

Maximizing the Impact of Highly Effective Teaching:

Using information to better support teachers and improve student outcomes

For the last six years, Pittsburgh Public Schools (PPS) has been engaged in the Empowering Effective Teachers (EET) plan to improve teaching and learning in every classroom across the district. The goals of the EET plan include increasing the number of highly effective teachers, increasing the exposure of high-needs students to highly effective teachers, and ensuring all teachers work in learning environments that support their ability to be highly effective.

Successfully meeting these goals first required developing ways to understand and respond to differences in teacher effectiveness. Through collaboration with the PFT and more than 400 teachers and school administrators, PPS has built a professional growth and evaluation system for Pittsburgh teachers that utilizes multiple lenses to accurately identify differences in teacher effectiveness:

- Observation of teacher practice
- Measures of student learning and growth
- Student feedback

In August 2013, over 1,400 teachers received for the first time a comprehensive view of their effectiveness when they received reports that pulled together the multiple lenses of practice into an overall view of their practice. These reports, known in PSS as Educator Effectiveness Reports, were no-stakes-attached previews of an overall combined effectiveness measure and associated performance level for each teacher.

Beginning in June 2014, teachers' end-of-year evaluation was based on this system, where ratings are based on 50% observation of practice and 50% student outcomes, where available.

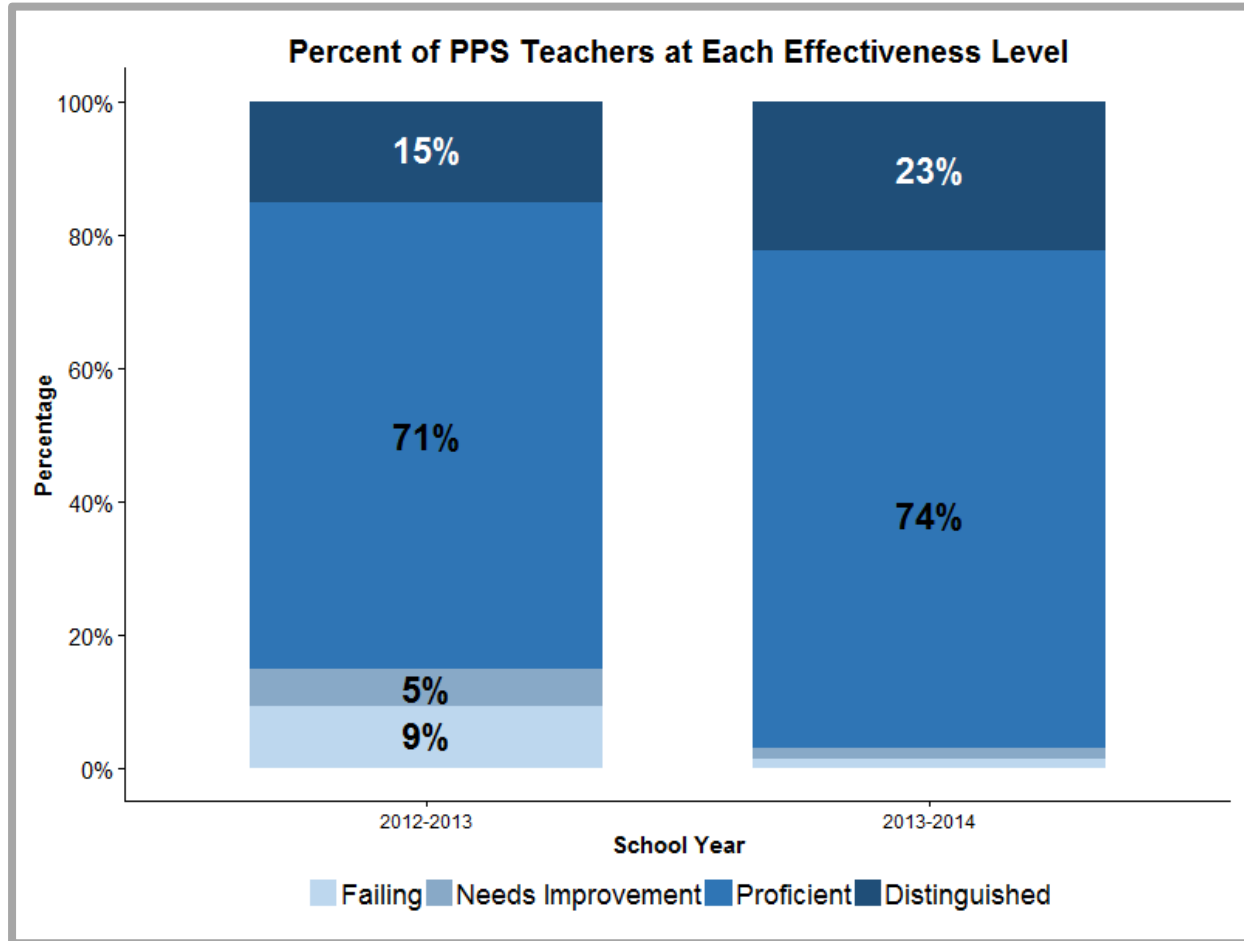
Passing these milestones was an important first step, and the culmination of the first four years of the EET plan. Building on this, however, it is how this information is used that will help the district support professional growth and ultimately impact student outcomes. Below is a sample of the never before available information the District now has as a result of the system. These analyses have opened opportunities for conversation and created an information base upon which PPS has begun to examine District practices.^{1,2}



¹ The majority of charts shared in this document were created using R software. R Core Team (2014). R: a language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. Available at <http://www.R-project.org/>.

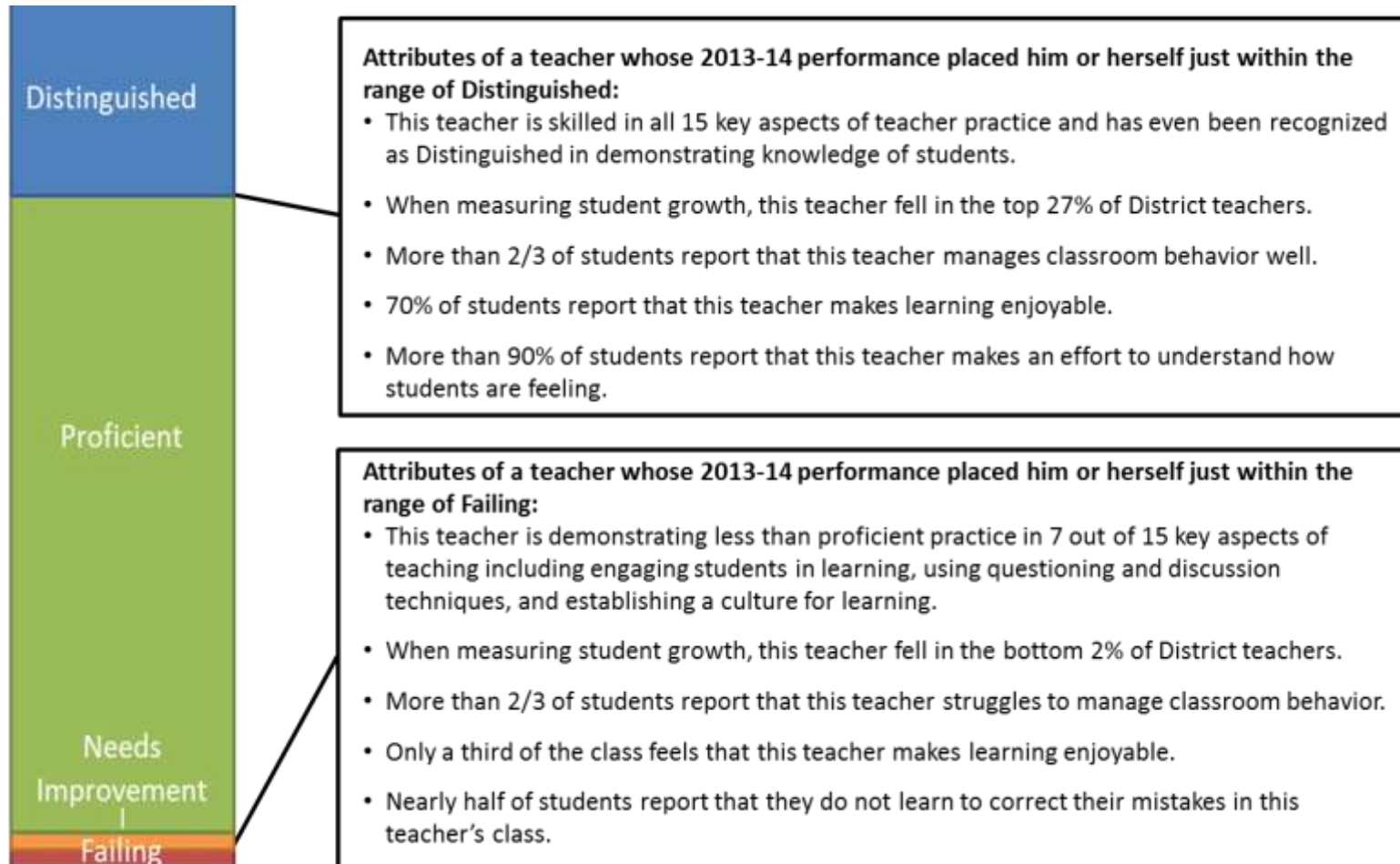
² The majority of charts shared in this document were created using the ggplot2 package in R. H. Wickham. Ggplot2: elegant graphics for data analysis. Springer New York, 2009.

The August 2013 preview Educator Effectiveness Reports confirmed that Pittsburgh is home to great teachers. Even with a new and more rigorous standard for teaching, more than 85% of our teachers demonstrated effective performance in 2012-13.³ Further, the new growth and evaluation system has allowed the District to recognize its most highly effective teachers. In 2013-14, 23% of teachers were recognized for their Distinguished performance.

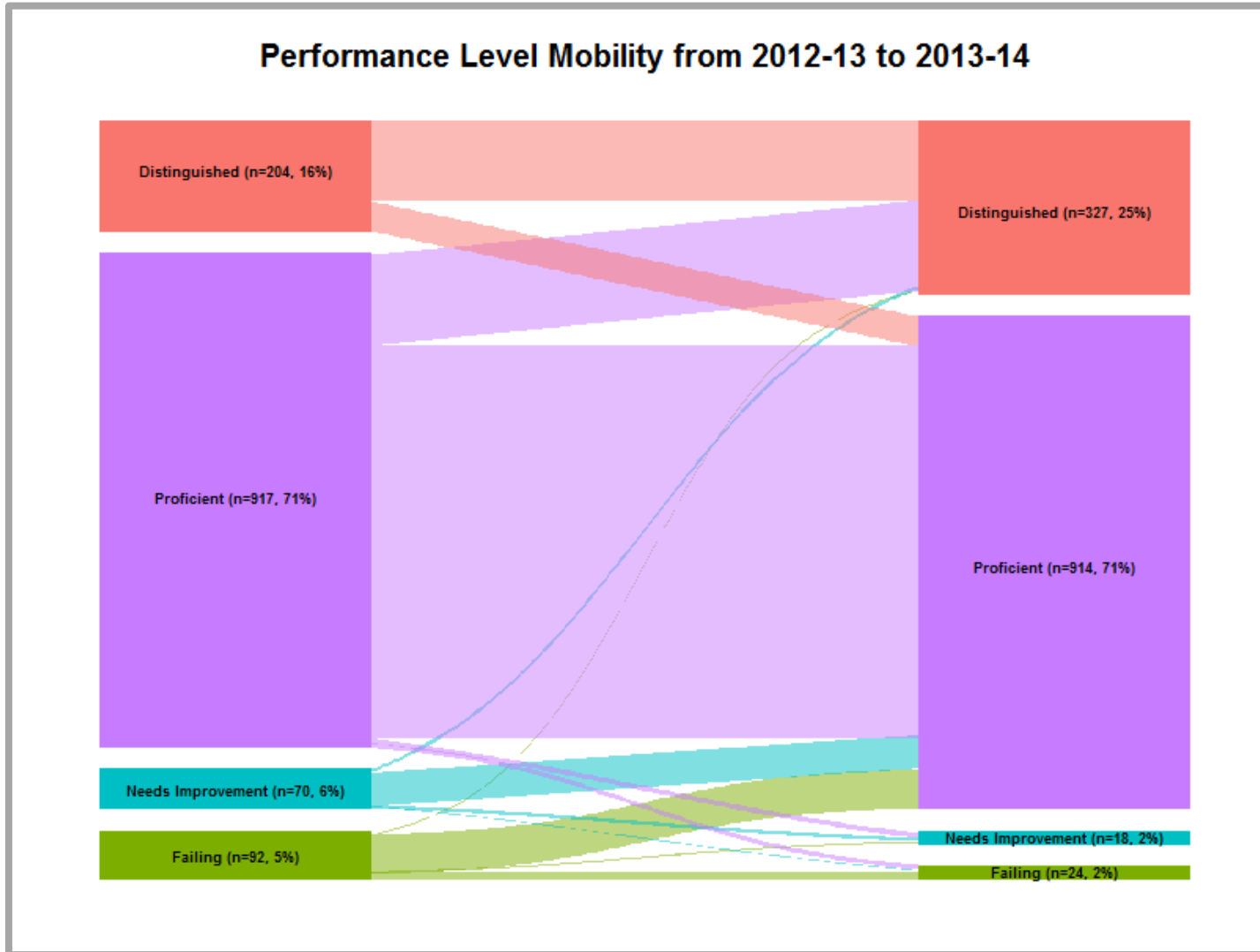


³ Pennsylvania Act 82 of 2012 established four categories of performance: Distinguished, Proficient, Needs Improvement, and Failing. PPS defines effective performance as Distinguished or Proficient performance.

It is now possible to paint a picture of what students experience when they receive instruction from teachers at the top and bottom levels of performance. The following is an example that focuses specifically on teachers performing at the bottom of the highest performance level and at the top of the bottom performance level to highlight the differences from a student perspective. As one moves higher or lower into the respective ranges, the results would be even more pronounced.

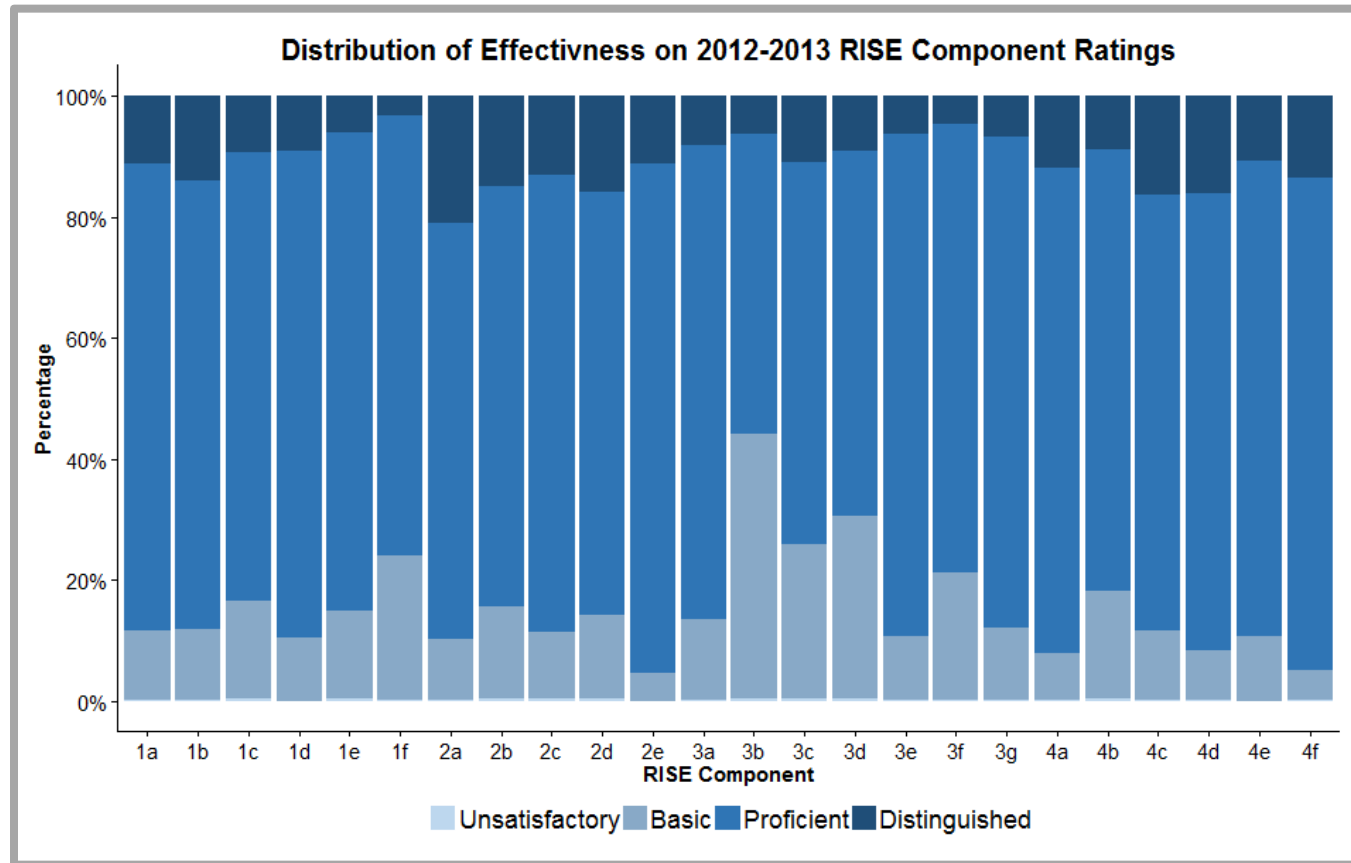


From a professional growth lens, PPS is now even better able to identify struggling teachers and provide them with the supports necessary to improve their practice. Roughly 85% of those teachers performing at the Failing or Needs Improvement level in 2012-13 grew their practice into the Proficient or Distinguished levels in 2013-14.



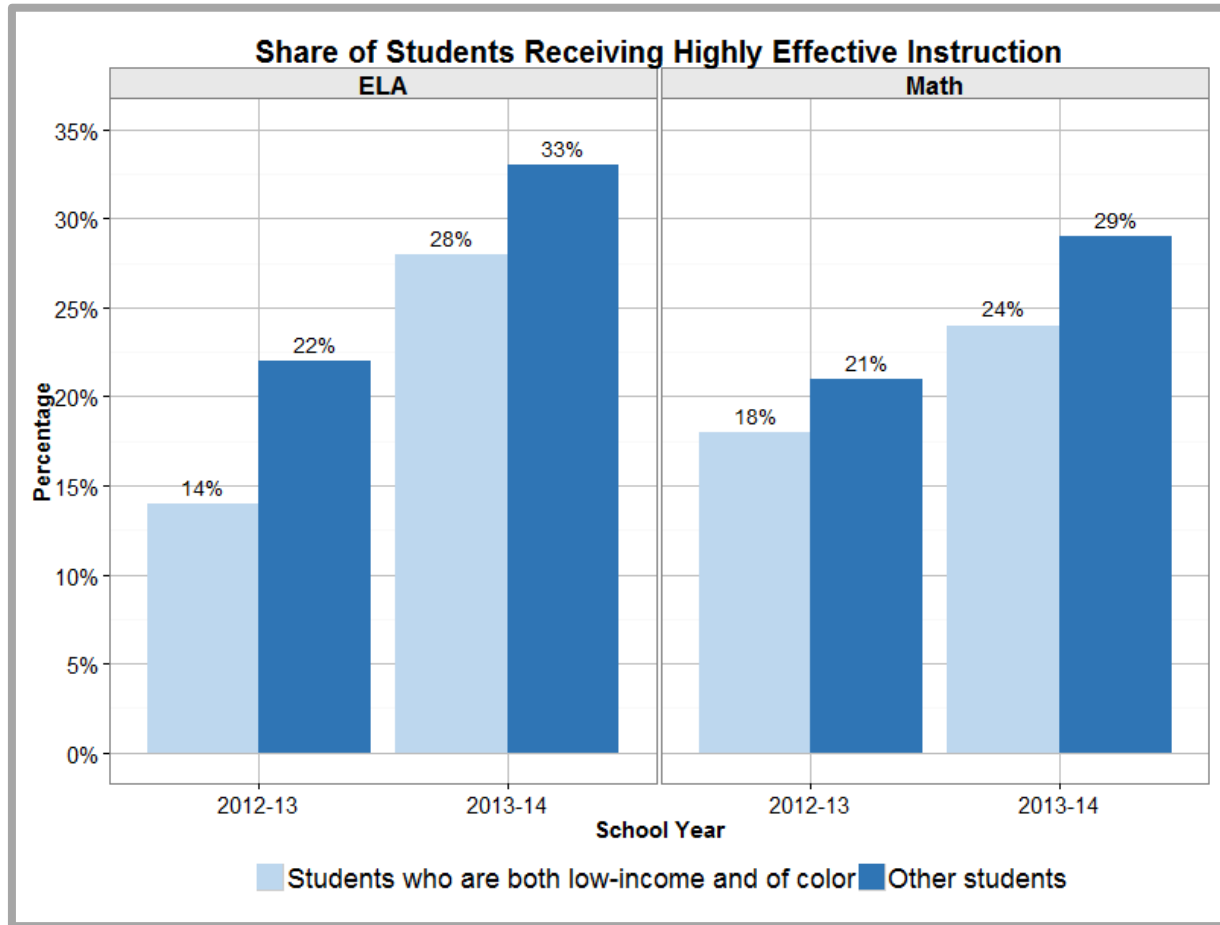
Having this new information available has allowed the District to answer questions that it had never before been able to, such as identifying common areas of growth which can inform professional learning opportunities across the District. For example, when looking at information from observation of teacher practice using the RISE rubric, common areas of growth include designing ongoing formative assessment (RISE component 1f), using questioning and discussion techniques (RISE component 3b), and using assessment to inform instruction (RISE component 3d).

This information also allows the District to track and acknowledge progress. For example, in 2012-13 54% of teachers demonstrated proficient or distinguished performance on RISE component 3b. But by 2013-14, over 70% of teachers demonstrated the same level of performance on that component.



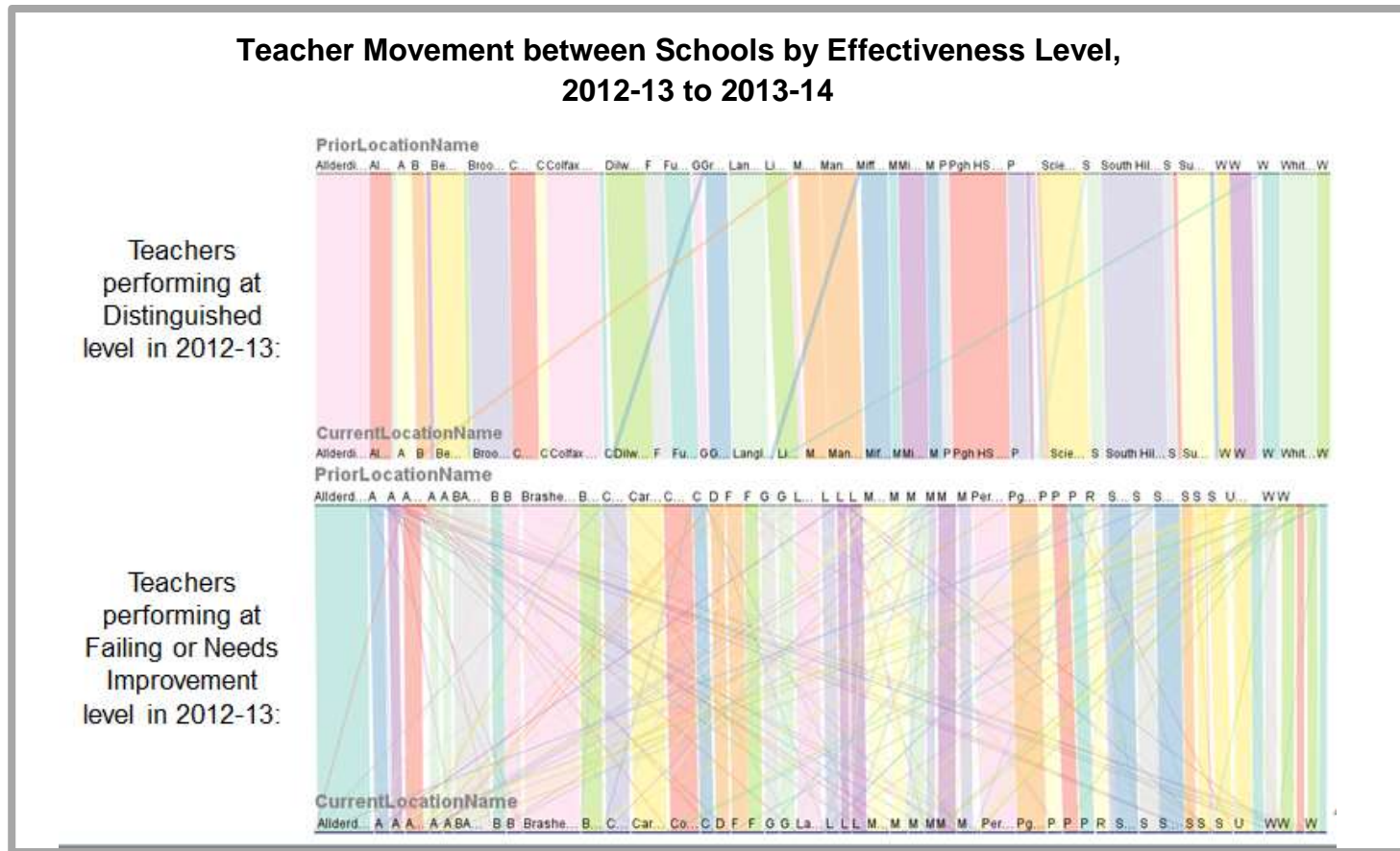
- 1a – Demonstrating knowledge of content
- 1b – Demonstrating knowledge of students
- 1c – Setting instructional outcomes
- 1d – Demonstrating knowledge of resources
- 1e – Planning coherent instruction
- 1f – Designing ongoing formative assessments
- 2a – Creating a learning environment of respect
- 2b – Establishing a culture for learning
- 2c – Managing classroom procedures
- 2d – Managing student behavior
- 2e – Organizing physical space
- 3a – Communicating with students
- 3b – Using questions & discussion techniques
- 3c – Engaging students in learning
- 3d – Using assessment to inform instruction
- 3e – Demonstrating flexibility & responsiveness
- 3f – Impacting student growth
- 3g – Implementing lessons equitably
- 4a – Reflecting on teaching & student learning
- 4b – Managing student data
- 4c – Communicating with families
- 4d – Participating in a professional community
- 4e – Growing & developing professionally
- 4f – Showing professionalism

The District is now able to see the extent to which different groups of students are receiving highly effective instruction and identify gaps that need to be addressed. Since 2012-13, students have gained increased access to highly effective teaching in both math and ELA. However, the District's most high-need students are still less likely than their peers to receive highly effective instruction.⁴ This is particularly evident in math, where the gap in access to highly effective instruction has grown between 2012-13 and 2013-14.



⁴ A student is identified as receiving highly effective instruction if he/she has at least one teacher over the school year that performed at the Distinguished level.

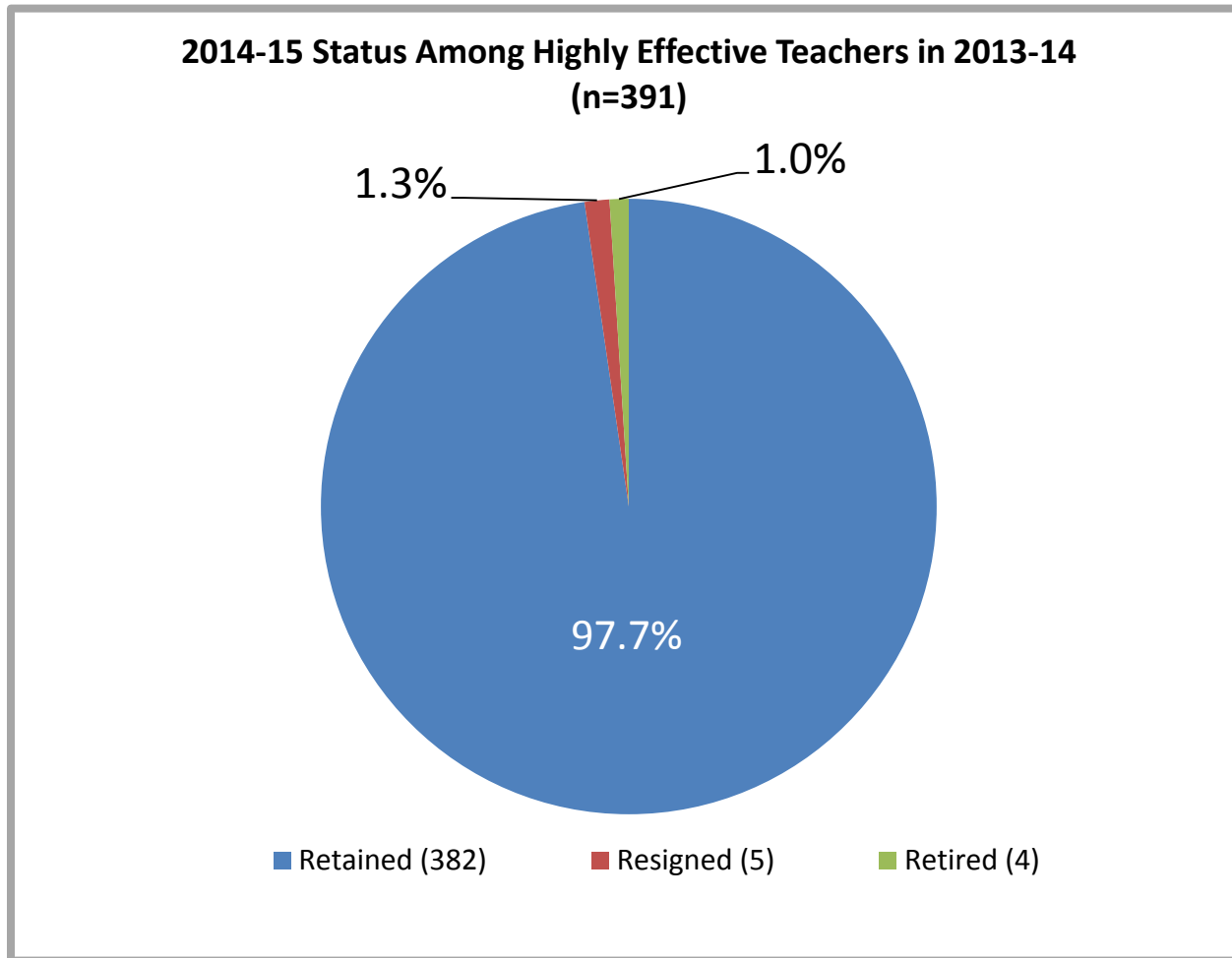
The District can also track patterns that it might not have been able to before, such as the movement across schools between teachers at the highest and lowest levels of performance. In the image below, lines that cross the vertical bars are teachers who have moved to different schools between 2012-13 and 2013-14.⁵ Teachers demonstrating practice at the Distinguished level in 2012-13 were much less likely to have transferred schools between 2012-13 and 2013-14 than their peers performing at the Failing and Needs Improvement levels.⁶



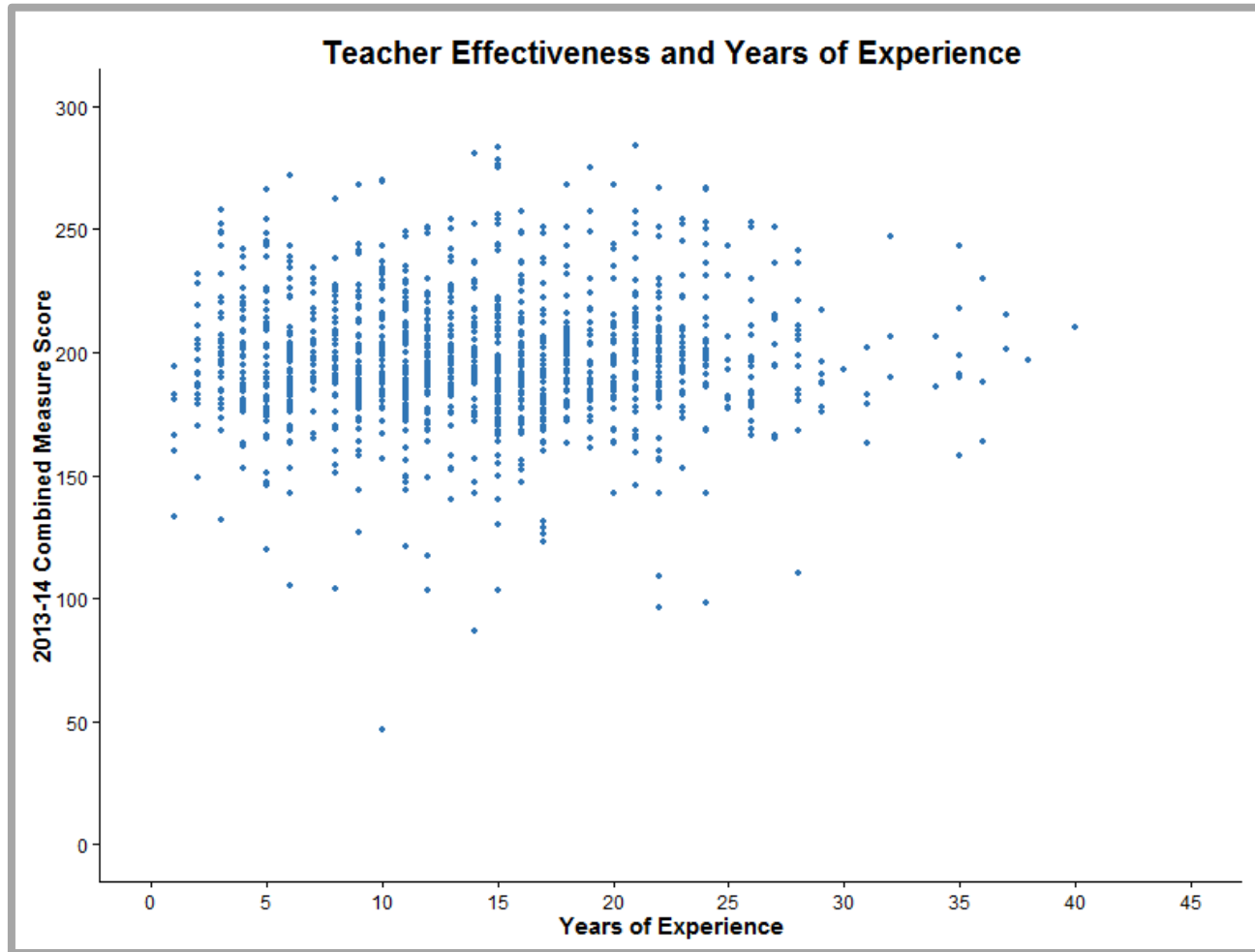
⁵ This chart was created using Parallel Sets. Kosara, Robert and Caroline Ziemkiewicz. (2003). Parallel Sets (Version 2.1) [Software]. Available at <https://eagereyes.org/parallel-sets>.

⁶ 64% of teachers performing at the Failing or Needs Improvement level who transferred schools between 2012-13 and 2013-14 was the result of being displaced from their original school, while 36% could have stayed in their original school but chose to transfer.

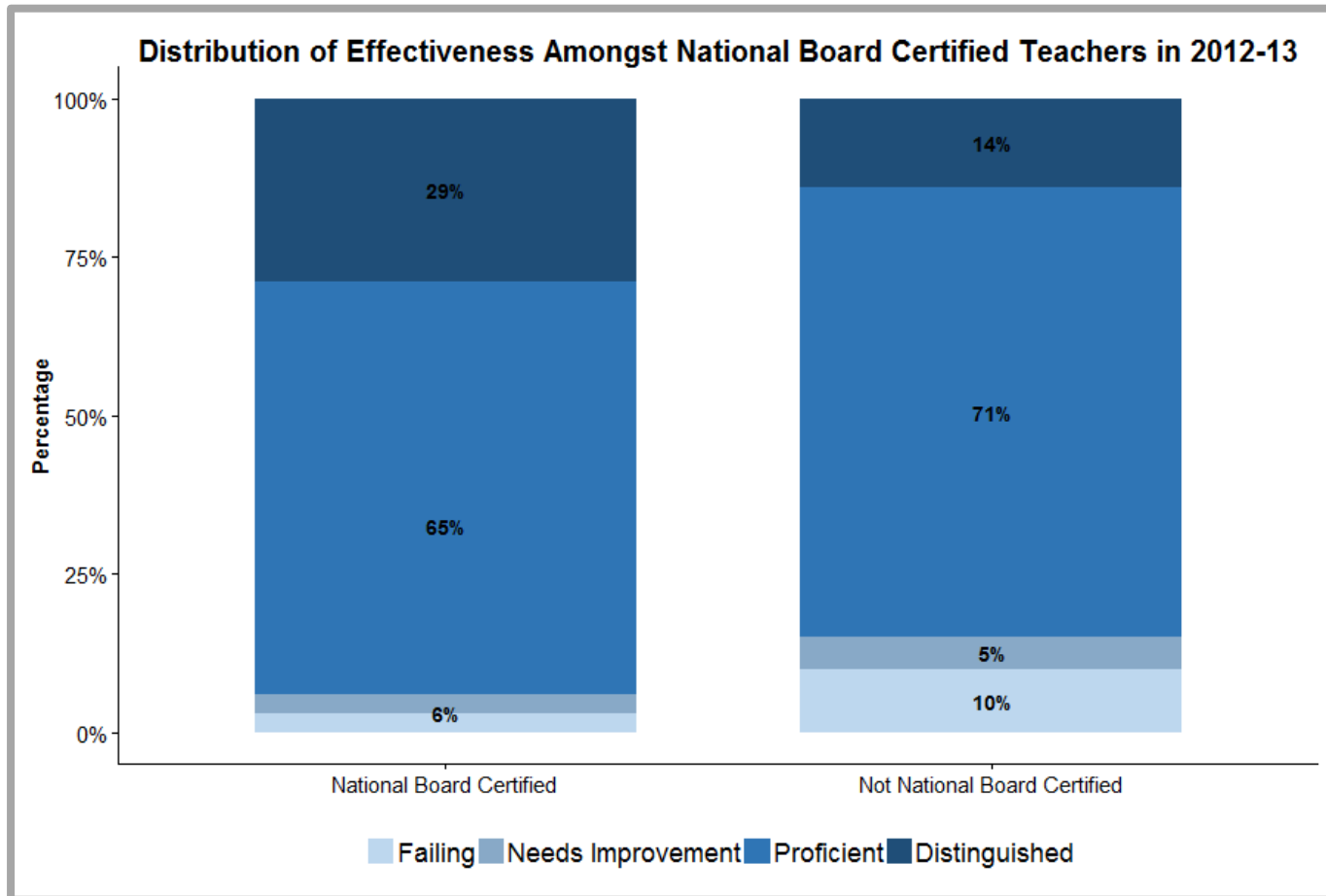
PPS is now able to monitor its success in retaining its most highly effective teachers. Between 2013-14 and 2014-15, the District retained nearly 98% of teachers who performed at the Distinguished level in 2013-14. Of the 391 teachers exhibiting performance at the Distinguished level last year, 382 continue to teach PPS students this school year.



The District can now also explore predictors of teacher effectiveness that can help it to further refine recruitment and selection processes. For example, the information suggests that there is little evidence to support the belief that the most effective teachers are the most experienced teachers. The chart below represents each teacher as a dot based on years of experience and performance in 2013-14, showing no relationship between teaching experience and effectiveness.



However, PPS has found that teachers who are certified through the National Board of Professional Teaching Standards generally perform at higher levels than their peers.⁷ Specifically, National Board Certified teachers are much more likely to perform at the Distinguished level and less likely to demonstrate practice at the Failing or Needs Improvement levels. This pattern has been consistent across years.



⁷ Currently, there are approximately 115 PPS teachers that are National Board Certified.