Teacher Preparation and The Next Education Workforce
White paper

A narrative of how a new teacher-preparation residency program piloted by Arizona State University’s Mary Lou Fulton Teachers College with two Arizona school districts addressed the workforce design problem at the heart of the teacher shortage.

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Principal investigator:
Nicole L. Thompson

Contributors:
Carole G. Basile
William Butler
Kattie Dolan
Teena Flesher
Paul Gediman
Edith S. Gummer
Brent Maddin
Robert Morse
Kelly Owen
Heather Villarruel
Introduction

In the 2018–19 academic year, Arizona State University’s Mary Lou Fulton Teachers College (MLFTC), which graduates over 750 teachers per year, partnered with two school districts facing severe teacher shortages to pilot a new teacher-preparation residency program. The pilot was designed to address a broad set of interconnected challenges faced by schools and teacher-prep programs.

The research that informs this white paper and its companion briefs consisted of 59 interviews with teacher candidates (Residents), mentor teachers (Lead Teachers), MLFTC faculty (Site Leads), district superintendents, school principals and district human resources professionals. Additionally, as is its practice, MLFTC faculty assessed Residents using the NIET Teacher Advancement Program (TAP) rubric, which identifies levels of teacher effectiveness during classroom observations and teacher evaluations.

This narrative outlines the reasons for the pilot, describes its objectives and its core features and summarizes the key learnings likely to drive the success of future iterations.

Companion implementation briefs provide further detail about elements of the pilot model, considerations for school systems and considerations for teacher-prep institutions.
Beyond teacher shortage: Understanding the workforce design challenge in P–12 education

NATIONAL CONTEXT

Too few people are entering the teaching profession, and too many are leaving early. Teacher preparation programs have long seen declining enrollment. Teachers switch careers or retire young.

An often-cited study shows that the U.S. is on track to prepare only two-thirds of the number of teachers it needs.

Projected teacher supply and demand

Source: “A Coming Crisis in Teaching,” a 2016 study by Leib Sutcher, Linda Darling-Hammond and Desiree Carver Thomas published by the Learning Policy Institute

Change in people enrolled in teacher preparation programs 2011–16.

Source: U.S. Department of Education
Additionally, too many of the teachers who are working are underprepared. In a March 2019 paper published by the Economic Policy Institute as part of its “The Perfect Storm in the Teacher Labor Market” series, Emma García and Elaine Weiss cite U.S. Department of Education data to illustrate following conditions in 2016:

- 9.4% of teachers had two years of experience or less
- 17.1% of teachers did not take a traditional route to teaching
- 22.4% of teachers had five years of experience or less
- 31.5% of teachers had no educational background in their subject of main assignment

They further report that all these numbers are more acute in high-poverty schools.

These are long-acknowledged and long-lamented problems. Their very persistence suggests that to continue to address the teacher shortage primarily as a labor supply problem is to profoundly misread the challenge.

A society that neither sustains a viable education workforce nor generates desired learning outcomes needs to redesign the profession, the workplace and how it prepares people for both.

Teacher-prep programs should embrace a mission that goes beyond credentialing graduates to go to work in a system that doesn’t retain or empower teachers and that doesn’t produce satisfactory or equitable learning outcomes. They should work with district partners to address the challenge not merely as a labor supply problem but as a workforce design problem.

That begins with confronting the realities of the jobs into which they are sending graduates and considering what those realities mean for teacher-preparation.

The prevalent one-classroom, one-teacher model asks teachers to be all things to all people at all times. It asks teachers to be content experts and pedagogues; to assess children’s socio-emotional and academic development and manage classrooms of 30 or more students; to teach children of all abilities; to be role models and social workers; to be data analysts, trauma interventionists and a host of other roles.

It’s an unreasonable expectation. It rests on the faulty assumption that all learners require the same thing from teachers and that, therefore, any teacher can adequately serve every learner. Research has significantly advanced the field’s understanding of how different instructional approaches, interventions and support can help different learners.

The one-teacher, one-classroom model is not only bad for learners. It’s bad for teachers and school systems. Teachers are afforded few degrees of agency. Rarely do they enjoy the rewards of adult collaboration and problem-solving that professionals in other fields experience. Career pathways are limited, with most avenues of advancement moving educators out of instructional roles and into administrative ones.
LOCAL CONTEXT

In line with national trends, MLFTC had seen declining undergraduate enrollment in teacher preparation programs in the years prior to the team-based residency pilot.

Historically, many MLFTC students had worked part-time and evening jobs, even when conducting full-time teaching residencies in their senior year, to pay tuition and living expenses.

MLFTC had been requiring teacher candidates in their senior year of early childhood and elementary education programs to conduct full-year teaching residencies using a 1:1 mentor model. There were several persistent challenges with that model.

It was difficult to find 750+ effective mentors each year.

It was difficult to ensure quality supervision for teacher candidates across hundreds of schools and dozens of districts.

Residents received inconsistent experiences in collaborative planning, learning assessment, parent communications and other facets of a full-time teacher’s job with which first-year teachers routinely struggle.

Each resident was exposed primarily only to one mentor and often saw a limited array of instructional methods and classroom management strategies.

The two districts that partnered with MLFTC on the teacher-prep pilot had longstanding relationships with the college. Both actively sought MLFTC seniors as residents and hoped to hire them as full-time certified teachers upon graduation. Strong relationships and a degree of trust existed between the districts and the college, and they had been operating together in a challenging environment for years.
The pilot program model: MLFTC Professional Pathways

The two districts and MLFTC developed team-based, paid professional residencies for senior-year students in selected bachelor’s degree programs.

Teams of two or three Residents worked under the supervision of a Lead Teacher, who was a certified teacher in the school. Additionally, MLFTC clinical faculty served as Site Leads who supported MLFTC students and liaised with district and school administrators and teachers.

While the traditional residency model at MLFTC featured a mentor running a classroom of 30 learners, assisted by a Resident, the pilot model was designed for teams of 3–4 adults to be responsible for 50–60 learners.

Previous MLFTC residency model

30 students

Mentor

Resident

Pilot MLFTC residency model

60 students

Lead Teacher

Resident

Resident

Resident

1 learning space (2 classrooms)

60 students with 4 adults
IMMEDIATE OBJECTIVES

**For schools**
Build teacher pipeline by filling immediate vacancies with Residents instead of substitutes or teachers hired under emergency certification.

**For Residents**
Relieve debt burden and reduce the need to work additional jobs.

**For MLFTC**
Retain students and eliminate the need to find more effective mentors than possible.

SYSTEMIC OBJECTIVES

- Develop alternatives to the one-teacher, one-classroom model.
- Expose Residents to more modes of instruction and models of teaching.
- Deliver more personal attention to improve learning outcomes.
- Expose learners to more supportive adults to improve socio-emotional learning.
- Develop leadership roles and advancement pathways for educators.

SCOPE

- District 1 had 16 students from MLFTC’s Special Education/Early Elementary Education dual certification program working in five schools serving learners in kindergarten through grade eight.
- District 2 had 35 students from MLFTC’s Elementary Education, Special Education, Bilingual Education, and Early Childhood Education programs working in six schools serving learners in kindergarten through grade eight.

CORE FEATURES

- **Paid Residents:** Residents applied for jobs through the districts’ existing hiring processes. Districts used funds they would otherwise have used to hire substitutes and emergency-certified teachers. They paid Residents approximately one-third (up to $12,000) of what they would have paid a first-year teacher, essentially securing three Residents for the price of one alternative FTE.

- **Lead Teachers:** District and school administration sought educators who had a combination of the following: strong teacher evaluations; grade-level and subject area experience; and experience as teacher-leaders, either among their peers or because they had previously mentored teacher candidates.

- **Site Lead:** MLFTC clinical faculty serving as Site Leads provided coaching and support to individual Residents, teams of Residents and, in many cases, to Lead Teachers, helping to balance the learning needs of Residents and the learning needs of P–8 students.

- **Instructional configurations:** Teams were empowered to determine their schedules, physical learning configurations and allocation of responsibilities in order to provide Residents with broader exposure to instructional modes and surround learners with more adults able to deliver personalized attention and instruction.
Key learnings

Based on a comprehensive series of interviews with superintendents, human resources administrators, principals, Lead Teachers, Residents and Site Leads, MLFTC views the pilot as a success that warrants introduction of the team-teaching residency model, in both paid and unpaid implementations, to additional districts.

In successful implementations of the team-based residency model, teams of educators were able to address the set of interconnected challenges that traditional residencies present to Residents, teachers, schools and learners.

In such cases, Residents expressed greater degrees of satisfaction with their experiences; school administrators regarded Residents as more prepared for first-year teaching positions than teacher candidates who had not participated in the pilot; and all observed gains in academic outcomes and socio-emotional development for learners. In the best cases, superintendents and principals observed significant professional growth among Lead Teachers.

"You’re required to go to all PDs and then anything prior to school, so we went to all the new teacher orientations, which I think was super beneficial. I learned a lot in my PDs and sitting with the Lead Teacher and asking questions during those PDs helped me professionally develop as a teacher." - Resident

"There are teachers who are not in this who are saying, “Wait. We like this. How can we get involved?” It’s a wonderful thing when you see others looking from afar, grasping that interest. It helps them grow professionally as well." - Superintendent

"The staff understood that Residents were student teaching, but I think that they really treated them as peers. They were here for every meeting we had, every professional development we had. They were staff members here." - Principal

"I was able to fill in more gaps for students that I wouldn’t have been able to had I had a whole class in front of just myself. I was able to really communicate and build better relationships with those students." - Resident

The experience varied among schools and among teams within schools. From the interviews, it’s possible to identify key characteristics of challenged teams and successful teams, as well as elements that need to be further refined and developed when introducing the model into additional schools and districts.
CHARACTERISTICS OF CHALLENGED TEAMS

A universal feature of teacher-prep programs that work with schools to provide clinical and professional experiences for teacher candidates is the steep learning curve Residents face as they transition from college coursework to working in schools. Balancing the professional learning goals of Residents with those of P–12 learners is a challenge that all teacher-prep programs and schools face together.

The pilot model introduced additional degrees of complexity that MLFTC, the partner districts, Residents, Lead Teachers and Site Leads had to navigate. The team-teaching model was new. It was ambitious. As one superintendent put it: "Stakeholders need to be flexible because there's gonna be some challenges.... How can we be creative? How can we live into the messy and be okay with messy? ... That high degree of collaboration needs to be there. If it's not, it's a siloed classroom, and you're in a box. We've seen that. We experienced that. It was not successful, and we don't use that site anymore right now until that shifts."

Some principals and Lead Teachers overvalued the vacancy-filling dimension of the pilot and undervalued the learning gains and professional development benefits the team model sought to generate.

Some Residents were asked to do too much too soon with too little support. Sometimes this appears to have been a function of teacher shortage. Sometimes it appears to have been a function of school personnel not balancing the Residents' roles as both paid employees and college students who are in fact pre-novices.

A minority of Lead Teachers conducted themselves in accordance with a traditional mentor model. In such cases, Residents received fewer of the model's intended benefits regarding the opportunity to team teach and deliver personalized instruction.

Some personal friction among Residents and between Residents and Lead Teachers inhibited teams. In such cases, they ended up conducting parallel teaching rather than collaborative co-teaching, or turn-taking without the intended role-definition and specialization.

In some cases, Residents and Lead Teachers felt they were told to be creative without being given clear teaming models and instructional configurations to try.

While some schools navigated uncertainty better than others, both districts committed to continuing the pilot model and expressed confidence that, having lived through the challenges of the first year, they had a better understanding of how to address them.
Characteristics of Successful Teams

Residents felt they were members of a professional community. In-service teachers viewed them as colleagues. They became embedded in school organization and culture, attending professional development events, staff meetings and other workplace functions. They also reported a greater sense of ownership and responsibility.

Residents were exposed to more facets of the job such as learner assessment, IEPs and parent conferences, as well as lesson planning and instruction for both large and small groups of learners.

Residents and Lead Teachers engaged in deeper forms of collaborative lesson planning based on individual learner data than they did under the previous residency model.

Resident teams practiced many forms of teaching such as whole-group instruction, small-group instruction, station teaching and more. Residents and Lead Teachers spoke positively of the creativity and enthusiasm they were able to generate among themselves and, consequently, among their learners.

Learners received more personal and small-group instruction tailored to individual learning needs. Residents and Lead Teachers reported seeing and measuring learning gains on student assessments, which they attributed to the ability of teams to provide deeper, personalized instruction.

Lead Teachers developed skills and practices characteristic of teacher-leaders such as coaching, role assignment and schedule management. Many reported acquiring a fuller understanding of leadership skills.

MLFTC Site Leads provided timely and effective support to help Residents and Lead Teachers plan and implement effective teaming configurations.

In the estimation of superintendents, principals, Lead Teachers and the Residents themselves, Residents emerged better-prepared than typical teacher-prep program graduates.

"We differentiated, we started out with three stations but eventually got down to six which were three instructional stations and then three independent stations. They were differentiated down to IEP goal and we would only have maybe two or three kids at a station at a time. It was really, really custom tailored to each student, and we had most of our kids meeting a lot of IEP goals by the end of the year. - Resident"

"This was the first time that I had a student teacher in meetings talking about student data and what they see from a student. - Principal"

"The most important aspect is the relationship between adults and children. Providing more opportunity for more adults to be more connected to children, it's a huge win. At the end of the year, [parents] came and found me and said, "This was the best thing that's ever happened for my child. I loved it. My child loved it. He or she had more contact time with adults here. She had more connection." - Superintendent"

"Learners developed meaningful relationships with more adults and were not dependent on having a good-fit relationship with only one educator."

"Lead Teachers developed skills and practices characteristic of teacher-leaders such as coaching, role assignment and schedule management. Many reported acquiring a fuller understanding of leadership skills."

"In the estimation of superintendents, principals, Lead Teachers and the Residents themselves, Residents emerged better-prepared than typical teacher-prep program graduates."

"I feel like this model absolutely gives them this bigger picture of what it truly is to be a teacher. All those things you don't learn sitting in a classroom. You don't learn how to sit in an IEP and give recommendations. They absolutely experienced that last year. That was the first time I had seen that with student teachers. - Principal"
ELEMENTS FOR FURTHER REFINEMENT AND CLARIFICATION

- Clear, common understanding among all stakeholders of the purposes of the model and the consequent expectations of participants.

- Common understanding that paid Residents are both employees of a district and full-time college students. Teacher-prep programs and schools need to work hard to balance the needs of college students, P–8 students and Lead Teachers.

- Clarity of definition of effective team practices: collaborative lesson planning, collaborative instruction, how specific team configurations can address specific learning objectives.

- How can teacher-prep institutions and schools work together to define and measure success not only by individual Resident development but also by the degree to which effective teams of educators develop?

- Teacher-prep programs should intentionally design early-college curriculum and junior-year internships to prepare students for all aspects of a team-based residency.

- Lead Teachers need intentional preparation to succeed in the team model. Issues that should be addressed in preparation include: managing team dynamics; how to gradually release their own authority and increase Resident responsibilities; effective team-teaching methods and how to coach them.

Further discussion is needed among teacher-prep institutions and districts about how to balance the purposes of paying residents and teaming them. These objectives can be complementary, but they are not identical. It’s important that addressing the immediate problem of filling vacancies not be allowed to undermine the systemic objectives of creating professional advancement pathways for educators and delivering better learning outcomes through teaming.
The Next Education Workforce: Teaming beyond teacher prep

Both MLFTC and the partner districts concluded that the team-teaching model has the potential to improve P–12 learning outcomes and to open up meaningful advancement pathways for educators.

Many other school districts agreed.

In the 2019–20 academic year, 14 districts, including the two that participated in the pilot, implemented team-based residency models. Some residencies were paid; some were unpaid. In Fall 2019, 224 Residents were paid, and 132 were unpaid. In all cases, Site Leads, Lead Teachers and school administrators attended a weeklong summer institute facilitated by MLFTC designed to address the readiness challenges clarified by the pilot.

The team-based residency model has implications that extend beyond teacher preparation. MLFTC is working with a number of districts to develop team models that integrate Residents not only with Lead Teachers but also with other certified teachers. This approach follows from the insight that the fundamental challenge facing the education system is not merely one of labor supply but of workforce design.

MLFTC’s vision for the Next Education Workforce draws on lessons learned from the team-based residency pilot to work with schools and other partners to:

1. **Provide all students with deeper and personalized learning** by building teams of educators with distributed expertise

2. **Empower educators** by developing new opportunities for role-based specialization and advancement

The initial work prioritized developing teams of educators with distributed expertise. MLFTC is now focusing on building systems and structures so that schools can better deepen and personalize instruction for all learners.

To that end, MLFTC is working with some of its partners to add another element to teams in addition to certified teachers and Residents. Communities are rich in experienced adults who have knowledge and expertise but may lack the instructional skills of career teachers. Learners will benefit if schools can integrate them into learning environments and prepare them for specific roles.

To achieve the vision of the Next Education Workforce, MLFTC and its partners seek to unpack all the tasks the system currently and untenably demands of individual teachers and to distribute those tasks, sustainably, among specialists deployed in teams. Teams would be made up of full-time teachers and Residents, part-time or rotating specialists and part-time community educators.
A CONTINUUM OF EDUCATORS SURROUNDING LEARNERS

Wraparound support
Content and instructional support
Community educators

Socio-emotional supports
Academic supports
Mentoring
Connections to the "real world"

Teaching assistants
Content and instructional support
New teachers
Experienced teachers
Specialized teachers

Assessment
Some instruction
Tutoring
Facilitation of digital learning

Assessment
Assessment analysis
Long-term planning
Small-group instruction
Instructional intervention and modeling

Assessment
Long-term planning
Small-and large-group instruction
Institutional intervention and modelling

Assessment and trend analysis
Long-term

Roles of the experienced teachers
Strategic deployment of educators
Team dynamics

Specialized teachers

An adaptable model:
Specific roles and responsibilities can and should vary among learning environments

A sample configuration of a Next Education Workforce team

90 learners
What adult expertise do they need?

Lead Teacher
Resident
Socio-emotional support
Math
Special Educator
ELA
Content Tutor
Resident
Social Studies

Teacher Preparation and The Next Education Workforce
The team-based residency pilot generated enough progress that MLFTC continues to work with partner districts to prove and refine the concept of Next Education Workforce models.

This ongoing work includes:

- Exploring how Next Education Workforce models can be financially sustainable.
- Convening a professional network of educators and education leaders committed to refining and implementing Next Education Workforce models.
- Publishing the first in a series of Next Education Workforce resources that address issues of readiness, school profiles, as well as core elements such as teaming, deeper and personalized learning, role-specialization and advancement pathways for educators. These resources will be free and publicly accessible.
- Developing a rigorous research and assessment agenda.

The team-based residency pilot conducted in the 2018–19 academic year suggests that university teacher-prep programs can and should recalibrate how teacher-prep programs feed into the education workforce.

They can leverage their market position. There is great demand for teacher candidates as interns and residents and for graduates as certified teachers.

They can leverage their intellectual capacity. University researchers can clarify, test and improve how we measure learning outcomes and professional development outcomes, as well as how we more holistically assess learning and professional environments.

They can leverage their convening power. Few other institutions are as well-positioned to bring practitioners, researchers, policymakers, nonprofits, community organizations, business organizations and others together.

Colleges of education have considerable leverage with which to bring people and ideas together to increase the capabilities of individual educators and the performance of education systems.