Results from the Year Two Survey of Next Education Workforce Model Teachers September, 2023

Introduction

The Next Education Workforce model enables teams of teachers to collectively teach a larger group of students. One purpose of this strategy is to foster deeper student learning across both academic and non-academic outcomes. The Next Education Workforce model can also provide more support to educators, allowing teachers to specialize and develop expertise within their teams (ASU, 2021).

The Next Education Workforce model originated at the Mary Lou Fulton Teachers College at Arizona State University (ASU). ASU partnered with the Johns Hopkins Institute for Education Policy to conduct a teacher survey to better understand the thoughts and experiences of teachers who participate in the model, particularly in relation to teachers not on Next Education Workforce teams in their same school district.

The following report provides a description of the second year of the survey data collection, analyzes survey results, and compares them against the first year of the survey data when feasible. This report addresses the following objectives:

- Describe the survey measures (teachers' self-efficacy, job satisfaction, perceptions of teacher-student interaction, and career plans);
- Compare Next Education Workforce model teachers and teachers not on Next Education Workforce in terms of the survey measures.

Survey Objectives

This survey seeks to understand Next Education Workforce model participants and how their experiences compare with teachers not participating in the Next Education Workforce model in the Mesa Public Schools ("Mesa"). ASU identified the following teacher constructs as important aspects of the Next Education Workforce model teachers' experiences: teachers' self-efficacy, job satisfaction, commitment, and perceptions of teacher-student interaction. The Institute developed a survey to measure these constructs by identifying previously validated question sets for each construction. It is important to note that the survey was not developed for teacher evaluation, as evidence of performance, or in any other context in which teachers might be incentivized to adjust their answers for a more favorable outcome.

Methodology

Sample and Data Collection

The confidential survey was administered to Pre-K through 12th-grade teachers between March 20th and April 21st, 2023, by Mesa. Of the 3,602 teachers who received the survey, 2,078 teachers responded, for an overall response rate of 57.7%. Note that in 2022, the response rate was 69.2% (out of 3,264 teachers who received the survey) and the survey was anonymously administered by the Johns Hopkins Institute for Education Policy.

Responses with at least 50% of the questions answered were analyzed, (the same strategy as in 2022). Out of 2,078 responses, 87.3% (n=1,814) met this completion criteria and are included in the analysis. However, of the responses that met this inclusion criteria, only 1,768 completed any questions related to this report (e.g., questions regarding efficacy, satisfaction, etc.). As such, the final sample analyzed within this report is 1,768, or 85% of the initial sample. Note that there is a decrease in the number of respondents on questions located towards the end of the survey. For example, 70 respondents in the final sample answered no efficacy questions, which came at the end of the survey.

Of the 1,768 teachers in our final sample, 280, or 15.8%, responded that they were working within a team. However, ASU provided a different official determination as to whether a teacher was defined as a Next Education Workforce model team teacher: someone who both self-identified as part of a Next Education Workforce team and was also identified by their school as part of a Next Education Workforce team. Using the ASU Next Education Workforce model team definition, only 140 teachers (less than 8%) were identified as part of a team. For this analysis, we use the ASU definition for teaming because it provides the most conservative estimates of the Next Education Workforce model. However, the team estimates in this report should be interpreted with this caveat in mind.

Table 1 shows the demographic characteristics of the total sample, Next Education Workforce model participants, and teachers not on Next Education Workforce teams in Mesa, including gender, race/ethnicity, and education. For example, Next Education Workforce participants and teachers not on Next Education Workforce teams have similar demographic characteristics: the majority in both groups are female and white, and about half have a BA in Education.

Note that the total number of male Next Education Workforce teachers is much lower than reported in the prior year despite the overall larger analytic sample in 2023. This is one indication of the differences between the two survey samples, thus complicating comparisons between the first and second years of the survey. Similarly, the race and ethnicity reports differ between years one and two, with a less diverse Next Education Workforce sample in year two. Again, this is additional evidence of sample differences between the two years.

However, it is unclear if the differences between the two survey administrations are due to actual differences in the respondent sample or to the source of information. For example, in

year one of the survey administration, respondents self-reported their demographic information. However, in year two of the survey, all demographic characteristics were added to survey responses from Mesa administrative data.

Table 1 Demographic Characteristics for 2023 Survey Administration

Demographic Characteristics of Participants

	T	otal	NEW '	Teachers	Non-NEW Teachers	
	N	%	N	%	N	%
Gender						
Female	1,439	81.39	119	85.00	1,320	81.08
Male	329	18.61	21	15.00	308	18.92
Race						
Native American	15	0.85	0	0	15	0.92
Asian	30	1.70	4	2.86	26	1.60
Black/African American	27	1.53	0	0	27	1.66
White	1,655	93.61	132	94.29	1,526	93.55
Multi-racial	29	1.64	4	2.86	25	1.54
Pacific Islander	3	0.17	0	0	3	0.18
Missing	2	0.11	0	0	2	0.12
Undesignated	7	0.40	0	0	4	0.24
Ethnicity						
Hispanic/Latino	251	14.20	29	20.71	222	13.64
Non-Hispanic/Latino	1,517	85.80	111	79.29	1,406	86.36
Education						
BA in Education	864	48.87	77	55.0	787	48.34
University based post- BA program	212	11.99	8	5.71	204	12.53
Master's in education	494	27.94	43	30.71	451	27.70
Alternative program	46	2.60	5	3.57	41	27.70
Missing	70	3.96	6	4.29	64	3.93
Other	82	4.64	1	.071	81	4.98

In contrast to the first survey administration, the teaching characteristics of this year's survey respondents do not include teacher subjects, grades, or grade levels. As such, only teaching experience is presented in Table 2. We report both total teaching experience and Mesa teaching experience. Note that Mesa experience is defined as the current number of consecutive years the teacher has taught in the district. If a teacher teaches in Mesa, leaves, and then returns, their Mesa experience starts over. Mesa teachers are all experienced, with an average of 10 or more years teaching and six to nine years teaching in Mesa. However, Next Education

Workforce team teachers are less experienced than teachers not on Next Education Workforce teams.

Table 2 Teacher Experience

Teacher Experience Characteristics

	Total			NEW Teachers			Non-NEW Teachers		
	M	SD	Range	M	SD	Range	M	SD	Range
Experience						_			
Total Experience	14.33	10.14	0-53	10.36	9.26	1-38	14.66	10.14	0-53
Mesa Experience	8.94	8.43	0-41	6.35	6.64	1-32	9.16	8.53	0-41

Data Analysis & Limitations

The Next Education Workforce teacher survey includes existing validated constructs or sub-constructs, outlined below, which have previously been used in peer-reviewed, published research and used in the 2022 Next Education Workforce teacher survey administration. See the 2022 survey report for details on initial validation efforts for developing this portion of the survey.

This analysis examines the differences in responses between Next Education Workforce teachers and teachers not on Next Education Workforce teams across the following constructs: perceptions of teacher self-efficacy, teacher job satisfaction, teacher-student interaction, and career plans. When feasible, we also compare this year's responses to last year's. However, there are significant differences across the two survey administrations. For example, the overall survey content and length were expanded this year (many questions were added to the survey, and the new questions appeared at the beginning of the survey), the survey administration changed (Mesa administered the survey), the respondent sample (lower response rates to our questions), the definition of a team member (self-reported in 2022 versus reported by ASU in 2023) and differences in teacher characteristic data (self-reported in 2022 versus merged from ASU/Mesa administrative data in 2023). Therefore, any comparisons between the two years should be made with caution. We refrained from positioning the two years' results side-by-side to discourage misunderstanding between any differences in outcomes.

Survey Constructs

Teacher Self Efficacy

Prior research defines teacher self-efficacy as a measure of a teacher's judgment of their own ability to reach desired outcomes (Bandura, 1977). Tschannen-Moran and Hoy (2001) developed the teacher efficacy construct utilized in the Next Education Workforce teacher survey, and Nie et al. (2012) validated the construct, which asks teachers questions about how well they can perform various tasks within schools. For example, teachers were asked, "How

well can you respond to difficult questions from your students?" and "How well can you help your students value learning?"

Teacher Job Satisfaction

Job satisfaction is generally defined as having a positive reaction to the workplace (Worrell et al., 2006). Research suggests that positive relationships with colleagues, parents, and students are related to teacher satisfaction (Cano-Garcia et al., 2005; Gavish & Friedman, 2010; Skaalvik & Skaalvik, 2011). The Next Education Workforce teacher survey reflects these sources of teacher satisfaction as three sub-constructs: satisfaction with co-workers, satisfaction with students, and satisfaction with parents. These sub-constructs were validated with a large international sample, including the United States (Pepe, 2011; Pepe et al., 2017). For example, teachers were asked, "How satisfied are you with the following aspect of the school: The extent to which your co-workers encourage you and support you in your work," and "How satisfied with the following aspect of the school: The degrees of interest shown by parents in the education of their children."

Teacher-Student Interaction

Teacher-student interactions were measured as one construct through five questions focusing on interpersonal interactions. Brand et al. (2008) validated this scale as a part of a school climate survey for teachers with a sample of 234 teachers. For example, teachers are asked, "To what extent do you agree with the following statements: My students share their concerns with me," and "To what extent do you agree with the following statements: My students express their feelings."

These scales were also revalidated in our 2022 report.

Teachers Survey Responses

This section compares Next Education Workforce teachers and teachers not on Next Education Workforce teams across each survey construct in year two of the study. It discusses these findings in relation to the prior year's outcomes. The analysis shows a significant difference between Next Education Workforce teachers and teachers not in the model regarding self-efficacy and interactions with students. However, Next Education Workforce teachers did not have significantly higher job satisfaction. Despite no differences in job satisfaction, Next Education Workforce teachers were significantly more likely to recommend teaching and said they planned to continue teaching in five years.

The analysis includes independent sample t-tests to examine the differences between Next Education Workforce teams and teachers not on Next Education Workforce teams regarding teacher self-efficacy, job satisfaction, and teacher-student interaction.

Teacher Self-efficacy

Teachers were asked about their own perceived ability to reach desired outcomes. Table 3 shows a significant difference in teacher self-efficacy between Next Education Workforce team

teachers and teachers not on Next Education Workforce teams. Note that these differences appear across the entire construct, as well as within two of the three subscales (i.e., instructional strategies and motivation).

There was no observed difference between Next Education Workforce team teachers and teachers now on teams regarding self-efficacy in the prior survey administration. However, it is unclear if this is due to the changes in teachers' beliefs or differences in the respondent samples between the two years. Considering this year alone, it is worth noting that less experienced Next Education Workforce teachers appear to consider themselves as effective, if not significantly more effective, than more experienced teachers not on Next Education Workforce teams.

Table 3- Teacher Self-Efficacy

	NEW Teachers			Non-NEW Teachers			
	N	M	SD	N	M	SD	sig
Teacher self-efficacy	134	3.79	0.61	1,566	3.66	0.64	*
Instructional strategies	134	4.01	0.65	1,565	3.83	0.69	**
Motivation	134	3.42	0.80	1,561	3.28	0.82	*
Classroom management	134	3.93	0.69	1,563	3.87	0.75	

Note. *p<.05, **p<.01, ***p<.001.

Job Satisfaction

We next asked teachers about their level of job satisfaction as teachers. Table 4 shows no significant difference between Next Education Workforce teachers' responses and those of their colleagues for teacher job satisfaction generally. In addition, Next Education Workforce teachers also reported similar levels of satisfaction with their co-workers, parents, and students compared to teachers not on Next Education Workforce teams.

These results differ from last year's survey responses when Next Education Workforce teachers reported being significantly more satisfied at work than teachers not on Next Education Workforce teams. However, it is unclear if this difference is due to an actual decrease in satisfaction or to differences in the sample between the two years.

Table 4- Teacher Job Satisfaction

	NEW Teachers			Non-NEW Teachers			
	N	М	SD	N	М	SD	sig
Teacher job satisfaction	140	3.25	0.80	1,620	3.24	0.81	
Co-workers	140	4.29	0.86	1,620	4.14	0.94	
Students	140	2.61	1.10	1,620	2.65	1.11	
Parents	140	2.85	1.15	1,619	2.91	1.08	

Note. *p<.05, **p<.01, ***p<.001

Teacher-Student Interaction

Teachers also answered questions about the frequency and quality of their interactions with their students. Next Education Workforce teachers reported significantly better teacher-student interactions than teachers not on Next Education Workforce teams. These findings were consistent with the survey responses in 2022.

Table 5- Teacher-student interaction

	NEW Teachers		Non-NEW Teachers				
	N	M	SD	N	M	SD	sig.
Teacher-student interaction	139	4.17	0.60	1,613	3.92	0.68	***

Note. *p<.05, **p<.01, ***p<.001

Recommending Teaching and Career Plans

In addition to measuring teachers' perceptions about existing constructs, as described above, the survey asked teachers about their current experiences, including their career plans. This next section describes teachers' responses to these questions.

Survey respondents were asked if they would recommend teaching to a friend, family member, or acquaintance, as well as the rationale for their responses. When teachers were asked if they would recommend teaching on a 0–10-point Likert scale, average scores across both groups of teachers were relatively low, with an average score for Next Education Workforce team teachers of 4.72 compared to 3.75 for teachers not on Next Education Workforce teams. However, an independent sample t-test demonstrates a statistically significant difference (P<0.0003) between Next Education Workforce teachers and others in terms of recommending teaching as a career. Thus, responses suggest that Next Education Workforce teachers and other teachers have similarly low perspectives regarding recommending teaching in their schools. However, Next Education Workforce teachers are significantly more likely to recommend teaching to a friend, family member, or acquaintance.

Teachers were also asked about their future career plans. When asked about what their career plans were for five years from now, 62% of teachers on Next Education Workforce teams, compared with 48% of teachers not on Next Education Workforce teams, indicated teaching as their plan. Clearly, Next Education Workforce teachers this year were more likely to say that they intended to continue teaching, a considerable increase from the prior year, during which 49% of Next Education Workforce teachers said they planned to be teaching in 5 years (almost the same percentage as teachers not on Next Education Workforce teams in that year at 47%). Recall that it is difficult to distinguish if this is a real change from the prior year or just additional evidence of differences between the sample and the survey in the two years. Whatever the case, there is a significant difference between Next Education teachers and teachers not on Next Education Workforce teams in the distribution of 5-year career plan responses (p<.0002). Table 6 presents five-year career plans for Next Education Workforce teachers and teachers not on Next Education Workforce teams.

Table 6- 5-year Career Plans

	NEW Tea	achers	Non-NEW T	eachers
	f	%	f	%
Teaching	87	62.1	782	48.0
Something else in education	28	20.0	273	16.7
Working in a different field	13	9.3	221	13.6
Retired/ Not Working	11	7.8	325	20.0
Not working	1	0.7	24	1.4
Missing Data	0	0.0	1	0.0
Total	140	100.0	1,626	100.0

Discussion

This survey explores how Next Education Workforce team teachers compare to their district colleagues not on a Next Education Workforce team regarding teacher self-efficacy, job satisfaction, teacher-student interaction, and career plans.

Analysis of the survey responses provides evidence that Next Education Workforce team teachers and teachers not on Next Education Workforce teams have similar demographic characteristics and educational backgrounds. However, Next Education Workforce teachers are less experienced overall, suggesting differences between the two groups on at least one important observable characteristic.

Teachers' survey responses suggest that, despite their more modest experience, Next Education Workforce teachers reported higher self-efficacy than teachers not on Next Education Workforce teams. Next Education Workforce teachers also reported stronger self-efficacy in general, as well as in terms of instructional strategies and motivation. However, Next Education Workforce teachers did not have stronger self-efficacy for their classroom management skills. This finding differs from last year's survey responses, when Next Education Workforce teachers

reported comparable levels of self-efficacy across all measures of self-efficacy as their district colleagues not on Next Education Workforce teams.

In contrast, Next Education Workforce teachers reported comparable levels of job satisfaction as teachers not on Next Education Workforce teams. These results differ from last year's survey responses, which showed that Next Education Workforce teachers reported higher satisfaction levels than their Mesa colleagues.

Both survey administrations have provided consistent evidence that Next Education Workforce teachers report more positive interactions with their students. This is especially promising, as each Next Education Workforce teacher interacts with more students than teachers not on Next Education Workforce teams.

These survey responses suggest some promising evidence of change. Teachers report that their participation on a Next Education Workforce team translates into increased self-efficacy and stronger interactions with students. In addition, Next Education Workforce teachers are significantly more likely to recommend teaching and report intending to continue teaching in the next 5 years at higher rates. However, Next Education Workforce teachers do not report higher levels of job satisfaction in this new survey administration. It is unclear how to interpret these differences across years, given changes to the survey administration.

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