education website: <http://all4ed.org/wp-content/uploads/2014/07/PathToEquity.pdf>
- Ingersoll, Richard M. "Teacher Turnover and Teacher Shortages: An Organizational Analysis." American Educational Research Journal, Vol. 38, No. 3 (Autumn, 2001), pp. 499-534.
- Kane, Thomas J., Jonah E. Rockoff, and Douglas O. Staiger. "Teacher Certification." Education Next (2007)." Learning in adulthood (2007): 105-129.
- Kraft, M.A. & Papay, J.P. (in press). Do supportive professional environments promote teacher development? Explaining heterogeneity in returns to teaching experience. Educational Evaluation and Policy Analysis.
- Rockoff, Jonah E. "The impact of individual teachers on student achievement: Evidence from panel data." The American Economic Review. 94.2 (2004): 247-252.
- Sanders, William L., and June C. Rivers. "Cumulative and residual effects of teachers on future student academic achievement." University of Tennessee Value-Added Research Center. (1996).
- The Cost of Teacher Turnover. Prepared for Texas State Board for Educator Certification, Texas Center for Educational Research, Austin, TX 78752, October 2000.
- The New Teacher Project, "The Irreplaceables: Understanding the Real Retention Crisis in American Urban Schools." 2012.



naate.org

401.371.0001

166 VALLEY STREET, 6M-104

PROVIDENCE, RI 02909

INFO@NAATE.ORG