

Acknowledgements

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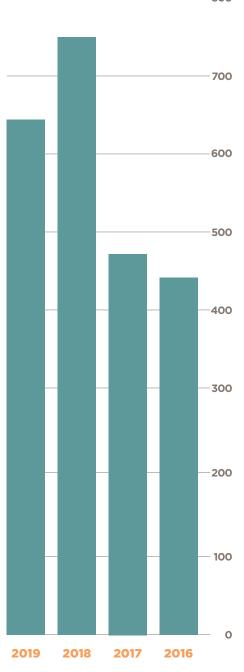
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introduction

New Mexico is facing a teacher shortage. Each year, students throughout Northern New Mexico are taught by unlicensed teachers and fewer college students are completing degrees in education.¹ Beginning in 2016, the SOAR Center at NMSU (https://alliance.nmsu.edu/soar/pubs/) has produced the New Mexico Educator Vacancy Report. Each fall, SOAR identifies the number of educator vacancies in the state and the number of students completing teacher preparation programs. (SEE TABLE 1).





The LANL Foundation wanted to more deeply understand the reasons behind the teacher shortage in our state, especially in our seven-county service area, Los Alamos, Mora, Rio Arriba, Sandoval, San Miguel, Santa Fe. and Taos counties. In fall 2019. the LANL Foundation partnered with Learning Alliance New Mexico to reach out to students and teachers in our region to better understand the dynamics behind the teacher shortage. This study sheds light on these shortages in Northern New Mexico and suggests actions that are needed to ensure that every child in Northern NM has consistent and reliable access to outstanding, culturally responsive teachers in each grade and subject area.

Teaching Matters

Ongoing shortages of well-qualified and experienced teachers are limiting New Mexico's ability to improve its education system to meet the requirements of its Constitution and laws. Every country that is known for having equitable, high-quality education has recognized that teachers are essential to ensure children and youth have access to rich and rigorous educational opportunities². New Mexico's Constitution (1911), the Bilingual and Multicultural Education Act (1973), the Indian Education Act (2003), the Hispanic Education Act (2010), and the adoption of Common Core State Standards (CCSS) in Mathematics and English Language Arts (2010) and Next Generation Science Standards (NGSS) (2017) collectively, establish a vision for what it means to offer a sufficient education to New Mexico's children and youth, including

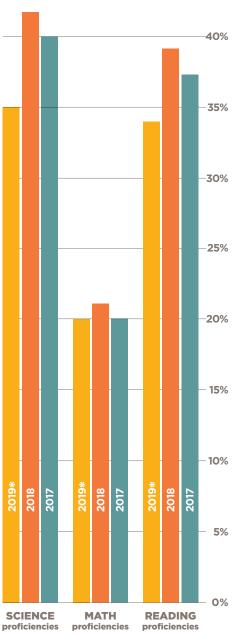
well-trained and supported teachers.

Yet, the New Mexico public education system consistently scores at the bottom of national and international education rankings that compare student outcomes across states. In 2019. New Mexico ranked lower than all other states on the Quality Counts Chance for Success Index, with a grade of D-plus and a score of 68. Year after year fewer than half of New Mexico students demonstrate that they are proficient in Science, Mathematics, and Reading on standardized assessments3 (SEE TABLE 2). These scores reflect a system that needs to change at all levels to better provide opportunities for children to thrive academically and socially in their communities in the 21st Century.



NM's Education Systems' Outcomes: Students proficiency rates in science, reading and math (NM PED) 2017-2019*

45%



To live up to the aspirations laid out in New Mexico's State Constitution and laws, and, most importantly, to nurture our children's, families' and communities' well-being and healing, we must ensure that novice and experienced educators receive the support they need to help transform our public schools. As was found in the Martinez/Yazzie v State of New Mexico lawsuit⁴, New Mexico needs to develop strategies, pedagogies, and systems that are culturally and linguistically relevant and responsive to all students' assets, needs and interests. At the same time, in our increased understanding of the importance of attending to whole child development⁵ and transforming learning opportunities, it is important to recognize that the adults in children's lives need time and support for changing how we do school in New Mexico. As a state, as we commit to implementing our own education laws (e.g. the Bilingual and Multicultural Education Act, the Indian Education Act and the Hispanic Education Act) and other pedagogical reforms called for by professional organizations (such as the National Council for Teachers of Mathematics. the National Science Teaching Association, the National Association for Multicultural Education, Teaching-Works, and others), we need to recognize that preparing and supporting teachers is an important part of this transformative work.

*NM changed assessments in 2019

Northern New Mexico's Teacher Vacancies 2016-2019

The sobering fact is that at the beginning of the 2019/2020 school year, 135 classrooms in our region were staffed by unlicensed teachers (SEE TABLE 3). If we assume that each vacancy was a class with 20 students (NM's average elementary class size⁶) at least 2,700 students in our region were taught by substitutes. In addition, vacancies are dynamic. For example, in January 2020, we learned from a superintendent in a small rural district that their secondary science teacher quit in the middle of the fall semester. At the time we spoke, the superintendent did not have any applicants who could fill the vacancy. Thus, he was looking for alternative solutions to ensure the students in his district had access to a science class.

To eliminate teacher shortages, hiring licensed teachers is one part of the puzzle, but even more vital is the work of retaining effective licensed teachers in the same district, charter, Tribal or Bureau of Indian Education school. While it is important to recognize that each school and district has unique challenges and affordances when it comes to fully staffing classrooms with licensed teachers, the reality is, many teachers are not staying in the schools that are hiring them. In Northern New Mexico teachers are moving around or leaving the profession: • While 77% of survey respondents have been teaching for more than six years, only 44% have taught in the same district/charter school for more

• 31% of survey respondents are on the fence about continuing their teaching career.

than six years.

TABLE 3

Teacher vacancies in Northern New Mexico's school districts 2016-2019*

TEACHER VACANCIES 2016-2019										
	2016	2017	2018	2019*						
NM State Total	443	476	740	644						
Northern NM Total	89.5	82	151	135						
DISTRICT VACANCIES										
Rio Rancho	32	22	28	20						
Santa Fe	13	12.5	66	58						
Bernalillo	3	7	3	6						
Española	23	14	11	18						
Las Vegas	0	3	5	2						
West Las Vegas	4			2						
Los Alamos	0	4	0	4						
Taos				8						
Chama	1	1	0	1						
Cuba	0			4						
Dulce	1	9	2	3						
Jemez Mountain	0	0		2						
Jemez Valley	1	0	1	1						
Mora		2.5		0						
Mesa Vista	0	0	1	0						
Pecos				0						
Peñasco	1	1	3	2						
Pojoaque		2		3						
Questa	0	0	2	1						
Wagon Mound	0	0	3	0						

*2016, 2017 and 2018 numbers were verified in October of each year; 2019 numbers were verified at the end of August 2019. These are challenges that districts and schools face throughout the United States; challenges that, at their heart, impact children's opportunities to learn. As the Learning Policy Institute has found:

High teacher turnover—or churn—undermines student achievement and consumes valuable staff time and resources. It also contributes to teacher shortages throughout the country, as roughly 6 of 10 new teachers hired each year are replacing colleagues who left the classroom before retirement?

Recommendations

The responses from this regional study suggest several strategies that could make a difference in recruiting and retaining teachers in Northern New Mexico. As summarized in TABLE 4. there are especially promising opportunities with Local Community Teachers, individuals who want to teach in the communities where they grew up. Additionally, to ensure that every child in New Mexico has access to culturally-responsive and effective teachers, local, tribal and state solutions need to focus on strengthening the profession of teaching. Strengthening the profession is not just about having professional wages, it is also about strengthening respect and working conditions for teachers, improving teacher preparation, and creating environments where teachers and their students thrive and want to return.

TABLE 4

Recommendations for recruiting and retaining Teachers in Northern New Mexico

Prioritize the recruitment of youth who reflect Northern New Mexico communities to become Local Community Teachers through a campaign that lifts up the profession of teaching as one where they can make a difference, are respected, and earn a good living.

Reimagine and focus teacher preparation programs on fostering partnerships with Northern New Mexico schools and districts to recruit, financially support, prepare and mentor Local Community Teachers.

Strengthen school systems through robust support and development of School Leadership, improved Teachers' Professional Learning opportunities and collaboration, and continued increases in educators' professional salaries.

Ensure
all children and
youth have access
to qualified,
culturally-competent,
and effective teachers
who know and understand
our communities.

methods

In August of 2019, the Learning Alliance of New Mexico (LANM) and LANL Foundation developed a mixed-methods research design to collect quantitative and qualitative data to inform recruitment, preparation, development, and retention of teachers to meet the culturally and linguistically diverse needs of New Mexico students. The two primary methods of data collection included electronic surveys and focus groups. Respondents and participants included high school students, primarily juniors and seniors, as well as teachers. Survey data was collected in 32 districts. charter schools, tribally-controlled and Bureau of Indian Education Schools in Northern New Mexico within the seven-county region served by the LANL Foundation: Rio Arriba, Taos, Mora, Los Alamos, Sandoval, San Miguel, and Santa Fe. Focus groups were conducted in 22 districts. There are three different types of districts located within these seven counties: two large urban districts; six mediumsized districts and twelve small rural districts. No individually identifiable information was collected on any student or teacher participant.

On September 8, 2019 LANL Foundation staff sent the survey to key points of contact in all 20 districts, charter schools and tribally-controlled schools. The teacher and student surveys stayed open from September 8 to October 13, 2019. The LANL Foundation staff sent additional reminders to districts who had not responded. Ultimately, 610 teachers and 367 students from the region responded to the survey.

Once the electronic survey questions were finalized. LANM and its contractors developed an in-person focus group instrument for teachers and students. The student and teacher focus groups took place between September 15 and October 31, 2019. Again, the LANL Foundation staff followed up with districts who did not initially schedule times with the LANM team. The LANM team conducted 28 teacher focus groups with 132 teacher participants, and 17 student focus groups with 198 student participants. It is important to note that the majority of focus group participants reported that they had not taken the electronic survey, thus, there is very limited overlap between survey respondents and

focus group participants. Additionally, LANM conducted in person interviews and written questionnaires with Regional Education Center Two superintendents, and an interview with an administrator at a tribal elementary school.

TABLE 5 describes the teaching experience of the survey and focus group participants. A majority of focus group respondents held a traditional or alternative level 1 license, while a majority of survey respondents held a level two or level 3-A license.

Analysis was iterative. Each researcher who conducted focus groups synthesized and analyzed themes that arose from each session. One researcher completed a detailed analysis of the focus group data and the survey data by looking for themes and trends using constant comparison across data sets. At each stage, as themes were identified through qualitative and quantitative analysis, researchers worked to confirm and disconfirm findings based on qualitative and quantitative comparisons across data sets and current and historical literature in the field.

TABLE 5

Overview of survey and focus group teachers

Survey Respondents (N=610) from 32 districts, charter schools and Bureau of	% of teachers who hold an alternative level 1 license	% who hold a level 2 or 3 license	% who have taught for less than 2 years	% who are bilingual	% who hold bilingual or TESOL endorsement	% who hold a Special Education License
Indian Education Schools	12%	78%	13%	32%	28% TESOL 10% bilingual	18%
Focus Group Participants (N=132 from 22 districts,	% of teachers who hold an alternative	% who hold a level 2 or 3 license	% who have taught for less than	% who are bilingual	% who hold bilingual or TESOL	% who hold a Special Education
charter schools and	level 1 license		2 years		endorsement	License

Local Community Teachers

Our study found that one set of teachers defies the teacher turnover trends: "Local Community Teachers." people who teach in the community where they grew up. Local Community Teachers graduate from our public schools, attend New Mexico's colleges and universities, stay in the profession, and live and teach in their home districts/schools over the long haul. Attending to the needs and interests of this group of teachers provides important insights about how to recruit and retain teachers in Northern New Mexico's schools and how to strengthen the profession of teaching in our region.

Twenty-eight percent of surveyed teachers (169) indicated that they teach in the community where they grew up (SEE TABLE 6). Ninety-two percent of Local Community Teachers live in the communities where they teach compared to 72% of non-local teachers (SEE TABLE 7). And, 57% of Local Community Teachers have taught for six or more years in their home districts, compared to 39% for non-local teachers. At the same time, 60% of new teachers who have taught for five or fewer years are non-local (60%), compared to 43% who are local (SEE TABLE 8). Eighty percent of Local Community Teachers who responded to this survey hold a level two or level three teaching license and of the 18% who reported holding a level one license, 9% are alternative and 9% are traditional.

In their comments, Local Community Teachers expressed strong commitment to their communities and emphasized their ability to relate to the students and families. As we recognize the

TABLE 6

Percentage of teachers who are originally from the community where they teach.

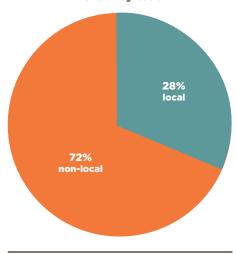


TABLE 7

Teachers who live in the community where they teach

 $(X^2(1, n=604) = .0000003, p < .001)$

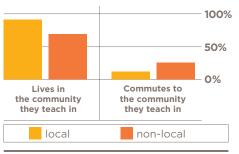
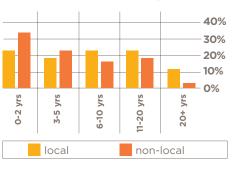


TABLE 8

Number of Years Teachers have taught in their Current District/Charter School

 $(X^2(4, n=594) = .00001, p < .001)$



importance of strong relationships between teachers, children and families that support learning, having access to teachers who are from and live in their communities is important for building bridges between community and school. As one Local Community Teacher reflected in the focus group,

I'm from this small community and I feel a lot of respect. I get involved in a lot of activities outside of teaching. My mom is highly respected and it flows to me. — NORTHERN NM TEACHER

Local Community Teachers also recognize the educational challenges that communities have experienced, including discrimination that was suffered when their elders were punished for speaking their Native languages in school. As one teacher commented, there is still much work that needs to be done to rebuild the communities' trust in schools:

Parents in this community suffer from their own historical trauma from discrimination they suffered when they were in school so they pass that on to their children. They can't see that education will pay off after so many years in school. — NORTHERN NM TEACHER

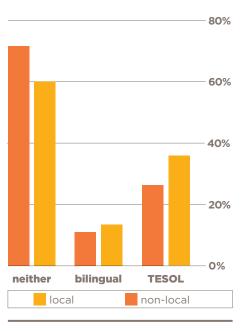
Local Community Teachers are especially well-positioned to help build these bridges because they have a deep understanding of the local community context and can support students to speak and learn in their home languages. Local Community Teachers seem to have increased awareness, skills, and commitments for working with Northern New Mexico's bilingual children. Nearly 80% of Local Community Teachers

reported having English learners in their classrooms, compared to 73% for non-Local Community Teachers. Local Community Teachers have more preparation to support bilingual learners, 36% have TESOL and 12% have Bilingual endorsements (SEE TABLE 9), while non-local teachers have obtained these endorsements at lower rates (TESOL 25%; Bilingual 10%). In addition, the survey revealed that Local Community Teachers feel more prepared and ready to teach English Language Learners (80%) than non-Local Community Teachers (69%) (SEE TABLE 10). Having teachers who are prepared and ready to teach our region's emerging bilingual students is vital for honoring the cultural and linguistic needs and interests in our communities.

Finally, it is important to recognize that Local Community Teachers graduate from New Mexico's Higher Education Institutions at higher rates than non-local teachers. Seventy-eight percent of Local Community Teachers earned their bachelor's degrees in New Mexico, whereas, 73% of non-local teachers earned their degrees from out of state (SEE TABLE 11 ON PAGE 11). This trend is important to notice because it points to an important lever in terms of strengthening the profession of teaching in Northern New Mexico.

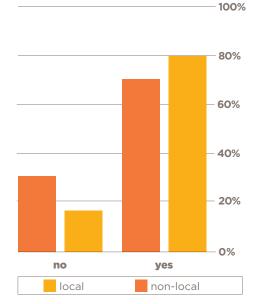
TABLE 9

Surveyed teachers who have TESOL or bilingual endorsements.



Do you feel adequately prepared to teach English language learners?

TABLE 10



Northern New Mexico's Teachers are Deeply Committed but Frustrated by Lack of Respect, Low Pay, and School Leadership

The majority of Northern New Mexico's schools are staffed by teachers who are committed to their profession and to their students but who are also frustrated by a lack of respect and support for teachers and by low salaries. Teachers report that they want to work in "a well-run school with consistent school leadership." Teacher retention is closely related to working conditions. According to the Learning Policy Institute (LPI) New Mexico's teaching attractiveness⁸ was 2.18 on a 1 to 5 scale. This scale includes a compensation rating (2.5), Working conditions rating (2.2), Teaching Qualification Rating (2), and a Teacher Turnover Rating (2). LPI found that 9.1% of New Mexico teachers had plans to leave the profession, compared to the US average of 7.3%. This lack of confidence in one's profession also has the potential to affect students who are considering becoming a teacher.

Teachers' Satisfaction and Commitment

The majority of teachers in both groups were satisfied, or very satisfied, with their decision to join the teaching profession. However, teachers' satisfaction tends to wane the longer they stay in the profession. The largest response from the more novice teacher focus group participants identified as "very satisfied" (47%) and the largest group from survey respondents, more veteran teachers, was "satisfied" (43%) (SEE TABLE 12 ON PAGE 12) As Toropova, Myrberg, & Johansson, recently reported,

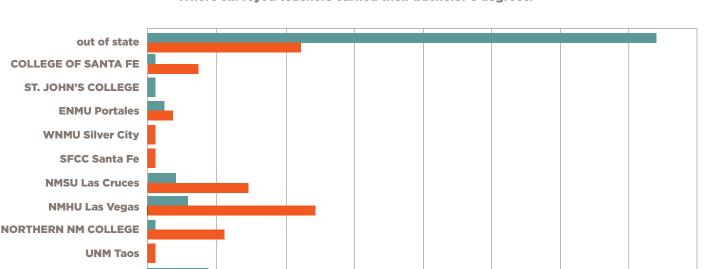


TABLE 11

Where surveyed teachers earned their bachelor's degrees.

job satisfaction not only relates to "...teacher retention, it also contributes to the well-being of teachers and their students, overall school cohesion and enhanced status of the teaching profession.9"

0%

10%

20%

local

UNM Albuquerque

Overall, 61% percent of teachers indicated a commitment to the profession. Sixty-eight percent of survey respondents are extremely (36%) or very confident (32%) that they would continue teaching as a career. Eleven percent of teachers surveyed were "not so confident" (8%) or "not at all confident" (3%) that they would continue teaching, and 20% of surveyed teachers were only "somewhat confident." In addition, teachers prepared in traditional programs were more confident they would stay in the profession compared to teachers

prepared in alternative programs; 63% of teachers from alternative programs were "very" or "somewhat" confident they would stay in the profession, compared to 72% of teachers prepared in traditional programs.

30%

40%

non-local

50%

60%

70%

80%

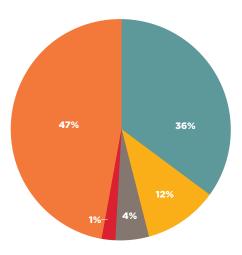
Based on this sample, the majority of teachers in Northern New Mexico are satisfied with their career choice, but the level of satisfaction decreased for the more veteran teachers who responded to the survey (SEE TABLE 12 ON PAGE 12). Additionally, teachers from alternatively licensure programs were less satisfied than teachers from traditional programs; 76% of teachers from alternative programs were "very satisfied" or "somewhat satisfied" with their decision to joining the profession compared to 85% of teachers who graduated from traditional programs.

What these data reveal are that job satisfaction may have to do with both the experiences one has "on the job" and in the experiences one has in preparation for the work. There may be a relationship between how a teacher was prepared and the challenges teachers face as they become members of the profession. Moreover, when teachers' satisfaction wanes, their enthusiasm for their work and the profession wanes¹⁰.

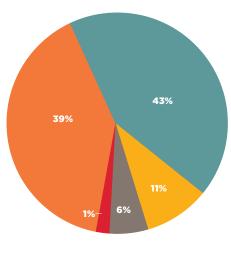
One reason teachers gave for feeling satisfied was working with students themselves. As one "very satisfied" teacher from a focus group reflected "I love kids. I love interacting with them and everything else is secondary." On the other hand, the work can be challenging in terms of supporting students, as one teacher

TABLE 12

Novice teachers' satisifaction with their decision to join the teaching profession



Veteran teachers' satisifaction with their decision to join the teaching profession





observed "many teachers take on the stress of students and their families onto themselves, so even among teachers who are happy and love helping students, many get burned out and turn unhappy."

At the same time, 31% (187) of the teachers surveyed were on the fence about continuing their career. Again, the type of preparation teachers did may matter, 36% of teachers prepared in alternative licensure programs were on the fence compared to 27% of teachers prepared in traditional programs. This potential turnover is costly. It costs approximately \$900011 for a rural district to replace a single teacher (the cost can be up to \$21,000 for an urban district). Thus, to replace the 135 teacher vacancies in our region this year, the cost will be approximately \$1,215,000. If all 187 teachers who are "on the fence" decide to stop teaching, then the cost to replace them would be \$1,683,000. The total between the two groups is \$2,898,000.

Another theme that emerged for teachers when reflecting on their satisfaction was the challenge of navigating the administrative aspects of the job and not feeling supported by the system. As one teacher noted, "Even when you're doing good with the students, the institutionalized disregard for us as professionals can get you down." Whereas, another teacher who said she was "somewhat satisfied" wrote, "Coming to grips with all the extra stuff — the things to do outside of the class is tough and so I would otherwise be very satisfied."

For teachers, strong leadership and feeling supported by their administrators and colleagues matters when it comes to teachers' commitment

and satisfaction. One teacher wrote that she "is very satisfied because of the environment at this school" after noting she was almost driven out of the profession by a principal and the bickering staff at another school last year. Another teacher wrote, "It has become too focused on test scores and the administrators are too afraid of lawsuits to support teachers. The class sizes have become unmanageable, and no administrative support is happening to adjust this [trend]." In the teacher focus groups, the majority of whom were new teachers who were earning, or who had just earned an alternative teaching license, "The top complaint/request was with regard to a well-run school (basic operations) with consistent school leadership."

- FOCUS GROUP RESEARCHER

Supporting Northern New Mexico's Teachers

Professional Development for Beginning Teachers.

In the focus groups, beginning teachers indicated that they want to have access to professional development that is timely and relevant to their current work. Beginning teachers in the focus groups, most of whom who had yet to complete their alternative licensure programs, were frustrated with the lack of support they were receiving for learning how to do "the basic school operations such as taking attendance, entering grades, email, accessing materials and technology." When they had access to supports, such as being assigned a mentor, or doing a "new teacher orientation," teachers in the focus group and in the survey reported that the supports were helpful.

While most novice teachers report that the support they are receiving is helpful, they also report feeling completely overwhelmed by the amount of professional learning they are facing. Several suggested that first & second year teachers be paired with a mentor who is a classroom teacher at their site, and that they not be required to participate in all of the PD the school/district offers.

- FOCUS GROUP RESEARCHER

This survey revealed that more beginning teachers have access to mentoring programs than the more experienced teachers did when they started their careers, but not all. Fifty-four percent of all teachers responding to the survey reported participating in a mentoring program when they first started teaching. Whereas, 81% of level one teachers responding to the survey reported participating in a mentoring program. The focus groups revealed that access to support and the quality of that support seemed to vary greatly.

The majority of beginning teachers in the focus groups were teaching full time while also being enrolled in an alternative licensure program. Most of these beginning teachers reported feeling woefully underprepared for the complex work that teachers do. In New Mexico, alternative licensure (post-baccalaureate) programs are limited to 24 hours of coursework and at the elementary level, rarely include subject specific teaching methods courses beyond reading methods, such as mathematics or science methods, and most alternatively prepared teachers begin teaching prior to completing a program.

Beginning teachers in the focus groups, had specific requests for the types of support they would like to see in a mentoring program. Several asked to see quality teaching in action so they could see what it looks like. In addition, focus group participants wanted more professional development in 1) Parent engagement and positive relationship building; 2) Assessment literacy; 3) Purposeful lesson planning to guide instruction and not as meeting a requirement for administration; 4) School operations, logistics, and procedures (student info system, accessing instructional resources and technology, etc.). Beginning teachers who participated in this survey are committed to on-going learning, but the learning needs to be "just in time" and paced. As one high school teacher said, "I realize I need to learn a lot of things, but I'm only one human being."

Professional Development for Experienced Teachers

In Northern New Mexico, 88% of surveyed teachers reported being supported by colleagues. The focus group teachers reported the same. as one researcher summarized, "the overwhelming majority rate the support they're receiving as helpful/ very helpful, citing collaboration with other colleagues as their greatest support." Teachers in the survey and focus groups reported the importance of getting informal support from colleagues. This collaborative support happened across experience levels, subject areas and across grade bands. As one teacher wrote:

I teach 8th grade and I have support from the high school English Language Arts teacher. She helps me know what the academic expectations will be for my students when they reach high school. She also shared her curriculum with me."

- NORTHERN NM TEACHER

Collaboration is vital for teachers, yet only fifty percent of teachers reported having access to professional learning communities. Collaboration between teachers is happening outside of such structures. As school districts, professional development programs and schools of education consider offering professional development opportunities, it is important to recognize that in many countries who lead in education, professional development and time for planning and collaboration is built into teachers' everyday work¹².

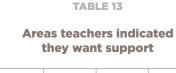
Specific areas of support that the survey teachers indicated they needed include classroom management and managing student behavior (33%), working with special populations (31%), and a wide variety of other interests and needs (31%), including wanting more time for planning and working in professional learning communities (PLCs), assessment and using data wisely, differentiation, and working with multicultural/multilingual families. Teachers also reported wanting support in lesson planning (17%) and subject area content knowledge (14%) (SEE TABLE 13 ON PAGE 14). One teacher made the suggestion that "it would be great to have mini-courses or 'micro-credentials' on subject matter content and method updates — especially in STEM [where]

things are developing so fast in the world." Deepening students' engagement in learning was an underlying theme in many teachers' comments about the supports they seek and speaks to the importance of understanding classrooms as a setting for fostering children's on-going social, emotional and academic development.¹³

In general, teachers in Northern New Mexico who responded to the survey and who participated in the focus groups are committed to on-going professional learning in order to improve students' learning opportunities. Finding ways to offer professional development in an area that is highly rural is vital for supporting these teachers' professional growth. One teacher indicated that the Regional Education Cooperative (REC) in her region was a tremendous support. Eighty-five percent of teachers indicated they are open, or maybe would be open, to engaging in professional development online.

National Board Certification

Only 8% of the surveyed teachers reported that they had earned National Board Certification (NBC). Fifty-seven percent of surveyed teachers indicated that they would be interested in earning their NBC if they were provided with financial and mentoring support to do so. Studies show that NBC teachers' students have better outcomes than non-NBC teachers across grade levels and subject areas.¹⁴ In New Mexico, earning NBC allows a teacher to move from a level II license to a level III license. which provides teachers with an increase in base salary from the state. In addition, teachers with NBC





receive approximately a \$6800 increase to that base-pay. Supporting teachers to earn their NBC can help to identify, develop, and retain effective teachers.

Professional Development in Culturally and Linguistically Responsive Pedagogies, Human Development and Learning Sciences

As New Mexico shifts pedagogies toward practices that are responsive to the students' needs and interests called forth in the Martinez/Yazzie v the State of New Mexico remedies.15 teachers need to be supported to further develop how they integrate culturally and linguistically responsive pedagogies into all that they do. This will help ensure that children have access to a sufficient education and pedagogies that are responsive to communities' needs and interests in Northern New Mexico. For example, one teacher noted that she sees teaching as a way to sustain her community's language. "We definitely need more Tewa language teachers as we are rare and have to be fluent in speaking the Tewa language as it is identified by some communities to be 'Endangered'."

Teachers also recognize that their professional practices and actions need to be informed by theory, or praxis.¹⁶ For example, understanding current theories about how children learn and develop¹⁷ can guide teachers in developing new pedagogies to be responsive to the ever-changing needs of students and society; an on-going endeavor. As one teacher observed,

I would encourage [teachers] to study change management in order to implement the changes within the system that need to occur. Studying sociology, in addition, and educational psychology/ Learning Sciences would benefit those in the field, as well.

- NORTHERN NM TEACHER

Teachers are calling for relevant, on-going opportunities for professional and collaborative learning. They are calling for working conditions that better support the complex work of teaching and learning. Participants' responses point to important shifts for initial and on-going teacher education and professional development; they also recognize and call for systems level changes that better support teachers' on-going professional growth and well-being. Recruiting the best and the brightest to teaching as well as retaining effective teachers is not just about ensuring teachers make professional salaries, it is also about ensuring teachers' work is valued and respected and that they have strong leaders who support their well-being and on-going professional growth.

Untapped Potential Among Northern New Mexico Youth

Youth are planning to attend college, but they are not planning to become teachers; Only 3% of students surveyed indicated they wanted to major in education.

Overall, youth responding to this survey are planning to attend college, but teaching is not a profession youth in our region are considering. While 3% of students surveyed indicated they wanted to major in education, 43% of

students surveyed indicated they wanted to major in STEM (25%) or Healthcare (18%). STEM interest was high among students in Northern NM, with more students indicating interest in STEM than any other field (SEE TABLE 14). When asked what they planned on doing after high school 76% of students indicated they would attend a four-year college or university (66%) or community college (12%). This number increased when students were asked to name where they would attend school after high school: more students expressed interest in attending college in answering this question. Ninety-three percent of students identified a school they would like to attend. Forty percent indicated they would like to attend school outside of NM, and over half (53%) indicated they planned on attending schools in NM.

At the same time, students demonstrated that there is an untapped interest in joining the teaching profession. Twenty-eight percent of students surveyed indicated that they had considered becoming a teacher. In fact, 82% of all students responding to the survey identified a grade level they could imagine teaching and 72% of students identified a subject area. Yet, 79% of students indicated that they had not talked with an adult about becoming a teacher.

The disparity between interest and commitment to the teaching profession may be due to students' negative perceptions about the teaching profession. As comments from the student survey and focus groups indicated, students see that teachers are unhappy and it matters.

TABLE 14

Majors Northern New Mexico's youth are planning to earn.



The students are generally aware teachers are not happy a great deal of the time because they have to deal with the difficult kids (and parents, and systems, etc), and on top of that - are not well-paid. Students understand it's a "double whammy" against the profession.

- FOCUS GROUP RESEARCHER

Eight percent of students' comments suggested that changes to the system of schooling would inspire them to teach. For example, one student wrote that, "A radical change in the system" would inspire them to become a teacher and another one wrote they'd be more attracted to the field if, "Teachers[were] not getting in trouble for things out of their control."

Teachers Hesitant to Recruit Students into the Profession of Teaching

Similarly, only about half of surveyed teachers (52%) indicated that they would encourage a student who approached them about becoming a teacher while 34% indicated that they might and 13% of teachers said they would not encourage a student to become a teacher. When asked to explain their thinking, the teachers who responded that they would not recruit others into the profession cited many challenges related to teaching. Many pointed to the workload, the low salary, and not being valued. As one teacher wrote, it is "a lot of work for not very much money." Other responses pointed to challenges around the job. One teacher indicated that the work was "thankless, exhausting, dangerous, no support." Another teacher who said "no" cited

challenges related to the system of teaching:

The job description is literally miracle worker. Government agencies ignore data, such as it taking an ELL around 5-7 years to reach grade level proficiency, yet expecting a good teacher to do that in a year. I get treated as a defective adult who went to school for numerous years to pick on kids and only teach the ones I like.

- NORTHERN NM TEACHER

For the teachers who indicated they would "perhaps" encourage a career in education, $\frac{3}{4}$ of the responses indicated that they were hesitant to encourage someone to join a field that they themselves had reservations about. One teacher said, "It's a lot of work and in New Mexico, the pay is not great. It's hard, [I do] not feel valued." Whereas, other teachers indicated they thought the profession had changed. As one teacher wrote, "Teaching used to be fun; now teachers are required to teach to state and federal tests. Teaching no longer requires imagination — just teach to the test." The other 1/4 of the "perhaps" responses wanted to encourage students who had the right disposition/ commitment for the profession of teaching and wanted students to be aware of the work it takes to become an effective teacher. As one teacher wrote, "I would want them to be sure they were willing to put in the time and effort it takes to be an effective teacher."

Financial Concerns About Becoming a Teacher

Students were concerned about both paving for college as well as their potential earnings if they were to become teachers. When asked, "What supports would be important for you if you choose to go to college to become a teacher?" 38% of students surveyed responded to the prompt with concrete suggestions: 32% indicated they would need for teacher salaries to increase, as one student wrote, "The pay would have to exponentially go up." Hand in hand with improving teachers' salaries, 20% of students indicated that they would need financial support to attend college to become a teacher. As one student summed up, "I'd need to be able to afford it, since my salary wouldn't be that great at repaying my inevitable student loans."

Students are tuning into an important trend, teachers in New Mexico are earning less than comparable other professions. New Mexico's average teachers' salaries rank 47th in nation. The average teacher salary in New Mexico in 2018/2019 was \$47,826 and the US average was \$61,730.18 Whereas, the average engineer in New Mexico earned \$98,700 in 2019¹⁹ and the average Registered Nurse is earning \$73,300 in 2020 in our state.²⁰ In the last two years, New Mexico has made important strides in terms of improving teacher salaries. New Mexico's Legislature and Governor supported raises for educators in 2019 and 2020, although in the special legislative session in June 2020, raises were reduced from 4% to an averaged 1% without any extra funding to districts due to the impact of COVID-19 on the state's budget.

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Social Support Needed for Becoming a Teacher

While figuring out how to afford becoming a teacher was a steady theme for students, they also provided insights in regard to the supports they needed beyond financial supports. Thirty-nine percent of students' comments indicated they wanted support from family members and friends for choosing to become a teacher. These responses are encouraging because they indicate that families and teachers encouraging students to become teachers along with attention to supporting students' college and career readiness could help students in Northern New Mexico consider teaching as a career. As one student wrote, "[beyond] financial support I would need...friends and family to support me through all of the years of school." Other students indicated that support would look like professional guidance that would help them to learn about the ins and outs of teaching through "opportunities for teaching and help with loans."

Recommendations for Recruiting and Retaining Teachers in Northern New Mexico

Cultivating outstanding educators who will remain committed to teaching in Northern New Mexico's schools and communities will require better meeting the needs of our current teachers while also strengthening teacher preparation programs in our region, especially when it comes to recruiting and supporting youth to become Local Community Teachers. We must also ensure that teachers make professional salaries, are valued and respected and have strong and steady leaders who support their well-being and on-going professional growth in high-functioning schools. The following recommendations aim to ensure that all children and youth in Northern New Mexico have access to culturallycompetent and effective teachers who know and understand our communities. through improved recruitment, preparation, and working conditions.

RECOMMENDATION 1:

Prioritize the recruitment of youth who reflect Northern New Mexico communities to become Local Community Teachers through a campaign that lifts up the profession of teaching as one where they can make a difference, are respected, and earn a good living.

Recruiting, preparing and supporting youth from throughout Northern New Mexico to become Local Community Teachers would help to ensure that the teaching profession is reflective of the people who live in the region and may also improve children's opportunities to learn in our schools.

Sixty-five percent of the students who responded to this survey identified as Hispanic/LatinX and 8% identified as Native American/American Indian. As Carver-Thomas reports, the benefits of more teachers of color in the teaching workforce include enhanced student achievement and graduation rates, students feeling more cared for and academically challenged, and more collegiality and belonging among teachers of color.²¹ In addition, 38% of student respondents indicated they were bilingual. Recruiting students who are bilingual helps to recognize bilingualism as the asset it is in New Mexico, as defined in the NM Constitution and the NM Bilingual and Multicultural Education Act.

Building a pipeline of Local Community Teachers requires both strengthening and changing perceptions about the profession. Toward this end, tribal, state, local districts and communities should consider launching and sustaining a campaign to strengthen respect for teachers and the teaching profession as a way to strengthen schools and attract committed and talented students to teach in their local schools. As one student counseled, "Be more inspirational of how being a teacher could be beneficial because most people say that teachers don't get paid well and it's not worth the time."

At the same time, strategies need to be developed to address students' financial concerns about becoming a teacher. Regionally, we need to find ways to provide scholarships and stipends that encourage undergraduate and graduate students to return to their home regions to teach after they've earned their teaching license

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as well as stipends to support students through student teaching and to earn bilingual or TESOL certification. For example, districts and/or Tribes or the state could create a scholarship program for students graduating high school with the bilingual seal on their diploma that would pay tuition and a living stipend for majoring in education at a NM institution and, in addition, guarantee a job as a teacher in a district or school in their region. As one student suggested, "scholarships and a promised job once I got out of college would help me to choose teaching as a career." Not only would such a scholarship strengthen bilingual students' access to college and becoming a teacher in the northern region, such programs could also help districts remedy the Martinez/ Yazzie v State of New Mexico lawsuit and live up to our constitutional aspirations of providing bilingual education to all public school students.

Students responding to this survey indicated they have high interest in potentially teaching in STEM areas that are often "hard to staff"²² but less interest in the other content areas. When asked what they would want to teach if they did become a teacher, 65% of students indicated that they were interested in teaching STEM (65%). At the same time, only 43% indicated an interest in majoring in STEM (43%). Supporting students to follow these interests will require the adults in children's lives to help them navigate the academic, social and financial aspects of pursuing these interests, especially if we want to attract vouth with an interest in teaching STEM to the profession of teaching. Students expressed much

less interest in the Humanities (4%), Social Sciences (7%), Arts (7%) and Trades/CTE (10%)²³. Growing students' interests in these areas is also important to attend to and nurture in Northern New Mexico as having excellent teachers in all these fields is relevant and vital for developing thriving communities.

Finally, policies should be enacted to prioritize the hiring of Local Community Teachers for teaching positions in their home region once they complete their training. The findings of this study confirm the value in supporting youth who grew up in a community to return to that community to teach. They should be seen as an asset to the profession and their region.

RECOMMENDATION 2:

Reimagine and focus teacher preparation programs on fostering partnerships with Northern New Mexico schools and districts to recruit, financially support, prepare and mentor Local Community Teachers.

"I believe having sufficient and welltrained teachers is critical to the health of our society."

- NORTHERN NEW MEXICO TEACHER

Local Community Teachers live, work and stay in the communities where they are from. Developing programs at the undergraduate and graduate level that support and are responsive to Local Community Teachers' initial and on-going professional learning could be a promising practice for strengthening schools in Northern New Mexico.²⁴ As we work to recruit

more students to become Local Community Teachers, we must simultaneously work to ensure that the education and preparation students participate in once they are in college, is responsive and excellent. If teacher preparation programs in New Mexico recruit and financially support students from local communities, it is likely that those students will stay in New Mexico and teach in their local communities.

We recommend that we incentivize and support teacher education programs to develop partnerships with schools and districts in Northern New Mexico to recruit, prepare, and retain teachers who are from the region. In particular, partnerships could also be formed between the Tribes, state entities, colleges of education, districts, charter schools, tribally-controlled and BIE schools²⁵ to make teacher preparation programs more responsive to communities' needs and interests,²⁶ provide scholarships to students interested in teaching and staying in the community, and both promise and provide students with employment as they pursue and obtain their degrees. Drawing on other programs and tools that have been developed to recruit and support high school students to become teachers, such as Educators Rising and Zuni: Engaging Teachers and Communities, can be a place to start. In addition, encouraging and providing tools for counselors, teachers, families, and community members to talk to youth about their aspirations is vital for expanding youth's career and college readiness.

Simultaneously, we ensure teacher education programs are grounded in best practices that are culturally and linguistically responsive as well as in the Science of Learning and Development. This can be done while drawing on existing assets of Local Community Teachers. For example, Local Community Teachers are committed and ready to support bilingual children in their communities. Developing and supporting preparation programs that assist enrolled students in attaining their bilingual endorsement while leveraging the bilingual/TESOL stipend could be a promising strategy for institutions of higher education and districts to recruit and retain more Local Community Teachers to continue this trend.

In addition, based on what current teachers are calling for, and in order to fully respond to the transformations called for in the Martinez/Yazzie lawsuit, Local Community Teachers need access to teacher preparation programs that are grounded in culturally and linguistically responsive practices and integrated with research on best practices from the social and learning sciences, which includes social-emotional learning and trauma informed instruction. Teacher preparation programs should include mandated coursework for aspiring teachers to recognize and address historical trauma, racial trauma, and intergenerational trauma. This could help to re-build communities' visions for and relationships with schooling and education throughout the region.²⁷

Reimagining teacher preparation does not end with recruitment and college programs. New Mexico must conduct further research and provide specific supports to alternatively prepared teachers to increase their preparation, persistence and success,

such as differentiated mentoring in their first years. Nationally, we know that beginning teachers with little preparation are 2½ times more likely to leave the classroom after 1 year, compared to their well-prepared peers,²⁸ and we see similar trends in Northern New Mexico. In this survey, teachers who were teaching while earning their alternative licensure, or who recently earned an alternative license, felt "woefully underprepared." And, while the mentoring support they were receiving was helpful, it was inconsistent and, at times, "overwhelming."

The alternatively licensed teachers in this survey felt less prepared to teach bilingual and special education students and they were less satisfied and less confident that they would stay in the profession. At the same time, alternative licensure programs provide important pathways for individuals who did not major in education in their bachelor's degrees, to become teachers.

RECOMMENDATION 3:

Strengthen school systems through robust support and development of School Leadership, improved Teachers' Professional Learning opportunities and collaboration, and continued increases in educators' professional salaries.

Increase support to School Leadership.

Improved recruitment and preparation programs need to be bolstered by excellent leadership once teachers are in a district or school. We need to strengthen school leadership, professional development and pay to make schools great places to work, including

fostering teacher leadership and ensuring access to on-going, relevant collaboration and professional development.

To strengthen school leadership, we must increase training and support for principals and superintendents to develop the leadership best practices that will make schools excellent places to learn. Teachers often cite lack of support from their principals as the top reason for leaving.²⁹ This study provides a loud and clear call for strengthening schools by strengthening and aligning leadership in schools and districts. By strengthening our leaders' professional development, and providing them the support they need, we have the potential to help transform the culture of schooling. By attending to the well-being of teachers, children and families, school leaders can help ensure that our schools are places where children, youth, and their teachers are thriving - that schools are at once good places for learning and good places for working.

Improving Teacher Professional Development Opportunities.

In improving working conditions for teachers, policy makers and administrators must ensure that teachers have access to meaningful, relevant and in-depth professional learning that is responsive to their needs and interests. As teachers have navigated distance-teaching and learning during the COVID-19 pandemic in spring 2020, the need for relevant and accessible professional development and collaboration is all the more prevalent. Nationally, teachers cite limited decision-making input and

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limited opportunities to collaborate with colleagues as reasons to leave the profession.³⁰ In Northern New Mexico, a strength to leverage is the collegiality and expertise teachers have to share with one another. For example, time for collaboration and teacher-led professional development offers opportunities for experienced teachers to grow as leaders while providing colleagues opportunities for professional learning in their home contexts.31 To improve collaboration for all teachers, schools need to develop structures in the school day that support teachers' on-going professional learning. This study reveals that 88% of teachers who participated in this study rely on support from colleagues, but that less than half of teachers have access to collaboration through formal structures like professional learning communities (PLCs).

In addition, this increased teacher access to professional development should include fiscal and programmatic support to Bilingual/TESOL certification, National Board Certification support, micro-credentialing and master's degrees. For example, working with New Mexico's institutions to offer master's programs that meet Local Community Teachers needs and interests for professional growth could help increase wages, strengthen the profession and retain experienced teachers. Currently, Local Community Teachers reported that 50% have earned their masters, whereas 63% of non-local teachers have earned their master's degrees. Local colleges can partner with districts to provide on-going professional development and support for teachers to earn their master's, continue their professional

learning and nurture teacher leaders. 85% of teachers were open to online learning opportunities, indicating an opportunity to collaborate with local college and universities no matter where they may live.

Recognizing that on-going professional learning and collaboration is necessary for teachers to meet students' and families' needs and interests provides opportunities for integrating such learning into teachers' regular work. Schools and districts have the potential to re-design teachers' work, and perhaps even create new positions. For example, employing Learning Engineers³² to work with teachers to design children's opportunities to learn based on the latest research in the Human Development and Learning Sciences.33 Or, working with Community Advisors, elders and parents in our communities, to identify and develop culturally and linguistic responsive practices and curricula that honors local knowledge and understandings.34 With rightful preparation, structures, and on-going supports, teachers can be the change agents students, teachers and communities are calling for.

Continue to Increase Teacher Pay.

Finally, policy makers must stay the course and continue to improve educators' salaries so that they are competitive in our region. While it would likely be transformative for New Mexico to become one of the highest paying states in terms of teacher salaries, New Mexico has a long way to go. Indeed, when it comes to wages, the profession of teaching lags behind other professions, as the Learning Policy Institute notes.

After adjusting for the differential work year, beginning teachers earn about 20% less than individuals with college degrees in other fields—a wage gap that can widen to 30% for mid-career educators. This low pay contributes to turnover."35

The data from this study, demonstrates that salary matters as students think about what they want to study in college, both in terms of earning a professional wage when they finish college and feeling like they can afford to pay for college—or payback student loans.

Children have a right to a good school — a good building, good teachers, right time, good activities. This is the right of ALL children.³⁶

- LORIS MALAGUZZI

The majority of the 742 teachers who participated in this study are committed to their profession — and to their students. They are committed to on-going professional growth and they take seriously their responsibilities to be responsive to their students' needs and interests. At the same time, teachers' in Northern NM report feeling that their profession is undervalued and not respected. We know that teachers work best when they are respected, earn a decent salary, work in schools that are well run, and have access to meaningful professional development and collaboration with colleagues. Teachers in Northern New Mexico are committed to their profession and are hungry for meaningful professional development. They recognize that there is much that can be learned in terms of supporting teachers to ground their pedagogical practices in the Science of Learning and Development as they work to develop practices that are culturally and linguistically responsive in response to the Martinez/Yazzie v the State of New Mexico lawsuit findings. Teachers also emphasized the importance of having strong and steady leadership so that they can work in high functioning schools. This study revealed that schools in Northern New Mexico need work in these areas.

The majority of the 565 students who participated in this study are planning to attend college and have high interest in STEM fields. They

support their teachers but are deterred from considering the profession of teaching because of low salaries and low respect for the profession of teaching. They are concerned about paying for college, especially if they choose education. The students' voices are a strong reminder that improving the profession of teaching is not only about improving teacher salaries, but also about improving the status of education in our communities improving the status of teaching in Northern New Mexico is vital both in terms of nurturing all students' future aspirations and recruiting the next generation of teachers.

One group of teachers defies most of the teacher turnover and retention trends: teachers who teach in the communities they grew up in, Local Community Teachers. Local Community Teachers live in the communities where they teach and they stay in the profession at higher rates than non-local teachers. They earn bilingual/ TESOL certifications at higher rates than non-local teachers and they feel more prepared to teach children who are bilingual. Local Community Teachers also earn their degrees, and attend teacher preparation programs, at New Mexico's institutions of higher education. Whereas, the majority of non-local teachers earn their degrees from institutions outside of New Mexico. Strengthening and building programs that are responsive to Local Community Teachers' initial and on-going interests and needs, including grounding programs in the Science of Learning and Development and culturally and linguistically responsive pedagogies would be an important area to focus on in terms

of strengthening the profession of teaching in Northern NM. The impact would be long lasting, especially in terms of strengthening the educational opportunities in our many rural communities.

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