



Early evidence of improved educator outcomes in Next Education Workforce™ models

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Concerns about the state of the teacher workforce are ever-increasing: the proportion of teachers who would recommend teaching continues to fall, as does interest in the profession among current students. Given these stark realities, many school systems are fundamentally redesigning teachers' roles in an attempt to make the job more attractive and sustainable, both to early-career teachers and seasoned veterans. These "strategic school staffing" solutions aim to improve both educator and student outcomes, based on convincing evidence that improved working conditions are critical both for teacher retention and for student success.

This brief details early outcomes for educators in one specific strategic school staffing initiative: Next Education Workforce™ (NEW) team-based models. NEW models overhaul the standard "one teacher, one classroom" approach, which requires one teacher to be all things to all of their students. Instead, teachers in NEW models share a roster of students with a team of other educators with complementary skills and expertise. These models allow increased collaboration between and support for teachers at all levels but may be particularly valuable for early-career educators, who often lack the structured support necessary to thrive in the classroom.

This brief contributes timely early-stage findings on Next Education Workforce team-based models as implemented in Mesa, Arizona. Neither schools nor teachers are randomly assigned to implement Next Education Workforce models, so any difference should not be interpreted as a causal impact of NEW. However, the findings are suggestive evidence of NEW's relationship to improved educator outcomes.

The evidence base thus far—on both strategic school staffing broadly and NEW specifically—is quite limited, as implementation is still in its relatively early stages.¹ The existing evidence on NEW is promising, but largely informal and internal. CRPE is partnering with NEW to develop a detailed research agenda and build a more rigorous evidence base. This research brief represents the first in a series of CRPE studies analyzing NEW's implementation and impact. Future studies will include additional years of data and an analysis of student-level outcomes.

¹ Opportunity Culture is another strategic school staffing initiative with a developing evidence base. For details, see https://www.opportunityculture.org/the-results/

Key Findings

This study identifies several significant differences between teamed and non-teamed teachers in Mesa Public Schools (MPS), suggesting that NEW models are associated with improved educator outcomes.

Compared to their peers in non-teamed classrooms, educators in NEW models:

- 1. Are more likely to remain at their school in the following year, and this difference is largest when looking specifically at early-career teachers.
- 2. Are more likely to plan to stay in the profession for five years.
- **3.** Are more likely to recommend teaching to a friend.
- **4.** Have higher evaluation ratings, even when controlling for ratings from the previous year.

With the exception of finding (1), all reported differences are statistically significant, even when accounting for differences in experience and demographics. While the evidence base on NEW is still preliminary, the results are promising and suggest NEW is working for educators, especially those earlier in their careers. Further, the relatively large differences in plans to stay in the profession likely <u>predict differences in retention in the coming years</u>.

THE NEXT EDUCATION WORKFORCE

The Next Education Workforce (NEW) is a strategic school staffing model that fundamentally shifts the traditional "egg-crate" model of schooling, where teachers are isolated in their classrooms and are individually expected to meet highly varied student needs. Teachers in NEW models, in contrast, work in a team of educators, drawing from complementary skills and expertise and sharing responsibility for one roster of students. This team-based approach should allow educators to differentiate roles and distribute responsibilities, easing the burden on each teacher and allowing for increased collaboration and support within the teaching team, according to the NEW Theory of Action (see Figure 1 on next page). By making teaching more supportive and sustainable, NEW could improve educator retention and satisfaction. Ideally, these redesigned learning environments would also improve student learning and lead to gains in student achievement, as well as at the broader school and systems level.

NEW models are currently operating in thirty school systems across thirteen states. Mesa Public Schools (MPS) was an early NEW partner and now has the widest implementation of the model. MPS began implementing teams in some schools and grades in 2020, and implementation has grown every year since. In the 2023-24 school year, half of the schools in MPS (41) have at least one team, though the total proportion of teamed educators is still less than 20%. In total, 646 of the roughly 3,500 MPS educators are currently working on one of 174 NEW teams (see Figure 2 on next page). The rapid expansion within MPS underscores the importance of understanding whether these models are related to actual improvements in outcomes.

Figure 1: Next Education Workforce Theory of Action

Next Education Workforce™ Theory of Action

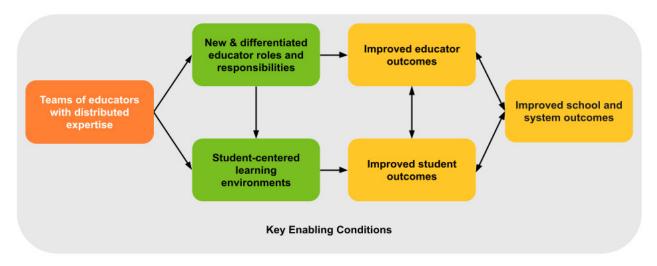
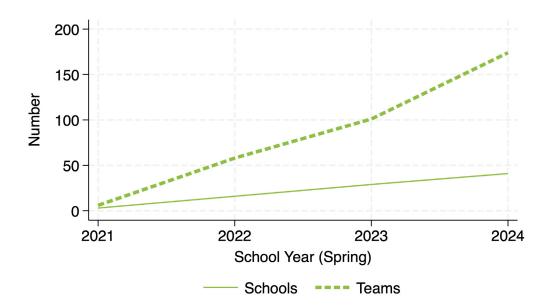


Figure 2: Number of implementing schools and teams in MPS by year



DATA & METHODS

This study draws from two different data sources for analysis: administrative educator-level data from MPS for the 2021-22 school year, which includes 2021-22 evaluation ratings and retention into the 2022-23 year, and data from a 2022-23 survey of all educators in MPS run by Johns Hopkins University. In the administrative data, the study sample limits to educators identified as working in classrooms and excludes substitute teachers. This parallels the survey sample, as the survey is distributed only to classroom teachers. The final sample in the administrative data includes 3,411 classroom teachers. Roughly 4% (138 teachers) are in NEW teambased models. The survey data includes 2,153 educators that began the survey, but only 1,701 respondents completed the survey. Any educators that responded to a question of interest are included in the sample, though the general findings remain the same when limiting the sample only to educators who are not missing any relevant responses.

This brief assesses the difference in outcomes between teachers in NEW models and non-teamed teachers using linear regression models with an indicator for whether an educator was on a NEW team. This brief presents these simple comparisons, as well as comparisons controlling for differences in teacher demographics (experience, race/ethnicity, and gender) and comparisons adding school fixed effects. School fixed effects allow for comparisons within schools; these can account for unobservable school-level differences such as principal leadership capabilities and school culture, which could be related to increased adoption of NEW models. NEW is not randomly assigned, so any differences should not be interpreted as a causal impact. Rather, these findings are suggestive evidence of NEW's relationship to educator outcomes.

Educators in Next Education Workforce models are different from their peers

Educators working in NEW models are quite different from their non-teamed colleagues. While both NEW and non-teamed educators in this sample are predominantly female, NEW teachers have an even stronger gender skew: 87% of NEW teachers are female, compared to 77% of non-teamed teachers (see Figure 3 on next page). NEW teachers are also less experienced than their non-teamed colleagues, on average: the median NEW teacher has seven years of experience, compared to eleven years for the median non-teamed teacher (see Figure 4 on next page). Both of these differences are statistically significant and underscore the importance of controlling for observable demographics, such as gender and experience level, when comparing outcomes across groups of teachers.²

² The racial makeup of NEW and non-teamed teachers is quite similar: 92.8% of NEW teachers and 92.6% of non-teamed teachers identify as white. Race/ethnicity controls are still included in models that include teacher demographics.

Selection into NEW can occur at different levels. Principals at different types of schools may choose to implement the program, and within schools, principals may invite a select subsample of teachers to participate. Interestingly, most of these differences between NEW and non-teamed teachers seem to be explained by differences in the types of schools or principals that opt into NEW. When looking within schools, differences between NEW and non-teamed teachers are much smaller and no longer statistically significant. Most of the variation can be explained by differences across schools, implying that selection of teachers within a school may be less of a concern.

Figure 3: Percent of non-teamed and NEW teamed educators identifying as female

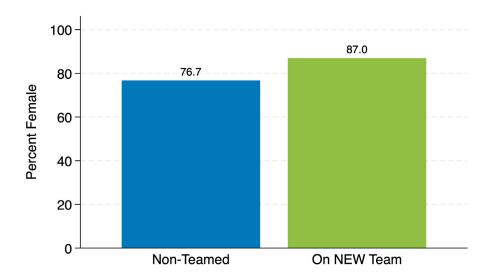
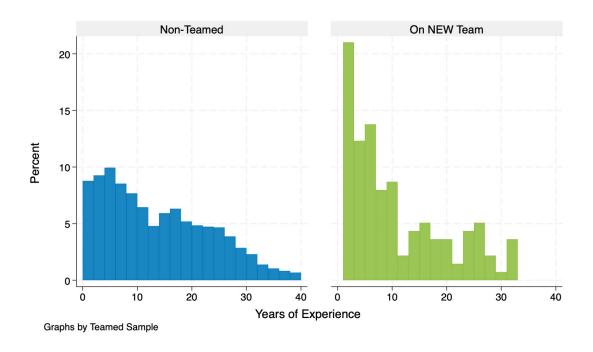


Figure 4: Distribution of years of experience for non-teamed and NEW teamed educators



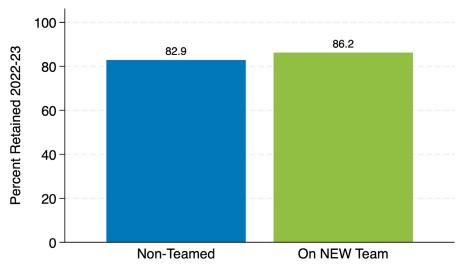
Educators in Next Education Workforce models are just as likely to remain in the profession

While retention is often considered a major workforce concern, it also has an impact on student learning. Previous research has demonstrated the strong negative relationship between teacher turnover and student achievement. In short, retaining teachers is an important first step to supporting student growth, so this analysis compares retention rates between NEW and non-teamed teachers.

Educators working in teams in 2021-22 were more likely to be teaching in the district in 2022-23 than their non-teamed peers. The differences in retention rates are small and not statistically significant, however. Using unadjusted differences in retention rates, NEW educators are about 3 percentage points more likely to remain in the district in the following year (see Figure 5). When including school fixed effects and controls for teacher experience and demographics, the difference is 5 percentage points—a relatively notable difference given overall retention rates, but not statistically distinguishable from zero in this data.

While teacher turnover rates are alarmingly high overall, a particular concern is that <u>early-career teachers are leaving at even higher rates</u> than their experienced peers. These differences are especially relevant here, since NEW educators are much less experienced than their non-teamed peers, on average. Indeed, analyses focusing on this subsample finds that early-career NEW teachers are nearly 13 percentage points more likely to stay teaching than early-career non-teamed teachers (see Figure 6 on next page).³ However, this difference is not statistically significant—unsurprisingly, given the small sample size of 474 teachers.

Figure 5: Percent of non-teamed and NEW teamed educators in 2021-22 still teaching in Mesa in 2022-23



³ Early-career educators are defined as educators in their first three years on the job. The differences remain roughly the same if early-career is defined as just rookie teachers or just teachers in their first two years of experience.

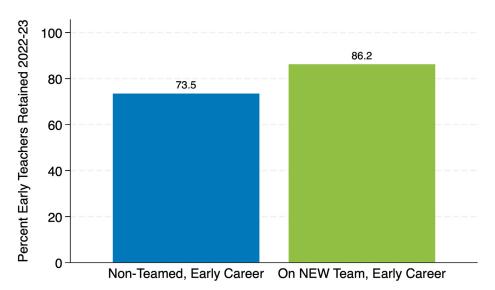


Figure 6: Percent of early career non-teamed and NEW teamed educators in 2021-22 still teaching in Mesa in 2022-23

Educators in Next Education Workforce models are more likely to plan to stay in the teaching profession and recommend teaching to a friend

NEW educators had roughly equal retention rates to non-teamed teachers, but could it be too early to see evidence of differences? A potential leading indicator of retention is whether an educator reports that they plan to remain in the profession. Indeed, previous research has demonstrated that <u>teachers' intention to leave the profession is significantly related to actually leaving</u>, though the effect is often delayed. Educators in Mesa were asked: "Given what you know now, what do you expect to be doing in your career five years from now?" Options included teaching, something else in education, working in a different field, retired, and not working.

As it turns out, educators in NEW models are significantly more likely than their non-teamed peers to plan to still be teaching in five years (see Figure 7 on next page).⁴ This difference could be due to life-stage priorities, however, as NEW teachers are also generally less experienced, and thus likely younger, than their non-teamed peers. Even when accounting for experience level and demographics, though, teamed teachers are still 9 percentage points more likely to plan to stay in teaching, and the difference remains significant and persists when including school fixed effects. If teachers' survey reports are to be believed, this provides suggestive evidence that NEW models could be associated with higher teacher retention in future years.

⁴ Less than 2% of the 2,048 respondents to this question chose "not working." For brevity, "not working" and "retired" are combined in this figure.

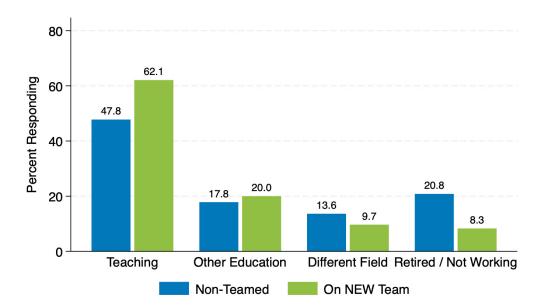


Figure 7: Percent of non-teamed and NEW teamed educators reporting career plans

Another survey question asks educators how likely they are to recommend teaching to a friend, family member, or acquaintance on a scale of 0 (not at all likely) to 10 (extremely likely).⁵ Teamed teachers have higher recommendation levels on average: the average teamed teacher has a 4.7, while the average non-teamed teacher has a 3.8 (see Figure 8 on next page). This difference is statistically significant, even when controlling for experience and demographics. When including school fixed effects, teamed teachers' responses are still higher on average, but the differences are no longer statistically significant.

While the significant differences are promising, recommendations are still quite low overall—a good reminder of the long road ahead, even when considering models designed to dramatically redesign the profession. Only 35% of teamed teachers would actively recommend teaching⁶—but a mere 22% of non-teamed teachers would do the same. That difference is again statistically significant, even when accounting for school fixed effects and differences in experience and demographics. Also of note, 21% of non-teamed teachers chose "not likely at all," or 0—the lowest score possible—while only 12% of teamed teachers chose this option.

⁵ The survey also allowed for responses of "can't rate" and "not sure," which are excluded from this analysis (less than 4% of respondents chose these options).

⁶ Actively recommending teaching is defined as choosing a 7 or higher.

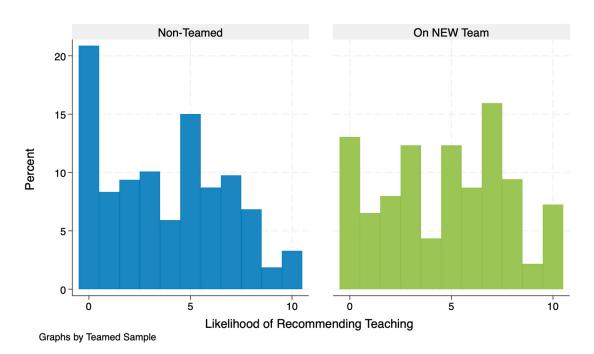


Figure 8: Distributions of non-teamed and NEW teamed educators' responses on recommending teaching

Educators in Next Education Workforce models receive higher evaluation ratings

Teacher retention is important, but the quality of retained teachers is at least as important as retention alone. While defining "teacher effectiveness" is a thorny issue—no one measure can fully capture the complexity and demands of teaching—teacher evaluation ratings are a meaningful proxy. Educators in Mesa are rated annually on a 4-point scale: Ineffective, Developing, Effective, or Highly Effective. Evaluation ratings are not perfect measures of performance, though, and are often considered to be inflated; in 2021-22, just three of 1,922 evaluated educators were rated as "Ineffective," while 67 were rated as "Developing."

Given that the great majority of educators in Mesa fall into the top two categories of "Effective" and "Highly Effective," this analysis regroups teachers into "Effective or Below" or "Highly Effective." The differences across groups are stark: educators in NEW models are 22 percentage points more likely to be rated as highly effective, and this difference is statistically significant (see Figure 9 on next page). These significant differences persist even when accounting for differences in experience and demographics.

When adding school fixed effects, teamed teachers still have significantly higher evaluation scores on average (teamed teachers are 14 percentage points more likely to be rated highly effective, and the average difference is roughly 0.15 points). These fixed-effect models compare the evaluation ratings of teamed and non-teamed teachers within the same school, thus accounting for any school-level differences in evaluation practices, such as principals' biases or differences in rating tendencies.

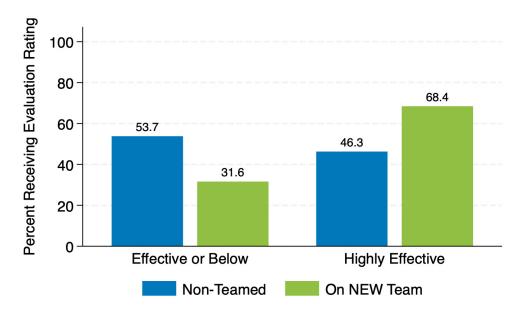


Figure 9: Percent of non-teamed and NEW teamed educators receiving evaluation ratings

Could these differences be explained by previous effectiveness? If principals were simply assigning their best teachers to teamed classrooms, then these analyses would find significant differences in evaluation scores, even if NEW does not change the learning environment for students. Two additional analyses assess this possibility. First, for early-career teachers in teamed and non-teamed classrooms, differences in average evaluation scores are insignificant. This suggests that any differences in the full sample are driven by later-career teachers. Second, analyses can incorporate controls for previous-year evaluation scores for the 75% of evaluated teachers that have ratings from the previous year. This sample does not include novices (as they have no previous experience) and excludes any teachers that were not in Mesa classrooms in the previous year. In this subsample, teamed teachers score significantly higher than non-teamed teachers, even when controlling for experience, demographics, and previous evaluation scores. However, the differences are no longer statistically significant when school fixed effects are included. These findings suggest that previous effectiveness alone is not driving these differences, though it could explain some portion of them. Indeed, the lack of within-school differences suggests that there may be notable differences in teacher growth across schools rather than within schools, and these differences may be related to NEW take-up.

There may be complicating factors, however. Observation rubrics are often structured for the traditional "one teacher, one classroom" model, and principals may struggle to adequately assess an individual teacher's performance in a teamed classroom as a result. Principals implementing NEW may also be particularly excited about the initiative and motivated to rate teamed teachers as highly effective, even if there are not real differences in effectiveness. Future studies should look at more holistic measures of effectiveness to account for these potential sources of bias.

Looking forward

This brief presents large and meaningful differences in reported career intentions, job satisfaction, and evaluation ratings between educators in NEW team-based models and their non-teamed peers in Mesa. While there may not be significant differences in retention rates between these groups, there is suggestive evidence of meaningful differences, especially among early-career teachers. Compared to non-teamed teachers, teamed teachers are significantly more likely to plan to be teaching in five years, are significantly more likely to recommend the teaching profession to others, and have significantly higher evaluation ratings. The survey responses suggest that differences in retention could be evident in the coming years: teamed teachers are currently just as likely to remain teaching as their non-teamed colleagues, but they are also much more likely to plan to stay in the profession and recommend it to a friend. The large differences in retention among early-career teachers are also suggestive of meaningful differences in the coming years.

But these educator outcomes are only the start. If implemented well, strategic school staffing initiatives could improve students' experiences so much that student learning itself is improved. This is certainly a key part of the Next Education Workforce theory of action: the initiative aims not just to fix teaching, but to improve student learning as well.

Future work from CRPE will delve deeper into the Next Education Workforce's comprehensive research agenda and explore more educator and student outcomes. As a first step, additional years of data will allow for a closer look at teacher retention after the initial years of implementation. CRPE is also planning quasi-experimental analyses to assess the causal impact of NEW on both educators and students, as well as a deeper study of the specific team- and school-level elements that are most strongly associated with positive outcomes.

The potential benefits of these staffing models are clear, but big questions on their effectiveness remain. As these models continue to scale, it is critical for rigorous research to focus on measures that have the potential to improve student learning.







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About the Center on Reinventing Public Education

The <u>Center on Reinventing Public Education</u> (CRPE) is a nonpartisan research organization at <u>Arizona State University's Mary Lou Fulton Teachers College</u>. We rigorously examine and test transformative ideas, using our research to inform action. We are truth tellers who combine forward-thinking ideas with empirical rigor. Since 1993, we have been untethered to any one ideology but unwavering in a core belief: public education is a goal—to prepare every child for citizenship, economic independence, and personal fulfillment—and not a particular set of institutions. From that foundation, we work to inform meaningful changes in policy and practice that will drive the public education system to meet the needs of every student.

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