

# Variation in Mentoring Practices and Retention across New Teacher Demographic Characteristics under a Large Urban District's New Teacher Mentoring Program

A large urban school district wanted to understand how its first-year teacher mentoring program might better support the district goals of increasing retention and maintaining a diverse workforce. This study investigated new teachers' participation in that program; how participation varied across teacher characteristics, especially how participation varied by the racial/ethnic makeup of new teacher–mentor pairs; and how participation in various aspects of the program was related to new teacher retention after the first year. The study found that over 40 percent of new teachers spent at least 10 hours a month meeting with their mentor but that more than 25 percent spent less than half that much time in mentoring meetings. There were also large differences by race/ethnicity in the proportions of new teachers who reported spending time on specific topics: White new teachers were almost twice as likely as Black new teachers to report spending substantial time on classroom management. New teacher retention was related to the amount of time new teachers spent meeting with their mentor, to whether new teachers reported spending substantial time with their mentor addressing classroom management, and to the racial/ethnic alignment of new teacher–mentor pairs.

## Why this study?

High teacher turnover is detrimental to student achievement, particularly in schools with high proportions of students of color from low-income households.<sup>1</sup> Teacher induction and mentoring programs are increasingly promoted as an effective mechanism for improving new teacher quality, new teacher retention, and student outcomes. However, induction and mentoring programs vary considerably,<sup>2</sup> and questions remain about what aspects of mentoring programs are most closely related to improved teacher outcomes.

A large urban school district wanted to better understand how its New Teacher Mentoring (NTM) program might better support the district goals of increasing retention and maintaining a diverse workforce. The study district hires more than 300 new teachers a year.<sup>3</sup> However, consistent with national trends,<sup>4</sup> the district retains only 51 percent of novice teachers after five years.<sup>5</sup> The district can use the findings from the study to better understand

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2. Bullough, R. V. (2012). Mentoring and new teacher induction in the United States: A review and analysis of current practices. *Mentoring and Tutoring: Partnership in Learning*, 20(1), 57–74. <https://doi.org/10.1080/13611267.2012.645600>.
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4. Ingersoll, R. M., Merrill, E., Stuckey, D., & Collins, G. (2018). *Seven trends: The transformation of the teaching force*. CPRE Research Reports. Retrieved October 24, 2020, from [https://repository.upenn.edu/cpre\\_researchreports/108](https://repository.upenn.edu/cpre_researchreports/108).
5. Papay, J. P., West, M. R., Fullerton, J. B., & Kane, T. J. (2012). Does an urban teacher residency increase student achievement? Early evidence from [district blinded]. *Educational Evaluation and Policy Analysis*, 34(4), 413–434. <https://doi.org/10.3102/0162373712454328>.

how features of the NTM program, including mentoring dosage (the frequency and length of new teachers' meetings with their mentor), content, and the demographic alignment between new teachers and their mentor, contribute to retention and to inform modifications to the program's design.

## What was studied and how?

The study addressed three research questions:

1. How much mentoring, or what mentoring dosage, did the district's new teachers receive, and what content received substantial attention?
  - a. Did the amount of mentoring and the content that received substantial attention differ by new teachers' race/ethnicity or gender?
2. Did the race/ethnicity and gender of new teachers align with those of their mentor?
  - a. Did the amount of mentoring or the content that received substantial attention differ by the degree to which the race/ethnicity or gender of new teachers and their mentor aligned, and did the differences depend on the race/ethnicity or gender of the new teacher?
  - b. Are new teachers' perceptions of the effectiveness of mentoring related to their race/ethnicity or gender or the degree to which these characteristics aligned with those of their mentor?
3. What is the relationship between new teachers' retention in the district the following year and the mentoring features they received (amount of mentoring, mentoring content, and alignment between the race/ethnicity or gender of new teachers and their mentor)?

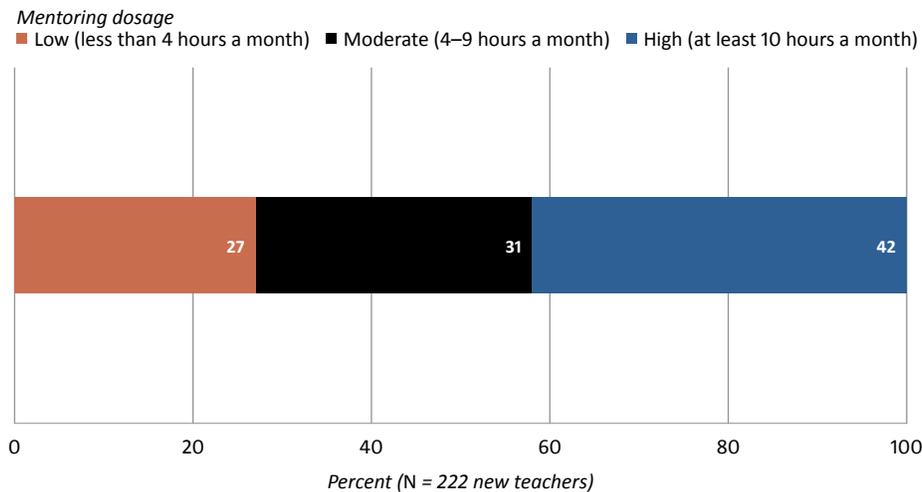
Data from paired 2019 new teacher surveys and mentor surveys conducted by the NTM program and 2018/19 and 2019/20 district demographic and workforce data were analyzed to address the research questions. The sample for the study consisted of 222 new teachers who completed the new teacher survey and 194 mentors who completed the mentor survey. The demographic and workforce data provided by the district included an indicator of one-year retention for all new teachers who completed the survey and for their mentors. The surveys asked new teachers and mentors about the activities they undertook as part of the program. Descriptive cross-tabulations, statistical tests, and regression analyses were used to explore program participation and the relationship between program features and retention.

The methods used in this study could not establish a causal relationship between specific mentoring features and new teacher retention. But the findings provide evidence about what mentoring experiences might be included in an early warning system to predict new teacher attrition. The findings also point to promising mentoring features that might be worthy of more rigorous impact evaluation.

## Findings

- **More than 40 percent of new teachers reported high dosages of meetings with their mentor.** About 42 percent of new teachers met with their mentor for at least 10 hours a month (high dosage), 31 percent met for 4–9 hours a month (moderate dosage), and 27 percent met for less than 4 hours a month (low dosage; figure 1)
- **New teachers reported spending substantial time with their mentor on topics directly related to delivering instruction.** Surveys asked new teachers how much time they spent with their mentor on a broad range

**Figure 1. More than 40 percent of new teachers received a high dosage of mentoring meetings, 2018/19**

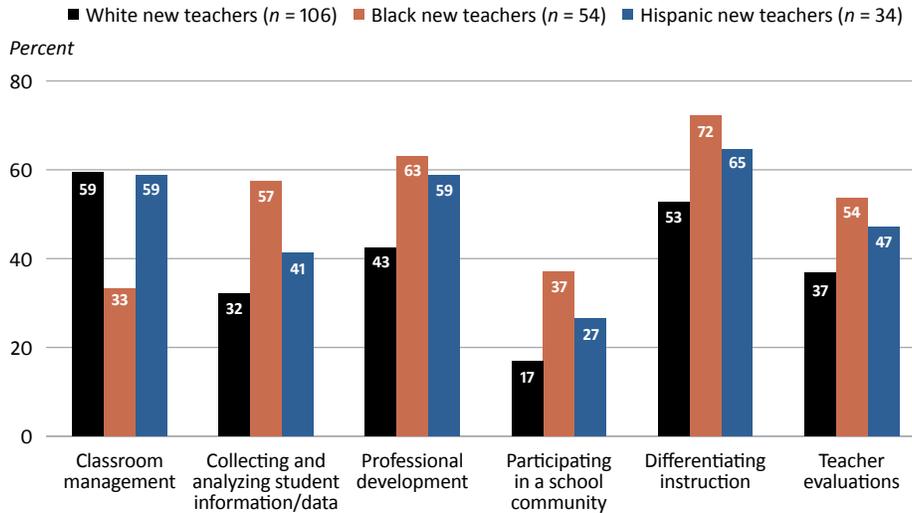


Source: Authors' analysis of data from the study district's 2019 New Teacher Mentoring program survey for new teachers.

of topics and activities. New teachers most frequently reported spending substantial time (quite a bit or a great deal/all of their time) on instructional strategies (69 percent), differentiating instruction (60 percent), and supporting students with disabilities (59 percent). Fewer new teachers reported spending substantial time on noninstructional topics such as family engagement (39 percent), maintaining accurate records (28 percent), participating in a school community (24 percent), and logistical issues (22 percent).

- **White new teachers reported spending substantial time with their mentor on classroom management more frequently than Black new teachers did.** Classroom management—which describes teachers' capacities to regulate students' behavior, maintain an orderly and respectful environment, and engage students in learning—was the second most common topic, after instructional strategies, that White new teachers reported spending substantial time on with their mentor. About 59 percent of White new teachers reported spending substantial time with their mentor on classroom management compared with only 33 percent of Black teachers (figure 2). This was the largest gap in the proportions of White and Black new teachers who reported spending substantial with their mentor on an instructional topic. There were negligible differences between racial/ethnic groups in the proportion of new teachers who reported spending substantial time on most other instructional topics. But Black new teachers reported spending substantial time with their mentor on professional development, collecting and analyzing student information/data, and teacher evaluations more frequently than White new teachers did.
- **About 46 percent of new teachers reported having a mentor of the same race/ethnicity, but this was driven largely by the prevalence of White new teachers with a White mentor.** Roughly 75 percent of White new teachers had a White mentor, but the rate of racial/ethnic alignment between new teachers and mentors was much lower for other racial/ethnic groups. Only 26 percent of Black teachers had a Black mentor, 21 percent of Hispanic teachers had a Hispanic mentor, and 10 percent of Asian teachers had an Asian mentor.
- **Mentoring dosage was positively and significantly related to new teacher retention after one year.** About 97 percent of new teachers in the moderate-dosage group and 94 percent of new teachers in the high-dosage group were retained in the district between the 2018/19 and 2019/20 school years compared with only 78 percent of new teachers in the low-dosage group. New teacher retention was significantly higher in the two higher dosage groups than in the low-dosage group, but the difference between the moderate- and high-dosage groups was negligible.

**Figure 2. The topics on which new teachers reported spending substantial time with their mentor varied by race, 2018/19**



Note: The analysis excluded Asian new teachers and seven new teachers with unspecified race/ethnicity. The figure displays only the six topics with a significant difference in the proportions of White and Black new teachers.

Source: Authors' analysis of data from the study district's 2019 New Teacher Mentoring program survey for new teachers.

- The one-year retention rate was lower among new teachers who reported spending substantial time with their mentor on classroom management than among new teachers who had not spent substantial time on this topic.** About 87 percent of new teachers who reported spending substantial time with their mentor on classroom management were retained in the district between the 2018/19 and 2019/20 school years compared with 96 percent of new teachers who did not report spending substantial time with their mentor on classroom management. The same pattern holds for teacher evaluations: the one-year retention rate among new teachers who reported spending substantial time with their mentor on the topic was 87 percent compared with 94 percent among new teachers who did not. Though some topics were related with retention, unmeasured factors might have contributed to a spurious relationship, so the findings do not provide evidence of a causal relationship.
- New teachers with a mentor of the same race/ethnicity were retained after one year at a higher rate than new teachers with a mentor of a different race/ethnicity, but the difference was driven by the high retention rate among White new teachers with a White mentor.** Roughly 91 percent of new teachers were retained in the district between the 2018/19 and the 2019/20 school years. This proportion was higher among new teachers with a mentor of the same race/ethnicity (94 percent) and lower among teachers with a mentor of a different race/ethnicity (88 percent). This pattern was driven by the high retention rate among White new teachers with a White mentor: 95 percent compared with 85 percent among White teachers with a mentor of a different race/ethnicity. There was no significant difference in retention rate between new teachers of color with a mentor of the same race/ethnicity and new teachers of color with a mentor of a different race/ethnicity.

## Implications

The study findings have implications for three aspects of the NTM program's efforts to reduce teacher turnover: content, dosage, and demographic alignment of new teacher–mentor pairs. While these relationships do not reflect casual relationships, they might help identify predictors of retention and point to features of the mentoring program that could be more rigorously evaluated.

The district that administers the NTM program could use the findings on the relationship between mentoring practices and retention to develop early indicators of new teacher attrition. A weekly or monthly time-use diary could be used to track the dosage of mentoring and the content discussed by new teachers and their mentor. Periodic review by the NTM mentors could employ an early-warning indicators approach to identifying teachers who appear to need additional support and to designing targeted intervention plans.

The findings also suggest that it might be useful for mentors to meet with new teachers for at least 4 hours a month to retain them. However, a more rigorous impact study is needed to confirm this conclusion because this study was unable to detect causal relationships. Future research could employ a more precise approach to document how time spent on mentoring activities is related to retention and other outcomes.

Future research could also pursue a deeper understanding of the ways in which teachers of different racial/ethnic backgrounds experience the NTM program. In-depth interviews with new teachers of different racial/ethnic backgrounds, different demographic alignment with mentors, and different retention statuses could shed light on the underlying factors that inform the divergent mentoring experiences of teachers of different racial/ethnic backgrounds.

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