

New Mexico Teacher Residencies (NM Residencies)

An Application for Federal Support through the Education Innovation Research Program

Submitted by the New Mexico Public Education Department (NMPED)

July 2023

Table of Contents

TABLE OF CONTENTS	2
A. SIGNIFICANCE.....	1
ABSOLUTE PRIORITY 1: DEMONSTRATES A RATIONALE.....	2
ABSOLUTE PRIORITY 5: EDUCATOR RECRUITMENT AND RETENTION.....	2
COMPETITIVE PREFERENCE PRIORITY: IMPLEMENTERS AND PARTNERS	5
B. STRATEGY TO SCALE	5
B.1 STRATEGIES TO ADDRESS BARRIERS.....	6
B.2 MANAGEMENT PLAN	9
B.3 CAPACITY TO SCALE	11
B.4 MECHANISMS FOR DISSEMINATION.....	13
B.5 UTILITY OF PRODUCTS	14
C. QUALITY OF THE PROJECT DESIGN	16
C.1 CONCEPTUAL FRAMEWORK	16
C.2 GOALS, OBJECTIVES, AND OUTCOMES	18
C.3 ADDRESSING THE NEEDS OF THE TARGET POPULATION	21
NOTES	30

A. Significance

The State of New Mexico's Public Education Department (NMPED) is pleased to submit this mid-phase application for the New Mexico Teacher Residencies (**NM Residencies**) project. The project addresses three priorities of the 2023 Educational Innovation and Research (EIR) competition: Absolute Priority 1: Demonstrates a Rationale, Absolute Priority 5: Field-Initiated Innovations—Promoting Equity in Student Access to Educational Resources and Opportunities: Educator Recruitment and Retention, and the Competitive Preference Priority: Promoting Equity in Student Access to Educational Resources and Opportunities: Implementers and Partners.

New Mexico recognizes that financial barriers to quality teacher preparation hinder the state's educational equity goals. Quality teachers matter for all students, but, too often, our schools lack equitable access to a stable pool of strong teachers. In historically underserved communities, teachers are more likely to be in their first years of teaching and to leave the profession quickly; they are more likely to be hired from fast-track programs before they are fully certified; and they are more likely to come from backgrounds that do not reflect the students they serve. Lack of experience, under-preparedness, and lack of cultural and linguistic match with students all hamper educational development achievement.¹ Conversely, better prepared, more experienced teachers are more successful at improving both learning and behavioral outcomes for children, and outcomes improve for all students when the teaching force includes individuals from a variety of backgrounds.²

To help address teacher workforce challenges, in 2022 the State passed a bill to support yearlong residencies, providing \$35,000 per resident, \$50,000 per program, and \$5,000 each for mentors and principals. With its investment, the State intends to grow residencies to reduce staff turnover, eliminate shortages, increase teacher diversity, improve student outcomes during and after residents' clinical placements, and reduce educational inequities across the state, including documented equity gaps in access to qualified educators that the *Yazzie/Martinez v. New Mexico* decision established.³ The NMPED is charged with implementing the teacher residency initiative and has embraced an active role in transforming the teacher preparation ecosystem into funded

residencies across the state that partner deeply with schools not only to address recruitment and retention needs but also to strengthen outcomes for students and to bring much-needed supports to current teachers (App. J1: Implementation sites). During the 2022-23 academic year, about 260 new residents—nearly half the documented vacancies in the state—were prepared; roughly 300 are slated to be prepared in the 2023-24 academic year. This proposal will further strengthen the existing statewide residency efforts, allowing NMPED to refine and expand the evidence-based approach in use across widely varying cultural and geographic contexts.

Three goals guide the project’s design and evaluation: 1) Strengthen recruitment and selection processes across preparation programs to attract, prepare, and retain a strong teaching force that reflects the state’s student population; 2) Reduce variability of implementation across different residency program types and localities to ensure equitable access to well-prepared teachers; and 3) Create sustainable funding streams with competitive wages so paid residencies can grow and become the norm in New Mexico.

[Absolute Priority 1: Demonstrates a Rationale](#)

NM Residencies builds upon research-based strategies shown to be highly effective in recruiting and preparing teachers who positively impact student outcomes in high-needs schools. A What Works Clearinghouse (WWC) Intervention Report summarizing findings across high-quality evaluations of Teach for America (TFA) that meet WWC Procedures and Standards Handbook Version 3.0 found strong evidence that TFA teachers have positive effects on student math achievement—an outcome that would support New Mexico’s need to strengthen math outcomes—and potentially positive effects in science.⁴ **NM Residencies** uses the three critical components in the TFA model: selective admissions, intensive pre-service training, and intentional placement and induction supports. As such, the project evidences the rationale for a mid-phase project, as required by the proposal guidance.

[Absolute Priority 5: Educator Recruitment and Retention](#)

NM Residencies enhances this evidence-based approach with two additional innovative

project components, both with rigorous research findings suggesting they are likely to improve student outcomes in both the short- and long-term. The first is year-long teacher residencies, a promising preparation model that provides rigorous pre-service professional learning opportunities to teacher candidates resulting in full certification before becoming teachers of record.⁵ Teachers, like other professionals, must master a complex interplay between disciplinary knowledge and the application of knowledge to nuanced situations, no two of which are precisely the same.⁶ Paid, supervised work requirements from 1500 hours to several years are part of certification for architects, civil engineers, hairdressers, and pharmacists before they can be licensed to practice independently.⁷ Historically, teaching has not followed that standard, allowing for on-the-job training when unpaid preparation programs models did not graduate the teachers districts needed. Paid residencies improve upon the historic practice of student teaching and provide an alternative to fast-track programs, giving aspiring teachers a supervised context and ample time to apply academic learning in the classroom before being entrusted to teach.

Evaluations of teacher residencies in recent years offer promising evidence of positive impacts, in particular around teacher retention in historically underserved schools, where turnover negatively impacts student outcomes.⁸ Studies of individual programs' retention rates range from 80% to 95% after three years, and from 70% to 80% after 5 years, compared to 50% or lower on average across high-need schools.⁹ A rigorous analysis of federal Teacher Quality Partnership grantees' residency programs has also found a statistically significant positive difference in residency graduates' retention rates.¹⁰ Retention matters because high-needs students are more likely to be taught by a revolving door of novice teachers. Since first-year teachers have less positive impacts on student outcomes compared to experienced teachers, preparing new teachers through pathways that increase retention will help address the persistent achievement challenges in high-needs schools.¹¹ Finally, since paid residencies are twice as likely to attract candidates from historically underrepresented backgrounds compared to other pathways, benefits accrue to high-needs students who will receive instruction from a stable workforce that is more representative of their own backgrounds.¹² Promising evidence also

shows that residency graduates are more effective than other first year teachers.¹³ Scores on graduation exams have been stronger in residency graduates' classes;¹⁴ residency graduates' students have outperformed other first year teachers' students on most statewide exams;¹⁵ achievement in most subjects for first year residency graduates' students have exceeded other novice teachers' scores, and, in STEM fields, while lagging in early years, quickly surpass veteran teachers' scores.¹⁶ **NM Residencies** will bring 1,800 residency-prepared teachers into the state.

The second additional innovative evidence-based approach **NM Residencies** uses is pre-service co-teaching. Teacher preparation programs can exhibit a wide range of clinical practice approaches, such as “gradual release” that begins with observation then incrementally allows candidates to take on more responsibility; “immersion,” where the class is led entirely by the candidate who then receives feedback; or “modeling,” where candidates watch, practice, and then replicate lessons. To our knowledge, evidence on the benefits of these clinical practice models does not yet exist. **NM Residencies**, by contrast, uses a promising instructional model that has a research base: Co-teaching. Co-teaching was initially developed to ensure special education students in inclusive settings have the supports they need to succeed. In addition to centering special education principles, co-teaching codified a set of instructional models for use when two certified teachers—one in special education and one in general education—collaborate in an inclusive classroom.¹⁷ Recently, a longitudinal analysis of special education co-teaching using fixed effects models and with a decade’s worth of administrative data in Massachusetts found significant positive impacts of co-teaching for both regular education and special education students.¹⁸ Co-teaching instructional models have also been used in pre-service settings. A rigorous evaluation of the impact of co-teaching on achievement outcomes during student teaching placements at a large regional university found that pre-service co-teaching models resulted in statistically significantly higher test scores compared to both regular student teaching placements and scores in classrooms with no student teacher at all. What’s more, scores improved for nearly every subgroup in every grade and every tested subject.¹⁹

Competitive Preference Priority: Implementers and Partners

Eight institutions of higher education (IHEs) are currently partnered with NMPED to implement this proposal, all of which are Minority Serving Institutions. Six institutions—Eastern New Mexico University, New Mexico Highlands University, New Mexico State University, Northern New Mexico College, The University of New Mexico, and Western New Mexico University—are Hispanic Serving Institutions (HSIs). Two IHEs are community colleges: Central New Mexico Community College (CNM) is an HSI, and San Juan College is a Native American Serving Non-Tribal Institution (NASNTI). In addition, the University of New Mexico is expanding teacher education to its Gallup campus, which is a NASNTI. New Mexico does not currently have a Tribal College or University (TCU) with an approved teacher preparation program, but NMPED is working with Diné College, a TCU, to explore how to bring their Arizona-approved program into New Mexico so they can join **NM Residencies**.

Engagement with these institutions to better serve underserved and high-needs students has been central to **NM Residencies**' pilot efforts. Overall, the initiative has increased both the numbers and percentages of aspiring teachers who reflect the demographics of the state's underserved P-12 populations. As the *Yazzie/Martinez v. NM* case found, the State's educational system has systematically underserved students from Indigenous and Hispanic/Latinx backgrounds, in addition to students with disabilities and students from low-income backgrounds. The ruling specifically identified the need to increase teachers who reflect the multicultural and multilingual backgrounds of the students they will serve.²⁰ Accordingly, **NM Residencies** focuses on recruiting, selecting, intensively preparing, and placing and supporting aspiring teachers who hail from local communities and are well prepared to best support their students, thus disrupting historic inequities. Additional financial incentives support these recruitment goals. The kinds of efforts that the participating MSIs have committed to as part of **NM Residencies** will change the face of P-12 education in New Mexico to the benefit of all.

B. Strategy to Scale

The State of New Mexico believes every aspiring teacher—and every student in New

Mexico—will benefit from a statewide system of teacher preparation that requires and supports paid residencies. This mid-phase EIR project proposal will provide the opportunity to extend the reach of residencies across geographies, demographics, and licensure areas and to gather evaluation data to help refine existing models, assess the impact of the initiative, and scale.

B.1 Strategies to Address Barriers

NM Residencies is the result of several years of New Mexico residency pilots. These efforts consistently surfaced three barriers that prevent the growth of high-quality residencies: 1) Programs, given typical recruitment efforts, are unable to attract enough qualified candidates who reflect students’ multilingual, multicultural backgrounds and/or who want to teach in high-needs schools; 2) Programs, which are largely based on existing preparation models, exhibit wide variation in their implementation, compromising the consistency of program quality; and 3) Residencies do not have sustainable funding streams that both address aspiring teachers’ financial barriers and allow programs to scale. **NM Residencies’** three goals and associated milestones and objectives are designed to address these barriers, and, where needed, to adjust course and refine approaches so that the state’s goal of scaling the work can succeed. Specific activities under each of the goals generally occur through direct technical assistance to local partnerships, in-person statewide community of practice meetings, and virtual focused learning and consultancies (See Appx J.2 for details on Goals and Strategies).

Goal 1. Strengthen recruitment and selection processes across preparation programs to attract, prepare, and retain a strong teaching force that reflects the state’s student population.

While financial barriers, addressed under Goal 3, are the biggest obstacle for achieving a well-prepared teacher workforce that includes teachers from traditionally underrepresented backgrounds, funding is not the only barrier. Teacher preparation generally has used passive recruitment approaches such as flyer postings and advertising at college fairs, which favor those historically more engaged in the higher education system, resulting in a teacher pool that does not reflect most PK-12 students’ economic, cultural, and linguistic backgrounds. In addition, in

the past few years, these approaches have struggled to enroll enough candidates to meet hiring and program enrollment needs.²¹ The **NM Residencies** approach, developed from a field-initiated effort that increased enrollment of candidates who reflect the multicultural, multilingual backgrounds of the students they serve, uses intentional partnerships with schools and districts with large proportions of historically underrepresented populations. The partnerships co-design recruitment and selection processes that use Grow-Your-Own approaches to identify current classified staff for resident candidacy;²² in addition, they design outreach approaches to local community members and career changers from other fields, such as healthcare, to enroll a highly promising local pool of teacher candidates. As an example of the impact of this approach, CNM's partnership design led to a near doubling of the number of applicants representing the multicultural landscape of the high-need schools where the residency is located (43% to 81%), more than doubled bilingual applicants (21% to 44%) for their special education program serving high proportions of multilingual learners, and increased the percentage of candidates wanting to teach in high needs schools from 21% to 81%. As part of direct technical assistance and other supports the project will provide in **NM Residencies**, the kind of approach in use at CNM anchors the work around this goal. Additionally, supplemental stipends for candidates in high-need licensure areas are part of recruitment efforts.

Goal 2. Reduce variability of implementation across different residency program types and localities to ensure equitable access to well-prepared teachers. New Mexico is geographically vast and demographically diverse. Twenty-three recognized sovereign Indigenous Nations lead their communities within the State's boundaries. This fifth largest state, with 121,000 square miles of land mass, houses 89 school districts and 96 charters, of which 44% are classified as rural; it is not uncommon for community members to drive over 200 miles to access shopping and other amenities. Over 60% of the State's PK-12 enrollment identifies as being of Hispanic origin, and nearly 20% are English learners. Unsurprisingly, in such a context, pathways to enter teaching have resulted in a variety of approaches designed to serve local needs. While NMPED honors local strengths and needs, variability in teacher preparation can compromise P-12

students' access to highly qualified educators. Accordingly, **NM Residencies** seeks to maximize the degree to which residencies across the state enact key quality principles. For example, the State sees pre-service co-teaching as a high-leverage approach to reduce program variability, as it 1) requires meaningful engagement of mentor teachers, who play a critical role in residency quality; 2) provides guidance for how to structure residents' integration into schools, including how to ensure mentors and residents have adequate time to co-plan lessons together; and 3) focuses resident learning on pedagogies that impact student learning, which provides P-12 classrooms where residents are placed with a strong instructional support model.

In addition to the co-teaching component of **NM Residencies**, the NMPED's Educator Pathways Bureau within the Educator Quality and Ethics Division (the lead for this application), is charged with overseeing preparation program approval and re-authorization in collaboration with the Professional Practices and Standards Committee, an advisory group to the Secretary of Education that ensures that high standards are maintained in the preparation and practice of professionally licensed school personnel.²³ **NM Residencies** has built a collaborative process through its pilot to establish guidelines and standards for the state's residency programs, resulting in increased requirements this year for programs' candidates to be eligible for state funding (Appx J.3). Over the course of the project, **NM Residencies** will further codify and enact program design features that are deemed crucial for successful residency implementation in the areas of mentor and resident selection, co-teaching training and implementation, pre-service curriculum and assessment, and induction supports. Evaluation data on these efforts will allow the State to better support partnerships that meet the needs of the widely varied geographic, cultural, and linguistic backgrounds of the state while maintaining high standards of quality and evidence-based practices to ensure equitable access to quality teachers for all students.

Goal 3: Create sustainable funding streams with competitive wages so paid residencies can grow and become the norm in New Mexico. Ultimately, the State cannot achieve its goal of having every student taught by a qualified teacher unless financial barriers for teachers to become well-prepared are removed. State investments have greatly reduced barriers, but two

issues remain salient. First, financial incentives to enter the profession through fast-track, teacher-of-record programs are strong. New Mexico has a three-tiered licensure system, with an initial guaranteed salary of \$50,000. Individuals with no preparation at all can be hired in New Mexico through emergency licensure and fast-track programs as teachers of record, receiving full salaries plus benefits. Teacher residencies should ultimately match fast-track employment and pay packages—which will require increased residency funding and, potentially, licensure policies that equalize resident and fast-track pathways—to ensure New Mexico’s students all are assigned fully prepared teachers. As part of the **NM Residencies** vision, NMPED recently created a teacher residency license that will allow districts to hire teacher residents; now, the \$35,000 state stipend can be used towards a salary and benefits package. In addition, **NM Residencies** partners with *Prepared To Teach*, a national expert in sustainably funding high-quality teacher preparation. They have modeled a financial approach for the State to scale residencies (Appx. J.4), and **NM Residencies** will facilitate the adoption of these financial models, grounded in *Prepared To Teach*’s eight years of national, sector-changing work. The project will support partnerships in braiding existing educational resources into the State’s investment. Strategies will focus on adapting the “Three R’s” for sustainably funding residencies: 1) Reducing program costs and increasing financial aid, 2) Reallocating resources from existing instructional roles, such as tutoring and occasional substitute teaching, and 3) Reinvesting dollars to support the instructional benefits that residencies provide by identifying cost savings from reduced teacher turnover—estimated at between \$10,000 and \$20,000 per teacher per year—and anticipated savings in such areas as remediation, grade retention, attendance, and the elimination of inappropriate special education referrals.²⁴

B.2 Management Plan

To ensure successful implementation of these goals and their associated objectives on time and within budget, **NM Residencies** has a strong management plan. NMPED has worked for the past two years with its **NM Residencies** partner, *Prepared To Teach*, to design and

implement the current state residency initiative on which the mid-phase plan is based. Both NMPED and *Prepared To Teach* have strong track records, independently and in partnership, managing complex, multi-million-dollar, multi-site projects and bring this expertise to bear on the development of the Management Plan, which is detailed in Appendix J.5.1.

Three management structures guide the **NM Residencies** plan. First, the overall project has a steering committee, chaired by the grant's project director, that meets monthly to review progress to milestones, findings from the evaluation, and emerging needs. Steering committee members will include the following: NMPED leadership; representatives from legislative bodies; New Mexico Deans and Director leads; PK-12 urban, rural, Indigenous, and multilingual leaders; and the state's educational philanthropies. All these groups currently interact with and support efforts related to the **NM Residencies** pilot work.

Second, each project goal and its associated objectives has a lead who manages efforts to meet the goal's timelines and milestones, and to ensure the workstream is within budget. The first goal, strengthening recruitment and selection processes, will be led by [REDACTED] Assistant Director for the Educator Quality and Ethics Division. This office oversees residencies, educator pathways, and grow-your-own programs. The second goal, reducing variability across programs, including implementing strong co-teaching models, will be led by [REDACTED] the state's Teacher Residency Coordinator, who leads the community of practice efforts, visits programs to provide direct supports for their efforts, and is the point person for all local Residency Directors. The third goal, creating sustainable funding streams, will be led by [REDACTED] Executive Director of *Prepared To Teach*, whose national and state-level work in this area will ensure partnerships engage the most promising, up-to-date approaches both to braid new resources into and to realize cost efficiencies for their residency partnerships. *Prepared To Teach* will also bring resources to disseminate the lessons learned through narrative storytelling to support legislative and broader public understanding of the power and potential, as the evaluation finds, of funding residencies. The project leads for the three goals will work closely with the grant project director, who will meet both separately and together with the leads to

collaboratively plan communities of practice, direct local technical assistance, and provide virtual supports to meet project goals.

Finally, each local residency partnership has an IHE Residency Director, as required by New Mexico statute, who is responsible for coordinating and leading local efforts across all three project goals. These Residency Directors have all been part of the pilot residencies, and all understand and support the goals and approaches of the project (see Required Attachments: Appx C.2 for letters and Appx J.6 for partnership descriptions). Residency Directors work collaboratively with both IHE and LEA leaders to build locally responsive and appropriate structures and approaches to engage, on the IHE side, faculty, field supervisors, and leadership and, on the LEA side, superintendents, human resources and curriculum and instruction leadership, principals, and mentors. Their local teams become part of the statewide community of practice, ensuring a strong linkage between the State's vision for the work, project activities and milestones, and local residency partnership implementation. Appendix J.5.2 summarizes responsibilities for key parties for the project's activities.

B.3 Capacity to Scale

NM Residencies serves rural and urban areas throughout New Mexico, including all racial, ethnic, economic, linguistic, gender, and ability groups in the state. From its inception, the project was intended to scale across all the teacher preparation partnerships in the state, with the goal of serving all public and charter schools. Several factors testify to the state's capacity to scale the project. First, **NM Residencies** has strong legislative commitment, including funding of roughly \$13 million a year, offering a \$35,000 stipend to some 300 candidates annually. The NMPED currently manages the **NM Residencies** pilot, which in its first year graduated roughly 250 residents and is projected to prepare some 300 candidates in the 2023-24 academic year. The State's investment translates to \$41 per student a year, compared to \$22 per student in California, a state with a \$650 million investment over 5 years in residencies.²⁵ The Legislature's investment in residencies is the foundation of the project's capacity to scale.

Second, **NM Residencies** is embedded within NMPED's Educator Quality and Ethics Division as part of the Educator Pathways Bureau. Here, residencies are integral to building a strong teacher workforce by using Grow-Your-Own teacher approaches, PK-20 partnerships that support current teachers and schools, and high-quality preparation and instructional models. The Bureau has a full-time Teacher Residency Coordinator whose daily work provides supports for eight of the ten state approved public teacher preparation programs and who will soon provide onboarding into the project for the remaining two programs and Diné College. The Bureau also has a full-time Preparation, Pipeline, and Recruitment Coordinator; both of these leaders work with the Assistant Director for Educator Quality and Ethics to align Bureau work, including residencies as a central focus, with NMPED's vision and goals.

Finally, **NM Residencies** partners closely with *Prepared To Teach*, the nation's leader in developing sustainability funded residencies. *Prepared To Teach* has longstanding New Mexico partnerships, including two of the nation's first sustainably funded programs, the nationally recognized Albuquerque Teacher Residency Partnership²⁶ and a post-baccalaureate special education program at CNM, where the district funds residencies as part of its human capital investments. *Prepared To Teach*'s Executive Director spends much of her work time in New Mexico, collaborating with other *Prepared To Teach* team members to support the project. A focus on financial sustainability is key to the capacity to scale **NM Residencies**. By increasing funding through reallocation of existing dollars and prioritizing district investments in residencies, **NM Residencies** can become sustainable and scale to meet hiring needs across the state. Working with *Prepared To Teach* will increase local funding each year using existing resources until a 50% match of the state investment is realized (Table 1). Increasing local investments allows more residents to be trained annually with roughly the same state investment, and demand for new teachers is expected to stabilize at about 500 once graduates begin to take jobs. Total projected legislative funding needed to fund candidates at current levels would be less than the State's current investments, allowing the state to explore ways to raise the stipends, add healthcare and benefits, or both, so that residency pathways can better compete with the

economic incentives of fast-track programs.

Table 1: Projected Sustainability Impacts on Residency Costs and Scale Capacity

Project Year	Residents trained	Total needed, \$35k stipends	Local funds: 10% initial, + 10% annual	State funding needed for \$35K
Year 1	300	\$10,500,000	\$1,050,000	\$9,450,000
Year 2	350	\$12,250,000	\$2,450,000	\$9,800,000
Year 3	400	\$14,000,000	\$4,200,000	\$9,800,000
Year 4	450	\$15,750,000	\$6,300,000	\$9,450,000
Year 5	500	\$17,500,000	\$8,750,000	\$8,750,000

B.4 Mechanisms for Dissemination

NM Residencies includes three robust dissemination mechanisms, in alignment with both NMPED's and *Prepared To Teach*'s belief that resources that can help to improve public education should be free, readily available, and useful. First, materials developed from and for the project will be archived on both the NMPED and the *Prepared To Teach* websites. NMPED will develop an **NM Residencies** web page that archives project materials, including the kinds of materials that can support replication efforts, such as agendas and resources used for Steering Committee meetings Community of Practice convenings. Project reports and resources will also be disseminated through the state Deans and Directors group for preparation programs, the weekly Superintendents' bulletin, and through reports to the Legislative Education Study and Legislative Finance Committees, the two bicameral, bipartisan groups that focus on education policy, programs, and finance.

Prepared To Teach, as part of its national mission, will curate and archive resources that are widely applicable to the field such as sample district/program agreements, mentor, resident, and principal agreements, and resources along the lines of existing resources like [A Primer for Incorporating Pre-Service Co-Teaching Into Teacher Residencies](#), [Towards a National Definition of Teacher Residencies](#), and [Registered Apprenticeship Programs and Teacher Residencies](#) (Appx J.7). The project's resources, like all resources on *Prepared To Teach*'s newly redesigned website, are fully searchable and can be explored by resource type (e.g., tool, brief, report, video) and topic (e.g., policy, partnerships, finance). This dissemination mechanism

enjoys a strong track record: Over the course of a typical three-month period, downloads are roughly 2,500. The web-based interface is user-friendly and engaging; viewers spend an average of almost two minutes on the webpages, nearly double the national average.²⁷ All new resources will also be promoted through the *Prepared To Teach* monthly newsletter, which has a 2,000 person dissemination list and a high rate of click-through engagement, in addition to postings on LinkedIn and Instagram and through [Pathways Alliance](#), a national group with strong dissemination efforts, where *Prepared To Teach* is a founding member.²⁸

Second, the project will disseminate information through webinars and virtual and in-person meetings, which are central to how *Prepared To Teach* supports the diffusion of innovation in the sector. *Prepared To Teach* has hosted or been invited to present at hundreds of convenings to share lessons around paid residency development. The project also has a national learning network of two dozen residency partnerships, where innovations will be shared. State, federal, and professional leaders regularly request *Prepared To Teach*'s participation in planning and attending meetings, where New Mexico's residencies have and will continue to be featured prominently, as in a recent US Department of Education webinar and an upcoming Learning Policy Institute Teacher Licensure Collaborative meeting.²⁹

Finally, the evaluator, Basis Policy Research, along with faculty and district leadership, NMPED, and *Prepared To Teach*, will collaborate on developing research reports, which will be shared with and accessible to policymakers and practitioners, to be disseminated to the field through research conferences and peer-reviewed journals. Track records for acceptance at these conferences are strong; in the past two years, over a dozen peer-reviewed presentations of residency partnership work have been accepted at national conferences. In addition, the evaluation findings will be submitted to the What Works Clearing house for consideration.

B.5 Utility of Products

For many reasons, the utility of **NM Residencies** products is highly likely to be of great service to the sector across a wide range of settings. First, the project will follow the approach

Prepared To Teach has used with materials development, using a Creative Commons license that allows users to rebrand, repurpose, and reuse materials as long as materials are not accessed for profit and credit is given to the project as the source. In the rapidly growing space of residency development, Creative Commons licensed resources are profoundly helpful, as evidenced by downloads on the *Prepared To Teach* website, the only group in the sector with such open source materials. In addition to more comprehensive resources like reports and briefs, the project will share manipulable documents, presentation slides with notes and commentary, and other tools that localities across the nation can access for free.

Second, New Mexico has large numbers of rural, bilingual, and Indigenous populations, more than in most other regions in the nation. It is hard to find projects with large numbers of these populations, and applying lessons from small projects can be difficult. Achieving **NM Residency** goals in the New Mexico context, because of the state's geography and population, will provide visibility into how best to serve rural, bilingual, and Indigenous populations through paid residencies. The lessons shared from the project's implementation will specifically reference variations across rural, bilingual, and Indigenous contexts.

Finally, the three goals of the project, to which objectives, activities, and evaluation efforts are aligned, represent what we believe to be universal barriers to scaling residencies. First, the need for robust recruitment of historically underrepresented teachers and individuals who reflect the cultural and linguistic backgrounds of the nation's hardest-to-staff schools is well documented.³⁰ Working to scale and systematize the successful recruitment efforts that CNM, as described above, has engaged across the other nine teacher preparation programs in the state over the course of the grant will offer important implementation lessons that the evaluation team will capture and the project will share. The second goal of reducing variability in program quality is also well documented in education, giving rise to efforts like Improvement Science and requirements for program fidelity in replication studies.³¹ **NM Residencies** will document important quality standards that residency partnerships should adhere to, helping elucidate how and when localities are able to fully meet those standards and/or suggest shifts that make

application across diverse geographies and populations appropriate. Sustainability, the third goal, remains, at this point in the history of teacher residency development, the most universal challenge.³² **NM Residencies** represents the first state-wide effort to align state-level investments and supports with local investments that can both grow and sustainably fund competitively funded paid residencies. Findings from this aspect of the project will, we believe, prove to be powerful across the sector, demonstrating what is possible within the educator preparation ecosystem through a well-documented case study of system change.

C. Quality of the Project Design

C.1 Conceptual Framework

The conceptual framework for **NM Residencies** rests in an understanding that teachers matter and learning to teach well takes time. Admittedly, many tangible and intangible supports play into education's ability to have positive impacts on students. Early childhood experiences, safe environments, supportive homes and communities, adequate resources to provide a range of learning and developmental opportunities, productive school-community connections, good leadership—all of these make a difference in our education system. But without strong, well-prepared teachers, none of these—not even all of them together—can support students' classroom learning and development to achieve the State's educational goals. For most students, their teachers account for the most significant portion of time they spend interacting with adults during the school year. Who those teachers are and what they know matters.

Developments in the science of learning and development make clear that teachers must know more than disciplinary information and how to manage a class.³³ The human brain does not learn in isolation; it is part of an ecosystem that includes the body's social-emotional well-being, which in turn is impacted by the supports and safety of their surrounding environments.³⁴ In schools, teachers create the learning environments their students inhabit. Creating a good learning space requires a complex set of skills that needs both study and practice before an individual should lead a classroom. Accordingly, several key lessons for teacher quality, all of

which require time to learn and master, form the underlying conceptual framework behind **NM Residencies'** commitment to quality teacher residencies as critical to the state's future workforce:³⁵ 1) Teachers must understand how to support learning for a range of individuals in their classrooms; residencies provide a year of hands-on experience to learn how to support student learning across differences before being responsible for a classroom; 2) Relationships are the most essential element in development and learning; residencies can provide future teachers the opportunities to develop the dispositions, socio-cultural knowledge, and self-awareness that put student relationships at the center of a classroom; 3) Students do not construct knowledge based on rote or repetitious learning of facts; knowledge accrues when individuals' biology, experiences, relationships, and social constructs converge, and residencies can help future teachers learn to create culturally responsive and sustaining environments that help students construct knowledge; 4) Learning processes rely on social, emotional, and academic brain functions; the different parts of the brain that control social, emotional, and cognitive processes work in concert to produce knowledge, and residencies allow aspiring teachers to experience how integrating social, emotional, and cognitive supports improves outcomes; and 5) Adversity affects learning, and educators can and must mitigate the impacts of adversity on student learning; residencies can help candidates experience how adversity affects learning in specific individuals and learn what can be done to minimize adversity.

The first principle undergirding the conceptual framework is that time to learn how to teach matters, for all the reasons that the Science of Learning and Development outlines. In fact, researchers have found that being fully certified to teach before being hired to lead a classroom is the single most important predictor of achievement in a school's control—excluding immutable qualities students bring to the school such as socioeconomic status.³⁶ Learning to teach requires, as with any clinical practice profession, an opportunity to work alongside an accomplished professional so future teachers can consolidate their knowledge through practice.³⁷ No dentist or nurse or architect or carpenter or pharmacist practices independently before undergoing such an apprenticeship; teachers should also experience a clinical practice placement that does all it can

to ensure they understand and can support students' full development. Since schools are organized around students' development over the course of a year, preparation should entail at least one year of work in a classroom, co-teaching with a fully-credentialed, accomplished teacher, so that the aspiring teacher knows how students grow across the whole of a school year.

Still, program variability could, in different contexts, compromise the impact of a year-long residency; adding time to preparation without other shifts in practice will not necessarily meet the State's goals for residencies. Accordingly, **NM Residencies** incorporates intentional instructional approaches, state-level oversight of evidence-based quality features, and collaborative learning opportunities to reduce program quality variability and ensure adoption of the most impactful aspects of residency programs. The logic model (Required Attachments, Appx G.) outlines key components of the conceptual framework for the project.

C.2 Goals, Objectives, and Outcomes

The **NM Residencies** plan includes three goals, 10 program objectives, and 12 program outcomes, specified and measured as follows and detailed in Appendix J.8.

Goal 1: Strengthen recruitment and selection processes across preparation programs to attract, prepare, and retain a strong teaching force that reflects the state's student population.

Objective 1.1: Build strong IHE/P-12 residency partnerships. **Strategies:** **1.1a:** Statewide community of practice meetings with IHEs and LEAs focused on building shared ownership, aligning to quality standards, and sharing promising practices; **1.1b:** Individualized consultations with IHE/LEA partnerships to refine goals/processes. **Outcome Measures:** **1.1a:** By Year 3, all public IHEs with state-approved teacher preparation licensure programs will have residency programs with leadership teams that have defined co-led structures with regular processes to monitor and refine residency implementation, as documented by NMPED program evaluation visits. **1.1b:** Annually, 80% of participants will rate the state-level Community of Practice as 4 or better on Likert scales as being meaningful and supportive of local change efforts, as measured by items on annual participant surveys. **Objective 1.2:** Shift outreach and recruitment

approaches. **Strategies:** **1.2a:** Annual review of hiring needs, community recruitment trends and opportunities, and revision of plans & materials; **1.2b:** Recruitment events to attract strong candidates matched to hiring and diversity needs; **1.2c:** Selection of residents aligned to licensure, demographic, and school hiring needs; **1.2d:** Co-sponsorship of Educators Rising events to strengthen grow-your-own pipelines. **Outcome Measure 1.2:** By Year 5, 65% of residents will identify as at least one of the following in state administrative data:

Hispanic/Latinx, Indigenous, bilingual, or male.

Goal 2: Reduce variability of implementation across different residency program types and localities to ensure equitable access to well-prepared teachers. **Objective 2.1:** Build and grow

year-long, full-time residency programs with rigorous, integrated coursework and clinical practice. **Strategies:** **2.1a:** Residents placed in selected training sites, provide onboarding as part of staff; **2.1b:** Annual stepback to refine integration of coursework, assessments, and clinical practice; **2.1c:** Sequenced coursework aligned to InTASC[i] standards and integrated with clinical practice; **2.1d:** Expand residency programs across licensure areas and to incorporate two additional institutions. **Outcome Measure 2.1:** An increase of 50 additional residents each year across the state's programs.

Objective 2.2: Create systems to select and support strong cadres of mentor teachers. **Strategies:** **2.2a:** Annual review of mentor selection processes to align to

NMPED guidance for quality; **2.2b:** Training of mentor teachers in program goals and curriculum, coaching, & expectations; **2.2c:** Mentor professional learning and supports through meetings aligned to NMPED career ladder and NM Residencies goals. **Outcome Measure 2.2:**

By Year 3, 90% of residents are placed with mentor teachers who have achieved Level 2 or 3 licensure and who have received micro-credentials in resident mentoring. **Objective 2.3:**

Develop statewide co-teaching expertise in residency classrooms, schools, and programs.

Strategies: **2.3a:** Annual co-teaching foundations and pairs training for mentors, residents, and faculty; **2.3b:** Train-the-trainer workshops to embed capacity for co-teaching foundations and pairs workshops into LEAs; **2.3c:** Co-teaching practices in use in residency classrooms

throughout the state **Outcome Measures:** **2.3a:** By Year 3, all public IHEs with state-approved

teacher preparation licensure programs will have engaged train-the-trainer pre-service co-teaching training with partner LEAs; **2.3b:** In Years 2-5, 80% of participants will rate the co-teaching foundations and pairs training as positive, as measured by participant surveys.

Objective 2.4: Ensure residents have supports to complete programs, secure State licensure, and launch successful careers. **Strategies:** **2.4a:** Ongoing supports for residents to pass licensure exams and portfolio assessments; **2.4b:** Residents offered positions in host districts; **2.4c:** Induction supports for new hires, including cohort activities and classroom observations.

Outcome Measure: 2.4: By Year 5, a total of 1,000 new residency-prepared teachers will have graduated, been hired, and remained teaching in New Mexico.

Goal 3: Create sustainable funding streams with competitive wages so paid residencies can grow and become the norm in New Mexico. **Objective 3.1:** Build capacity across residency

partnerships to braid resources for residencies' financial sustainability. **Strategies:** **3.1a:** Exploration of fiscal and policy options to braid resources into residencies, including program redesign needs; **3.1b:** Develop and annually refine local plans for the dollar amount and source of funding to dedicate to residencies through role reallocation and reinvestment approaches.

Outcome Measure 3.1: By Year 5, all residency partnerships in the state will have identified sustainable funding streams that add at least \$35,000 per candidate to the state's investment in residency candidates. **Objective 3.2:** Improve cost efficiencies and access to financial aid at IHEs. **Strategy:** **3.2:** Engagement with individual IHE financial aid offices to maximize access to work study, workforce, and other financial aid. **Outcome Measure 3.2:** By Year 3, all public IHEs with state-approved teacher preparation licensure programs will have processes built into financial aid to identify work study eligible candidates and those with unmet financial need and to connect them to increased financial aid supports. **Objective 3.3:** Create an aligned Teacher Residency Apprenticeship program. **Strategy:** **3.3:** Engagement with IHEs and LEAs to promote residency-aligned Registered Apprenticeships, integrating funding into financial aid and CTE.

Outcome Measure 3.3: By Year 2, the State of New Mexico will have an approved Teacher Residency Registered Apprenticeship program. **Objective 3.4:** Solidify legislative support for

residency investments. **Strategies: 3.4a:** Development of resources and documentation explaining NM Residencies' impacts; **3.4b:** Annual presentation to legislature; **3.4c:** Annual reports to LESC and LFC. **Outcome Measure 3.4:** By Year 4, teacher residency funding will become a permanent line item in the state's education budget.

C.3 Addressing the Needs of the Target Population

Paid co-teaching residencies are appropriate for the high-needs students the project will serve, both as a pre-service licensure requirement and during the residency year. NM Residencies defines high-needs students, which all the NM Residencies partnerships serve, as students attending schools that meet the 40% free or reduced lunch eligible benchmark for being a Title I school. Novice teachers cannot put a class on pause and leave the room to seek advice from a supervisor for how to address a particular learning situation; residencies are designed with that reality in mind, providing co-placements with accomplished mentor teachers until aspiring educators have completed all credentialing work and demonstrated competence across all standards for performance necessary to ensure their readiness to practice. Known components of quality teacher preparation inform **NM Residencies'** preparation designs. Schools have been selected for their supportive professional environments, which promote teachers' learning and longevity, important qualities for teacher preparation sites.³⁸ Residency curricula align with practice, a feature associated with stronger first-year performance.³⁹ Recruitment from local populations will attract historically underrepresented populations into school roles. Mentor teachers will possess the knowledge, skills, and dispositions to positively impact both student and resident learning and development. Residents will be selected for their match with districts and commitments to students and communities they will serve.⁴⁰ The co-teaching instructional intervention during the residency year is documented as effective, in particular for high-needs students.⁴¹ Accordingly, PK-12 students not only will have better future teachers; they will benefit instructionally during the residency year. This preparation design is both appropriate and profoundly needed for the students that **NM Residencies** serves. Underprepared teachers are less

likely to be able to meet students' learning needs, and they are a major driver of teacher turnover. **NM Residencies** reverses the reality of the revolving door of underprepared teachers who serve in high-needs schools, improving PK-12 students' outcomes.

D. Quality of the Project Evaluation

NM Residencies is designed to assess whether and in what ways pre-service co-teaching residencies improve teacher and student outcomes, offering the project the opportunity to explore the intervention's potential. All the pre-service co-teaching residency settings serve high-needs students, defined as students attending schools that meet the 40% free or reduced lunch eligible benchmark for being a Title I school, students with disabilities, and/or students who are English learners (see App. J.1). Spread geographically across New Mexico, the schools in the study exhibit a diversity of demographics. Some serve racially isolated groups; some have demographic diversity; some have high proportions of linguistically diverse students; some are urban; some are rural. The range of settings will allow **NM Residencies** to explore both the impact of these promising innovations in teacher preparation and the feasibility of implementation across a range of settings.

Basis Policy Research (Basis), an independent research firm with experience conducting large-scale evaluations of federally funded programs, will conduct a rigorous independent evaluation of the **NM Residencies** project. The evaluation is designed to (1) assess the impact of pre-service co-teaching residencies on student academic performance and (2) provide ongoing formative feedback through an implementation analysis and assessment of progress toward program objectives and goals that will facilitate data-informed continuous improvement of program practices. The evaluation design will provide timely feedback to inform mid-grant adjustments, while developing continuous learning feedback loops for the state to understand what works and what might not for **NM Residencies** implementation and impact.

D.1 Methods of the Evaluation Will Produce Evidence Meeting WWC Standards

The impact evaluation will use a regression discontinuity design (RDD) that meets

What Works Clearinghouse (WWC) standards without reservations for effects on student academic performance. Specifically, the impact evaluation will examine whether students in **NM Residencies** co-teaching classrooms with residents experience different academic outcomes compared with students in classrooms without residents. Estimating the effect of co-teaching classrooms with a mentor and resident will be important because a positive effect would show stakeholders that residency co-teaching experiences are valuable, not only to participating residents (and their mentor co-teachers), but also to the students they teach during the residency co-teaching year, thus encouraging sustainability and scalability.

Mentor co-teachers for the **NM Residencies** project will be selected based on NMPED guidance for quality. NMPED teacher quality ratings are categorical; progression from Level I to Level II or Level III after three years of teaching requires the teacher submit an application. There are teachers with more than three years of teaching experience in Level I, who are not eligible to be co-teaching mentors in the **NM Residencies** project, who are comparable to teachers in Levels II and III but only differ on the submission of the application. The impact evaluation will use this information as the forcing variable for the RDD, where Level I teachers with more than three years will be the comparison group and Level II and Level III teachers will be the treatment group. Given that not all Level II and Level III teachers will serve as co-teaching mentors, the design will be a fuzzy RDD where the impact estimate will be a ratio of the impact of co-teaching residency on student outcomes divided by the probability of Level II and Level III teachers serving as co-teaching mentors. In each year of the grant, the statistical and graphical integrity of the forcing variable will be tested to establish the smoothness of the density of the forcing variable around the cutoff. Additionally, the continuity of the relationship between the student outcome and the forcing variable will be tested.

One threat to this study meeting WWC standards without reservations is participant attrition. If the treatment participants who leave the study are different than control teachers who leave in a manner related to outcomes of interest, then results will be biased such that

differences in outcomes cannot be attributed solely to the intervention. Thus, we will heed WWC recommendations and examine two kinds of attrition – overall and differential – to determine if the characteristics of participants leaving the study introduce bias. Moreover, we will use conservative attrition standards to determine if differential attrition is considered “low” or “high.” Basis will continually monitor attrition across groups and share results with residency partnerships and **NM Residencies** project leads as a means of providing formative feedback.

The outcome data for the impact evaluation is an objective and valid measure of student performance, which the Basis researchers will obtain from NMPED for each of the grant years. Basis will standardize state assessment ELA, math, and science results based on state means and standard deviations by grade and subject area. NMPED will also provide teacher-level administrative data, including demographics and additional personnel information and student-level administrative data, including the link between teachers and students and demographics.

To estimate the effect of **NM Residencies** co-teaching on student performance, we will use a two-stage least squares framework and predict selection as a co-teaching mentor, using the exogeneity of the forcing variable, and then estimate the effect of predicted selection as a co-teaching mentor on student achievement outcomes. The local linear regression equations may be specified as:

$$Co - Teach_{iy} = \alpha + \gamma(Quality_{iy}) + X_{iy} + \varepsilon_{iy} \quad (1)$$

and

$$Y_{iy} = \theta + \beta(\widehat{Co - Teach}_{iy}) + X_{iy} + \varepsilon_{iy} \quad (2)$$

where $Co - Teach_{iy}$ in equation 1 represents actual selection as a co-teaching mentor for teacher i in year y . $Quality_{iy}$ is an indicator variable that equals one for teachers with Level II or Level III quality criteria and zero for teachers with three or more years of experience and Level I quality criteria. X_{iy} is a vector of teacher-level characteristics for teacher i in year y , including demographics and number of years of experience. The

estimated magnitude of the discontinuity in the probability of being selected as a co-teaching mentor, $Co - \widehat{Teach}_{iy}$, is used in equation 2 to estimate the impact of co-teaching residencies on student performance. Y_{iy} is the aggregated performance of students for teacher i in year y , controlling for student demographics. If the estimated coefficient for co-teaching mentors, β , is statistically significant and positive, then we can conclude that **NM Residencies** co-teaching is more effective in raising student achievement than classrooms with no residents.

Basis conducted a power analysis using *PowerUp*⁴² to estimate the minimum detectable effect size (MDES) that can be expected from the use of the fuzzy RDD to estimate the impacts of **NM Residencies** co-teaching on student outcomes. For the power analysis, we use a 2-level RDD with random effects. We assume 25 students per for each pair of 120 residents and co-teaching mentors in elementary grade 3 through 8 classrooms with state standardized assessment data per year. Furthermore, we assume 20% of the variance explained by teacher-level covariates.⁴³ These parameters will provide 80% power for MDES of approximately 0.095 in each year of the grant.

D.2 Evaluation Focus on Effective Strategies for Replication

The formative evaluation will include an implementation analysis that will examine the extent to which **NM Residencies** project components are implemented with fidelity and explore which components are related to improvements in teacher and student outcome, which will allow for a determination of the features that should be implemented in future replication efforts. The formative research questions in Table 2 are aligned to the **NM Residencies** project goals, objectives, and outcomes described in section C.2.

Table 2: NM Residencies Formative Evaluation Questions

Obj.	Research Question	Data Source
1.1, 1.2, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3., 3.4	Q1. To what extent are components of the NM Residencies co-teaching program implemented as intended?	Program data; Surveys; Focus Groups
2.1, 2.2, 2.3, 2.4	Q2. Is variation in the implementation of NM Residencies co-teaching components related to student performance?	Program data; Surveys; Assessment data

Basis will use a three-stage implementation framework for the formative evaluation.

Stage 1: Establish implementation fidelity metrics and targets. In coordination with the project team in Year 1, we will use the **NM Residencies** project logic model to establish implementation metrics that correspond with three dimensions of implementation fidelity—adherence, exposure, and quality of delivery—and aggregated to the participating IHEs. After we finalize the list of metrics, we will use data from the first year of the grant to develop an implementation fidelity rubric where we will set quantifiable targets scored on a three-point scale: (1) unacceptable implementation, (2) acceptable implementation, and (3) ideal implementation. This process will help us determine (a) where to set implementation target thresholds and (b) how the implementation fidelity indicators will be combined into scales. The latter will assist us in deciding whether we use a single, overall measure of implementation fidelity or sub-scales of fidelity that correspond to the three dimensions of fidelity. We will also propose criterion for ideal, acceptable, and unacceptable implementation to disaggregate the implementation data by (a) met all expectations, (b) met required expectations, or (c) did not meet required expectations. **Stage 2: Analyze implementation fidelity data.** We will score IHEs with an overall implementation score and scores by the three fidelity dimensions and flag IHEs with low implementation target levels in one or more metrics, as well as identify common areas where stakeholders are struggling to achieve high fidelity of implementation. By identifying this information, we can support the **NM Residencies** project team to support IHEs with implementation. **Stage 2: Analyze relationships between implementation data and outcomes.** We will use multiple regression models to examine the relationship between **NM Residencies** implementation fidelity and teacher and student outcomes. The models will include a variety of control variables, including information about IHE district partnerships, districts, schools, teachers, and students. In these analyses, we will test for significant relationships and report on the strength and direction of the relationships between implementation and outcome measures. These analyses will provide correlational results regarding how levels of key implementation components relate to outcomes to inform future replication efforts.

We will collect two categories of data sources for the formative evaluation: programmatic data and researcher collected data. Programmatic data will include all existing data sources collected by the **NM Residencies** program, including participation and personnel data. Participation data will include but is not limited to residency program recruitment and selection procedures, residents' attendance at program events, resident classroom attendance, co-teaching hours, mentor attendance at training, and other available data indicating engagement in program activities. Personnel data will include residents' application materials and mentor personnel history.

Researcher collected data will include surveys and focus groups with residents and co-teaching mentors (instruments can be found in Appendix J.9). Surveys for residents and co-teaching mentors will be administered twice per year to measure changes in perception over time. The resident survey will focus on perceptions on preparedness to teach, including questions about planning and preparation, the classroom environment, classroom instruction, and professional responsibilities. The co-teaching mentor survey will focus on perceptions of the residency program's support and training for mentors and mentors' perceptions of residents' preparedness to teach. A factor analysis will be completed after each administration to check for an internal consistency of .80 or higher. Survey items will measure change over time and inform program implementation. The survey will be administered electronically and in cooperation with the project team leads and school leaders. When convenient, the survey will be administered to a gathered group of residents and mentors to ensure a high response rate.

Basis will use annual focus groups with groups of residents and co-teaching mentors to complement survey data. Resident and mentor focus groups will address two themes: *operational* and *social feasibility*. By *operational*, we mean the degree to which co-teaching training and support are meeting the needs of participants. *Social feasibility* refers to participants' responsiveness to or acceptance of co-teaching training, as well as careful consideration of the resources or supports needed to implement, refine, and sustain programmatic components. We will systematically analyze the qualitative data using content analysis and employing the four

practices of identification, coding, categorization in a matrix, and inductive analysis. These approaches will be applied to audio transcriptions and reviewed in a random order multiple times to minimize order bias. Findings will be grouped into common themes and featured in formative, implementation, and summative reports to highlight key celebrations, areas needing improvement, and areas requiring further study. When appropriate, reports will include representative, anonymized quotations from **NM Residencies** program participants.

D.3 Evaluation Plan Alignment to Project Components

The evaluation plan is aligned to program goals, objectives, and outcomes, providing performance feedback to project leaders to facilitate data-informed continuous improvement. The evaluation plan includes both impact and formative research designs to assess the impact of the program on student outcomes, evaluate the implementation of programmatic components, and explore mediating factors (see Sections D.1 and D.2). The set of impact and implementation outcomes and measures selected for the project collectively provide the necessary data needed to evaluate the project's progress towards and ultimate achievement of goals in addition to ensuring strong performance management and continuous improvement processes. Moreover, the implementation fidelity analysis will provide information regarding the thresholds for acceptable implementation.

D.4 Evaluation Performance Feedback Processes

Basis will present findings from this evaluation through five types of deliverables: Discover Day sessions, implementation metrics reports, interim reports, a summative report, and WWC reporting. Additionally, results from the analyses and deliverables produced through this evaluation may be used by the **NM Residencies** project team for grant reporting to the U.S. Department of Education. **Discover Days.** Basis researchers will facilitate three Discover Day sessions per grant year to foster collective sense-making with **NM Residencies** stakeholders about findings from the program evaluation. Basis uses Discover Days with our partners to cultivate trusting relationships, encourage feedback loops, and support continuous improvement.

Discover Day sessions are designed as a dedicated window of time (typically one full day or two adjacent half days) to take a deep dive into results from evaluation efforts, co-interpret results with project staff, and development collective insight on conclusions and next steps that may lead to potential adjustments in grant activities and/or evaluation efforts. **Implementation Metrics Reports.** In Years 2-5, Basis will produce quarterly implementation metrics reports that provide the most recent and cumulative prior data from the fidelity of implementation analyses. The reports will provide continuous and timely feedback to inform programmatic decisions. **Interim Reports.** Basis will produce four interim reports at the end of Years 1-4. The interim reports will be organized by the evaluation questions and present data available through the reporting period. The reports will provide formative feedback to the **NM Residencies** project team to inform programmatic decisions and federal reporting. **Summative Report.** Basis will produce a final report that captures the entire project scope. The report will be organized by evaluation question, describing the fidelity of implementation, relationships between implementation and outcomes, implications for replication, and overall impact of the **NM Residencies** project. Basis will submit the summative report to the **NM Residencies** project team at the end of Year 5. **WWC Reporting.** Basis will produce a report of the project's impact design methodology and results for WWC review and reporting. The WWC report will be completed at the end of Year 5.

Notes

- ¹ Jessica Cardichon et al., “Inequitable Opportunity to Learn: Student Access to Certified and Experienced Teachers” (Palo Alto, CA: Learning Policy Institute, 2020), <https://learningpolicyinstitute.org/product/crdc-teacher-access-report>.
- ² Albert Shanker Institute, “The State of Teacher Diversity” (Washington, D.C.: Albert Shanker Institute, September 2015), <https://bit.ly/1F9uSWG>; Seth Gershenson et al., “The Long-Run Impacts of Same-Race Teachers” (Cambridge, MA: National Bureau of Economic Research, November 2018), <https://doi.org/10.3386/w25254>; Tara Kini and Anne Podolsky, “Does Teaching Experience Increase Teacher Effectiveness? A Review of the Research” (Palo Alto, CA: Learning Policy Institute, June 3, 2016), <https://learningpolicyinstitute.org/our-work/publications-resources/does-teaching-experience-increase-teacher-effectiveness-review-research/>; Helen F. Ladd and Lucy C. Sorensen, “Returns to Teacher Experience: Student Achievement and Motivation in Middle School,” *Education Finance and Policy* 12, no. 2 (April 12, 2016): 241–79, https://doi.org/10.1162/EDFP_a_00194.
- ³ Yazzie/Martinez vs. State of New Mexico, No. D-101-CV-2014-00793; D-101-CV-2014-02224 (State of New Mexico County of Santa Fe First Judicial District July 20, 2018).
- ⁴ US Department of Education, What Works Clearinghouse, “WWC Intervention Report: Teach For America,” A Summary of Findings from a Systematic Review of the Evidence (Washington D.C.: US Department of Education, 2016), https://ies.ed.gov/ncee/wwc/Docs/InterventionReports/wwc_tfa_083116.pdf.
- ⁵ Ann Nutter Coffman and Richelle Patterson, “Teacher Residencies: Redefining Preparation through Partnerships” (Washington, D.C.: National Education Association, 2014), <http://199.223.128.150/assets/docs/Teacher-Residencies-2014.pdf>; Roneeta Guha and Tara Kini, “Teacher Residencies: Building a High-Quality, Sustainable Workforce” (Palo Alto, CA: Learning Policy Institute, 2016), <https://tinyurl.com/yrth7be9>.
- ⁶ Howard Gardner and Lee S. Shulman, “The Professions in America Today: Crucial but Fragile,” *The MIT Press* 134, no. 3 (Summer 2005): 13–18; Jamie Alter and Jane G Coggsall, “Teaching as a Clinical Practice Profession: Implications for Teacher Preparation and State Policy” (Washington, D.C.: National Comprehensive Center for Teacher Quality, March 2009), <https://eric.ed.gov/?id=ED543819>.
- ⁷ Karen DeMoss, “Following the Money: Exploring Residency Funding through the Lens of Economics” (New York, NY: Prepared To Teach, Bank Street College of Education, April 2018), <https://educate.bankstreet.edu/faculty-staff/16/>.
- ⁸ Cardichon et al., “Inequitable Opportunity to Learn.”
- ⁹ Guha and Kini, “Teacher Residencies.”
- ¹⁰ Tim Silva, Allison McKie, and Philip Gleason, “New Findings on the Retention of Novice Teachers from Teaching Residency Programs,” NCEE Evaluation Brief (Washington, D.C.: Institution for Education Sciences, August 2015), <https://bit.ly/2Ki0sWW>.
- ¹¹ Kini and Podolsky, “Does Teaching Experience Increase Teacher Effectiveness?”; Cardichon et al., “Inequitable Opportunity to Learn.”
- ¹² Gershenson et al., “The Long-Run Impacts of Same-Race Teachers”; Guha and Kini, “Teacher Residencies”; Don Long, “Preparing Diverse, Effective Teachers through Residencies and Induction,” *National Association of State Boards of Education* 23, no. 1 (October 2018): 4.
- ¹³ Ryan Eisner et al., “Examining the Impact of Denver Teacher Residency on Teacher Retention, Teacher Effectiveness, and Student Achievement” (Association for Education Finance Policy, Washington, D.C., March 16, 2017), <http://bit.ly/2EaQciy>; National Center for Teacher Residencies, “Teacher Residency Impact & Results,” NCTR, April 17, 2017, <http://bit.ly/2DW6RHn>.
- ¹⁴ Kay Sloan et al., “A Different, More Durable Model” (San Francisco, CA: Rockman et al, September 2018), <https://files.eric.ed.gov/fulltext/ED593903.pdfcollege>.
- ¹⁵ “Memphis Teacher Residency” (Nashville, TN: Tennessee State Board of Education, 2016).
- ¹⁶ John P. Papay et al., “Does an Urban Teacher Residency Increase Student Achievement? Early Evidence From Boston,” *Educational Evaluation and Policy Analysis* 34, no. 4 (December 2012): 413–34, <https://doi.org/10.3102/0162373712454328>.
- ¹⁷ Richard A. Villa, Jacqueline S. Thousand, and Ann I. Nevin, *A Guide to Co-Teaching: New Lessons and Strategies to Facilitate Student Learning*, Third edition (Thousand Oaks, California: Corwin, 2013).

-
- ¹⁸ Nathan Jones and Marcus A. Winters, “Are Two Teachers Better Than One?,” *Journal of Human Resources*, February 4, 2022, 0420-10834R3, <https://doi.org/10.3368/jhr.0420-10834R3>.
- ¹⁹ Nancy Bacharach, Teresa Washut Heck, and Kathryn Dahlberg, “Changing the Face of Student Teaching through Coteaching,” *Action in Teacher Education* 32, no. 1 (2010): 3–14.
- ²⁰ Yazzie/Martinez.
- ²¹ “2022-New-Mexico-Educator-Vacancy-Report.Pdf,” accessed July 8, 2023, <https://alliance.nmsu.edu/soar-center/2022-New-Mexico-Educator-Vacancy-Report.pdf>; Stephen Sawchuk, “Teacher-Prep Enrollment Continues to Decline - Education Week,” *Education Week*, March 29, 2016, <http://www.edweek.org/ew/articles/2016/03/30/teacher-prep-enrollment-continues-to-decline.html?r=465685489>.
- ²² “Grow Your Own Educators,” New America, 2021, <http://newamerica.org/education-policy/grow-your-own-educators/>.
- ²³ New Mexico PED, “Educator Pathways Bureau,” New Mexico Public Education Department, accessed July 8, 2023, <https://webnew.ped.state.nm.us/bureaus/educator-pathways-bureau/>.
- ²⁴ Hannah Dennis, Karen DeMoss, and Divya Mansukhani, “The Affordability Imperative: Creating Equitable Access to Quality Teacher Preparation” (New York, NY: Bank Street College of Education, Prepared To Teach, April 2021); Hannah Dennis and Karen DeMoss, “Simple Shifts: Creating Paid Roles to Support Aspiring Teachers” (New York, NY: Bank Street College of Education, Prepared To Teach, April 2021); Hannah Dennis and Karen DeMoss, “The Residency Revolution: Funding High-Quality Teacher Preparation” (New York, NY: Prepared To Teach, Bank Street College of Education, April 2021).
- ²⁵ “Early Impact of Teacher Residencies in California” (Learning Policy Institute, April 2023), https://learningpolicyinstitute.org/media/4015/download?inline&file=CA_Teacher_Residency_FACT_SHEET.pdf.
- ²⁶ “Albuquerque Teacher Residency Partnership Receives National Award | UNM College of Education & Human Sciences,” accessed July 9, 2023, <https://coe.hhs.unm.edu/news/2022/02/atrp-national-award.html>.
- ²⁷ Jakob Nielsen, “How Long Do Users Stay on Web Pages?,” September 11, 2011.
- ²⁸ “Pathways Alliance,” accessed July 15, 2022, <https://www.thepathwaysalliance.org/>.
- ²⁹ *Literacy and Math Series—Session 4: Addressing Teacher Shortages and Support*, 2023, <https://www.youtube.com/watch?v=iEo2oeBeSql>; “Teacher Licensure Collaborative,” Learning Policy Institute, accessed July 9, 2023, <https://learningpolicyinstitute.org/project/teacher-licensure-collaborative>.
- ³⁰ Albert Shanker Institute, “The State of Teacher Diversity”; Gershenson et al., “The Long-Run Impacts of Same-Race Teachers”; Cardichon et al., “Inequitable Opportunity to Learn.”
- ³¹ Anthony Bryk, “Accelerating How We Learn to Improve: 2014 AREA Distinguished Lecture,” *Educational Researcher* 44, no. 9 (December 1, 2015): 467–77.
- ³² Sarah Gosner, “This May Be the Best Way to Train Teachers, but Can We Afford It?,” *The Hechinger Report* (blog), May 5, 2016, <http://hechingerreport.org/may-best-way-train-teachers-can-afford/>.
- ³³ Linda Darling-Hammond et al., “Science of Learning and Development: Implications for Educational Practice,” February 17, 2019.
- ³⁴ David Osher et al., *Drivers of human development: How relationships and context shape learning and development* 1, 24 APPL. DEV. SCI. 6–36 (2020).
- ³⁵ Pamela Cantor et al., Malleability, plasticity, and individuality: How children learn and develop in context 1, 23 APPL. DEV. SCI. 307–337 (2019); David Osher et al., Drivers of human development: How relationships and context shape learning and development, APPL. DEV. SCI. 1–31 (2018); Linda Darling-Hammond et al., Implications for educational practice of the science of learning and development, 24 APPL. DEV. SCI. 43 (2019).
- ³⁶ *Id.* at 3.
- ³⁷ JAMIE ALTER & JANE G COGGSHALL, Teaching as a clinical practice profession: Implications for teacher preparation and state policy (2009), <https://eric.ed.gov/?id=ED543819>.
- ³⁸ Matthew A. Kraft and John P. Papay, “Can Professional Environments in Schools Promote Teacher Development? Explaining Heterogeneity in Returns to Teaching Experience,” *Educational Evaluation and Policy Analysis* 36, no. 4 (December 1, 2014): 476–500; Matthew Ronfeldt, “Where Should Student Teachers Learn to Teach? Effects of Field Placement School Characteristics on Teacher Retention and

-
- Effectiveness,” *Educational Evaluation and Policy Analysis* 34, no. 1 (2012): 3–26.
- ³⁹ Donald J. Boyd et al., “Teacher Preparation and Student Achievement,” *Educational Evaluation and Policy Analysis* 31, no. 4 (2009): 416–40.
- ⁴⁰ “National Center for Teacher Residencies (NCTR),” 2021, <https://nctresidencies.org/>.
- ⁴¹ “Attendance Works,” Home, accessed July 15, 2022, <https://www.attendanceworks.org/>; Nancy Bacharach and Teresa Washut Heck, “Voices from the Field: Multiple Perspectives on a Co-Teaching in Student Teaching Model,” *Educational Renaissance* 1, no. 1 (August 2012): 49–61; CAST, “Universal Design for Learning Guidelines,” 2018, <https://udlguidelines.cast.org/>.
- ⁴² N. Dong and R.A. Maynard, “PowerUp!: A Tool for Calculating Minimum Detectable Effect Sizes and Sample Size Requirements for Experimental and Quasi-Experimental Designs,” *Journal of Research on Educational Effectiveness* 6, no. 1 (2013): 24–67.
- ⁴³ M. M. Chingos, G. J. Whitehurst, and M. R. Gallaher, “School Districts and Student Achievement,” *Education Finance and Policy* 10, no. 3 (2015): 378–98; Larry V Hedges and E. C. Hedberg, “Intraclass Correlation Values for Planning Group-Randomized Trials in Education,” *Educational Evaluation and Policy Analysis* 29, no. 1 (2007): 60–87.