UNM Project ECHO & College of Education and Human Sciences

PROJECT ECHO & THE COLLEGE OF EDUCATION AND HUMAN SCIENCES: SUPPORTING NEW MEXICO EDUCATORS

REQUEST

- A combined proposal from the University of New Mexico's Project ECHO and College of Education and Human Sciences: One university committed to building and sustaining educators across their career
- FY25 Research and Public Service Project (RPSP) Request that is a part of the main University of New Mexico request
  - 5.6 Million in recurring funds for a joint initiative to support teachers - between Project ECHO serving teachers and University of New Mexico College of Education and Human Sciences
  - RPSP Title: Enhancing and evaluating primary and secondary education—a major social determinant of health and a key driver of economic development in New Mexico:
    Improving Student Achievement with a Literacy Focus

Founding Goals of Project ECHO

Develop capacity to safely and effectively treat Hepatitis-C (HCV) in all areas of New Mexico and to monitor outcomes.

Develop a model to treat complex diseases in rural locations and developing countries.

The ECHO Model

Use technology to leverage scarce resources

Share best practices to reduce disparities

Apply case-based learning to master complexity

Evaluate and monitor outcomes

Arora S., Thornton K., Murata G., et al. *N Eng J Med*. 2011;364(23):2199-207.

Arora S., Kalishman S., Thornton K., et al. *Hepatol*. 2010;52(3):1124-33.

Legislative Funded New Mexico Project ECHO Health Programs

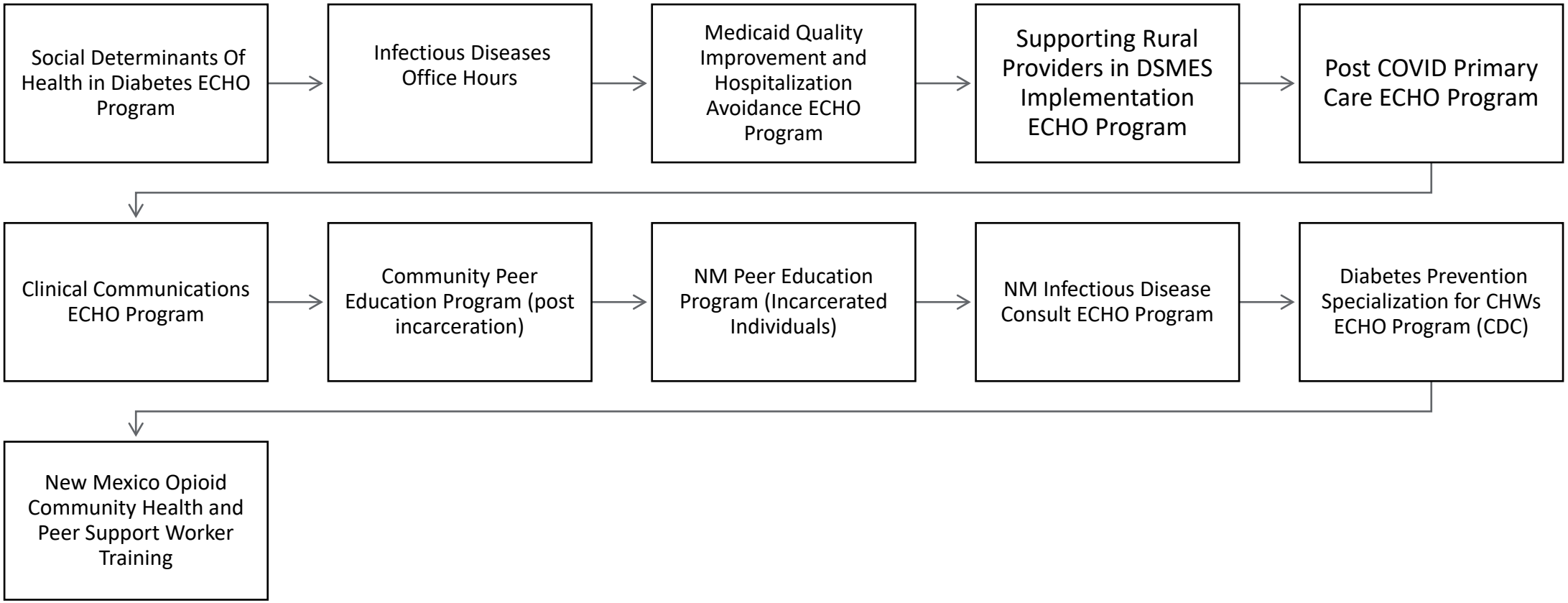
Adverse Childhood Experience ECHO Program	Adverse Childhood Experience ECHO Program: Putting Faces to the ACES	Alcohol Use and Mental Health ECHO Program	Bone Health ECHO Program	Cancer Survivorship ECHO Program	Care for the Older Patient ECHO Program	Dermatology ECHO Program
Endocrinology ECHO Program	General Pediatrics ECHO Program	HIV ECHO Program	Improving Perinatal Health ECHO Program	Supporting Children and Youth in Mental Health ECHO Program	Palliative Care Champions ECHO Program	Miners' Wellness ECHO Program
Neurology ECHO Program 02/24	Palliative Care ECHO Program	Violence Prevention ECHO Program	Reproductive Health ECHO Program	Diabetes Prevention Specialization for CHWs ECHO Program (Salud es Riqueza)	Rheumatology ECHO Program	Safe Care NM ECHO Program
School-Based Health Center ECHO Program	New Mexico Viral Hepatitis ECHO Program	Opioid Crisis and Pain ECHO Program 12/23	CHW/CHR Specialization in Maternal Health ECHO Program 02/24	Tumor Boards ECHO Program 12/24	Substance Use Disorder in Maternal Health ECHO Program 01/24	Street Medicine ECHO Program
		Climate Change and Human Health ECHO Program	Gender Affirming Care ECHO Program	Colorectal Cancer Screening ECHO Program 04/24		

Cross-Cutting Legislative Funded ECHO Programs and Initiatives

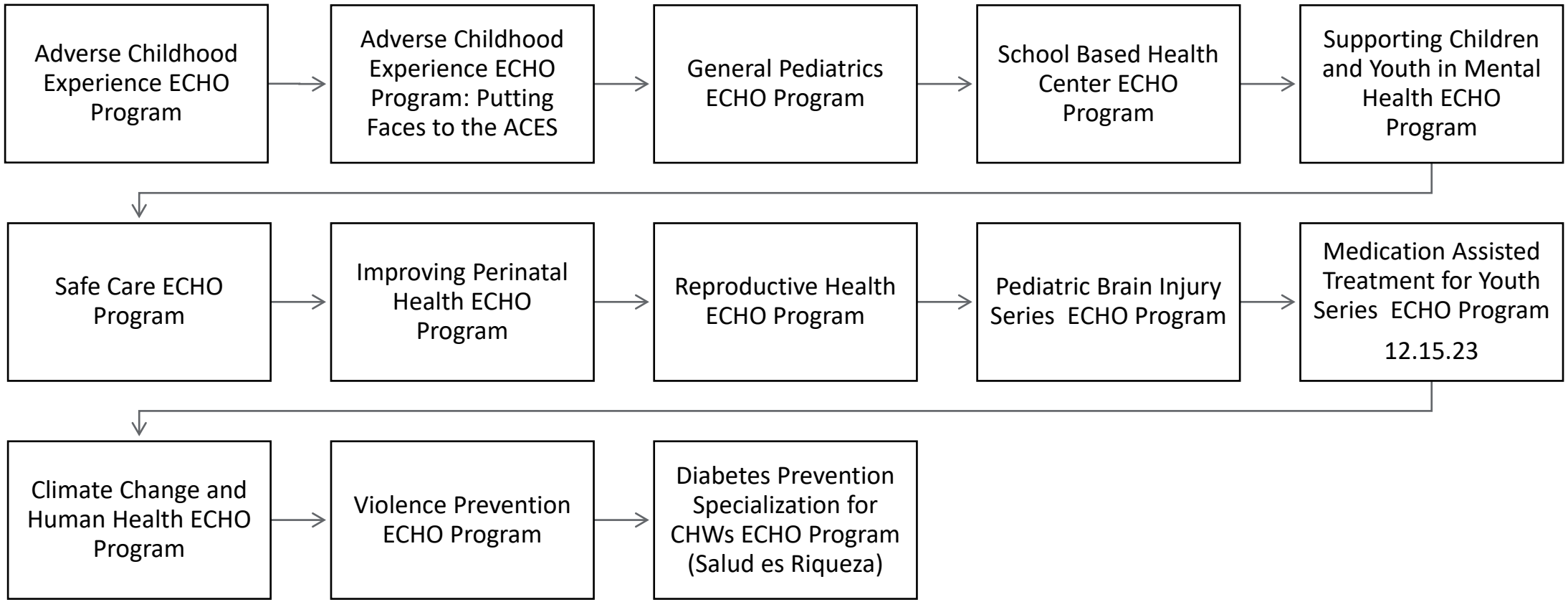
The following series crosscut several programs to best support participant and community-identified learning objectives.

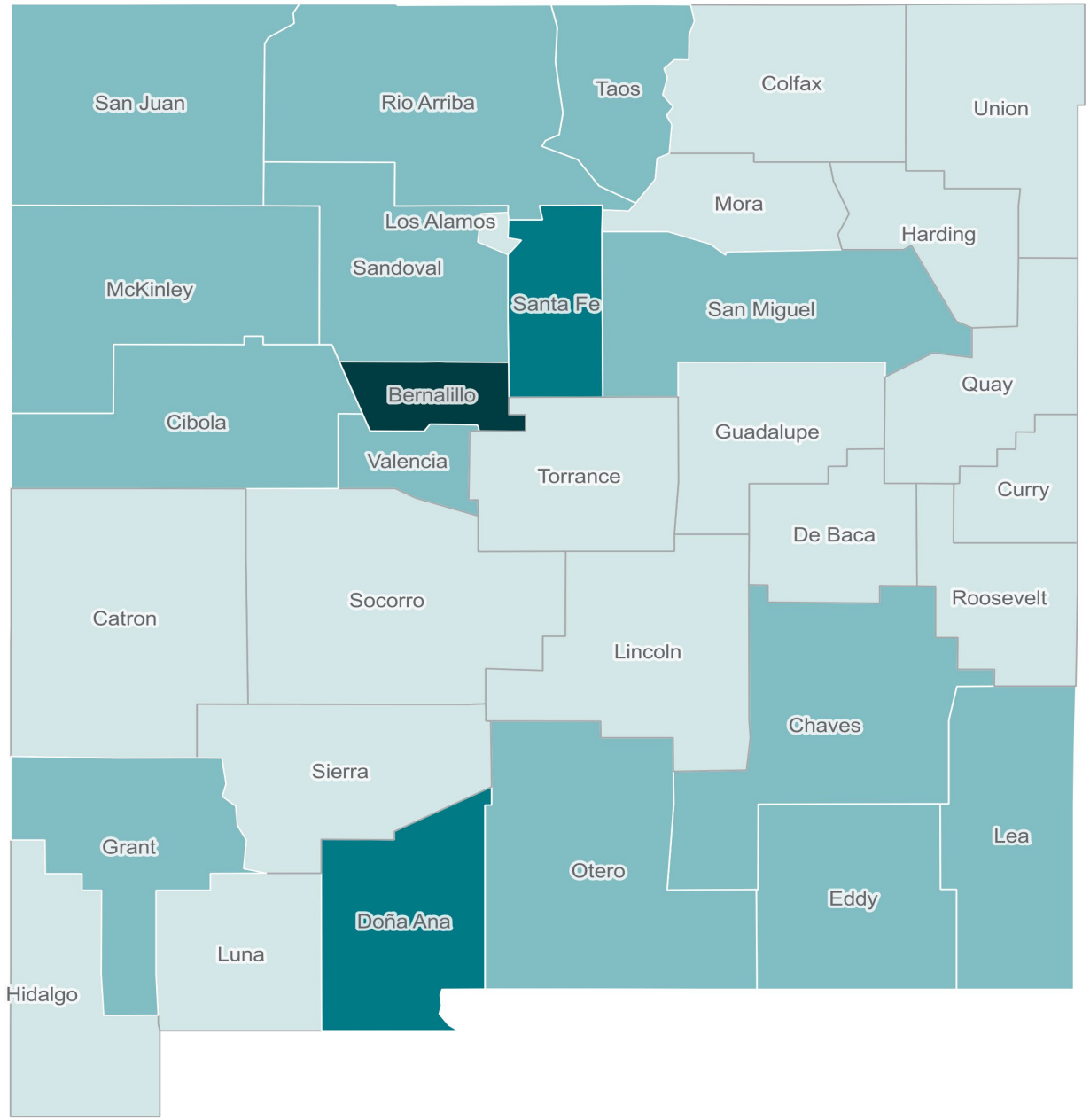
Pediatric Brain Injury Series ECHO Program	Fentanyl Series ECHO Program	Medication-Assisted Treatment for Youth Series ECHO Program

New Mexico Health Programs Supported Through Grants and Contracts.



Health Programs that Support New Mexico's Children



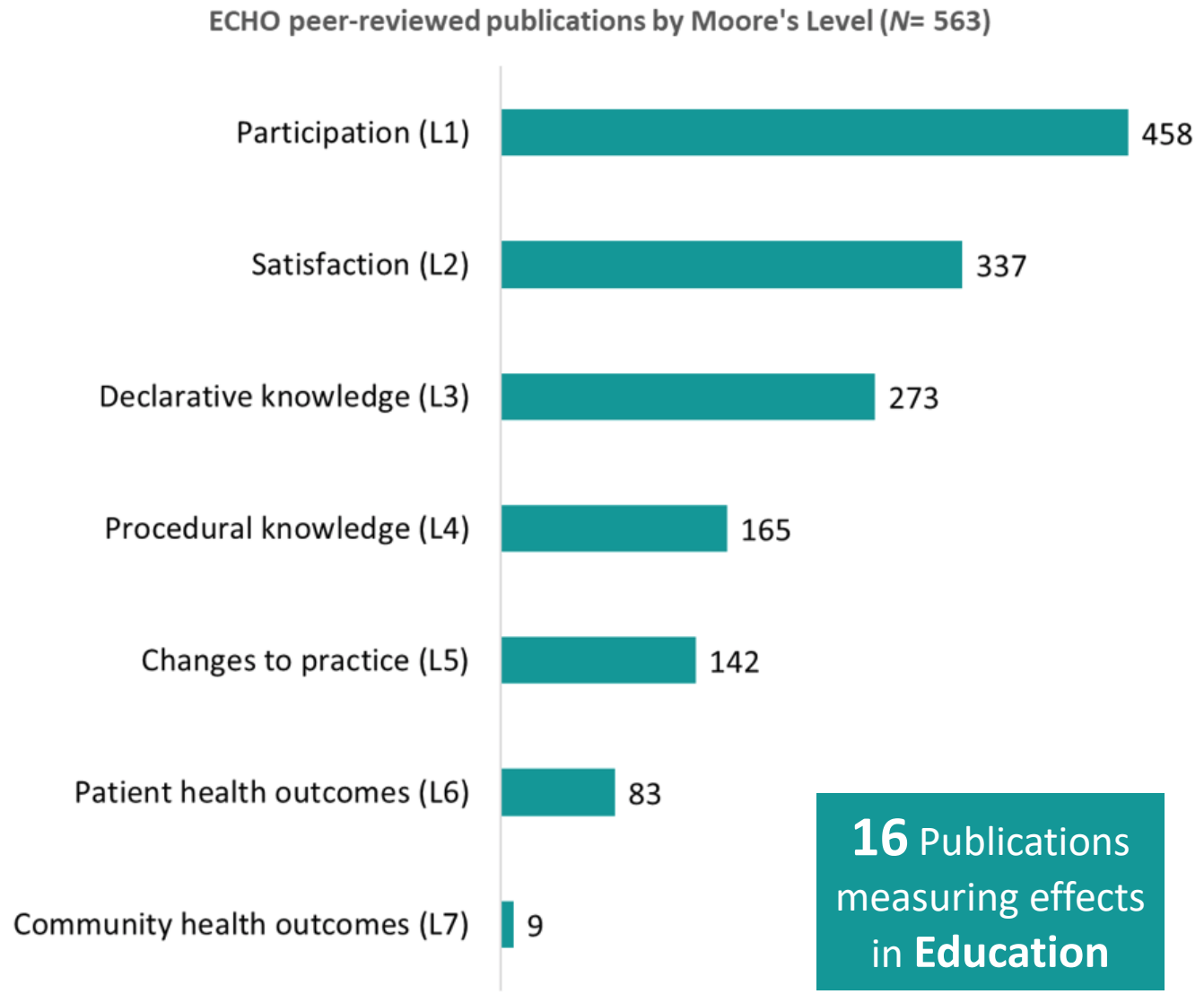


Map of Attendance by first line professionals in ECHO Sessions Across the State

As if 7/16/2023 there have been **181,191** cumulative attendances by almost **19,251** individuals.

ECHO Publications by Outcome Levels

563 Publications



16 Publications measuring effects in **Education**

Benefits of the ECHO Model in Healthcare

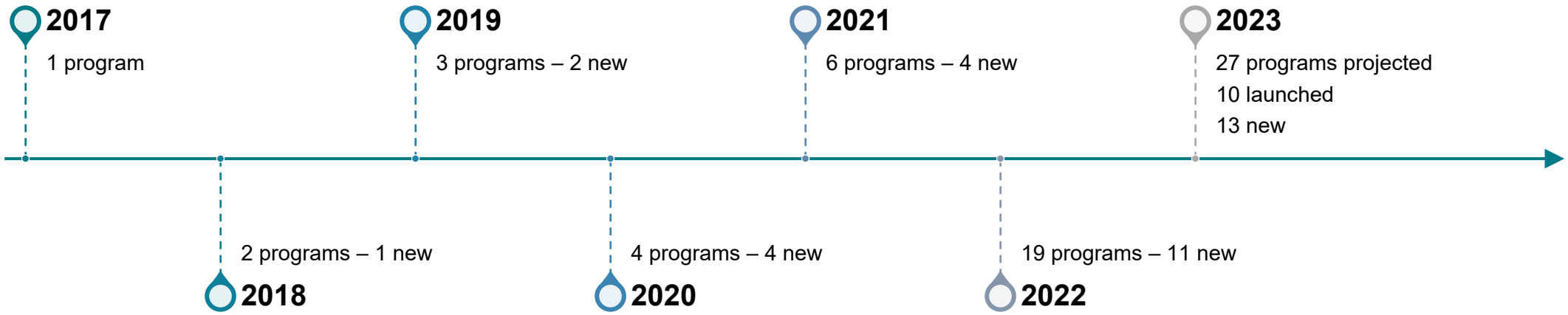
- Quality and safety
- Rapid learning and best-practice dissemination
- Reduce variations in care
- Access for rural and underserved patients, reduced disparities
- Workforce training and force multiplier
- Improving professional satisfaction/retention
- Supporting the medical home model
- Cost-effective care - avoid excessive testing and travel
- ***Prevent cost of untreated disease (e.g., liver transplant or dialysis)***
- Integration of public health into treatment paradigm

Democratizing Implementation of Best Practice

Fundamentally, the ECHO Model is a tool to help upskill frontline workers

- Ongoing mentorship and guided practice
- Discussion driven by real needs and actual cases and problems of those working on the frontline
- Provides a supportive social network
- Efficient and effective way to get implementation of best practices to frontline workers
- Creating a safe space for dialog, learning, and development

ECHO for Education NM: From Pilot to Proof of Concept to Building Capacity



6 years

28 Topics

44 Programs

550 Sessions

11,564 Hours of Learning

3,384 Unique Participants

All 33 NM Counties

999 Participating Orgs

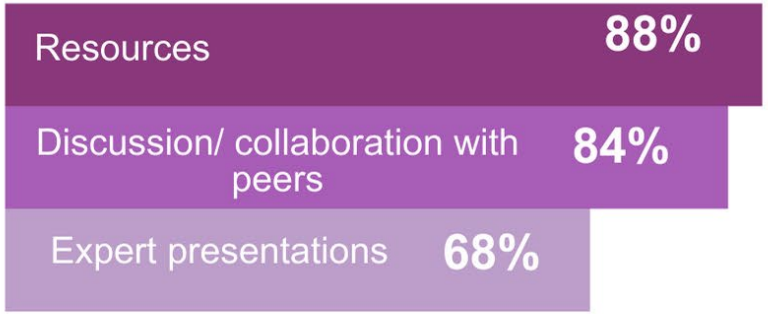
89 NM School Districts

New Mexico Project ECHO Education Programs

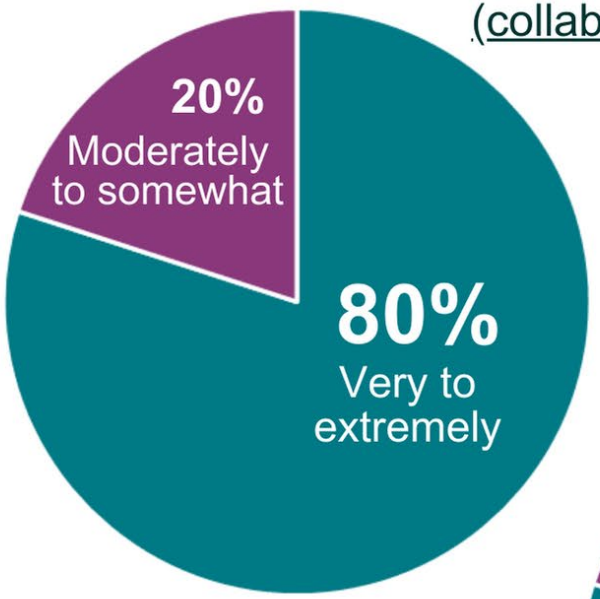
Adobe Think Tank ECHO Program	Community Schools NM ECHO Program (CS)	CoRequisite Model for Higher Education NM ECHO program	Developmental Specialists NM ECHO Program (Leadership)	Developmental Specialist Community of Practice	Early Childhood Statewide Inclusion Supports NM ECHO Program
Early Childhood STEM NM ECHO Program	Early Numeracy for Elementary ECHO Program	Educator Resiliency through Social Emotional Learning	Elementary Math NM ECHO Program	FACULTY ECHO Program	Family Engagement in Early Literacy NM ECHO Program
Integrating STEM NM ECHO Program	Social Emotional Early Development Consultation Support	Leadership Engagement and Development in Child Care NM ECHO Program	Middle School OpenSciEd NM ECHO Program	Multilingual Early Childhood Certificate Pathway (Coursework)	Multilingual Early Childhood Certificate Pathway (Equity)
Multilingual Early Childhood Certificate Pathway (Sustainability)	Reflective Practice in Early Care and Education NM ECHO Program	Science K-8 NM ECHO Program	Southwest College and Career Counseling ECHO Program	STEM through Math NM ECHO Program	Strengthening Families and Communities NM ECHO Program
Structured Literacy for the Classroom Kinder NM ECHO Program	Structured Literacy for the Classroom 1st Grade NM ECHO Program	Structured Literacy for the Classroom 2nd Grade NM ECHO Program			

Participant Evaluation Survey

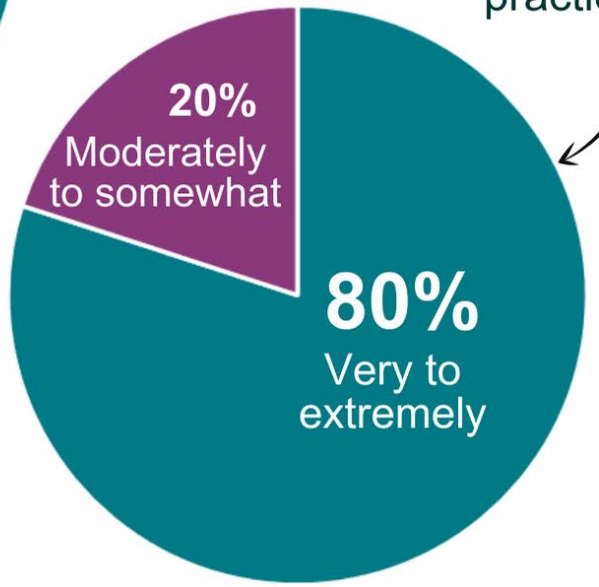
What participants found to be the most beneficial aspect of the program



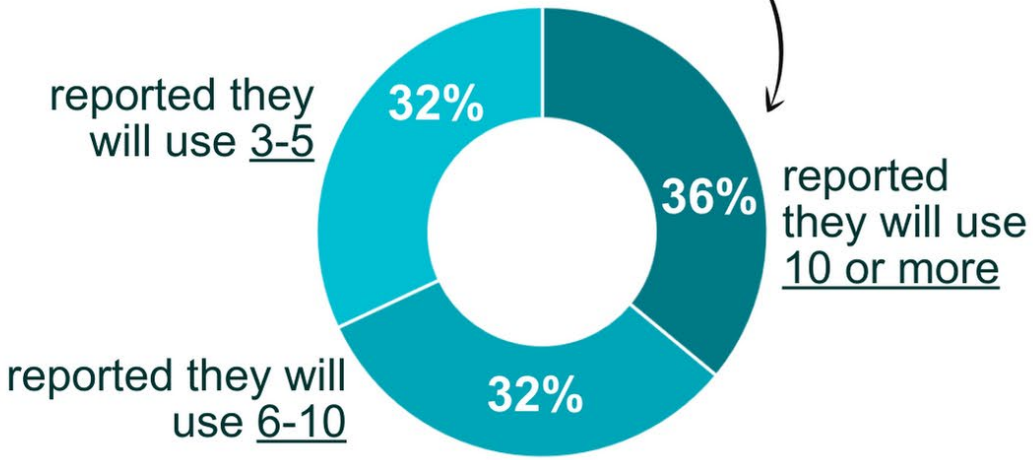
How useful were the discussions (collaborative problem solving) to participant practice



How useful were expert presentations to participant practice



How many strategies and approaches participants plan to use

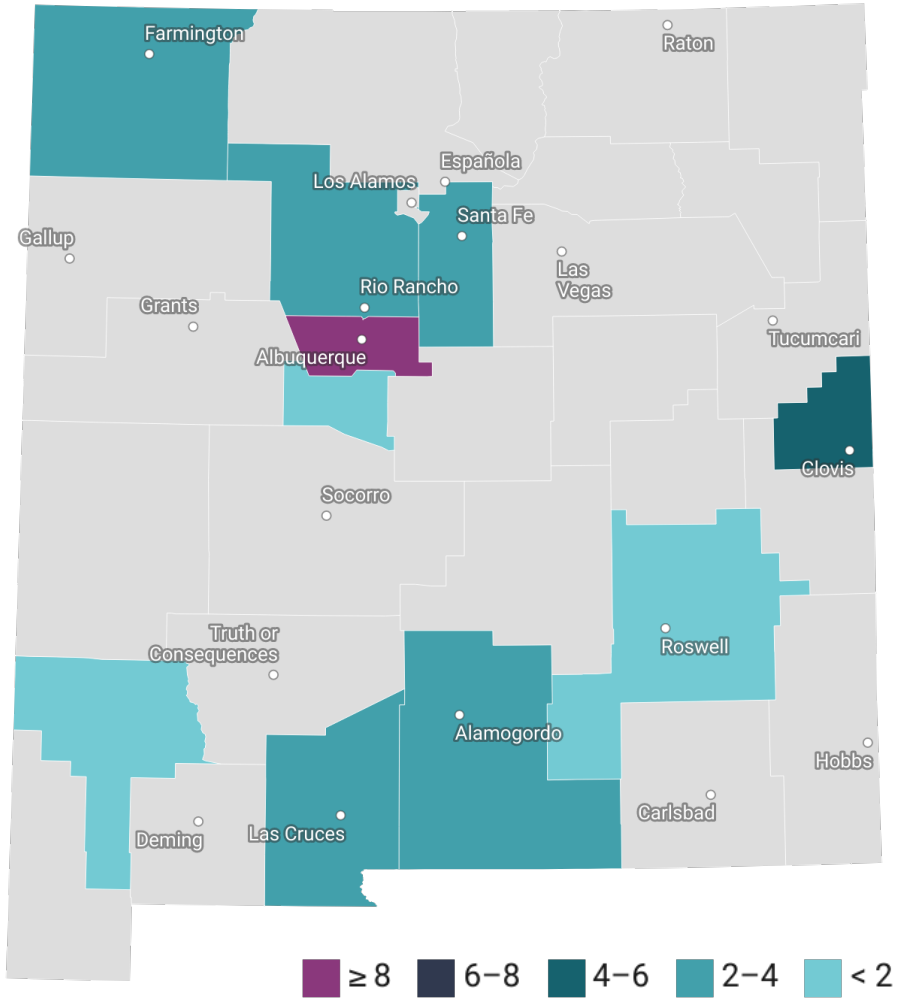


100%

Reported implementing strategies and approaches learned in the program

Participants came from the following school districts:

Albuquerque	Clovis	Farmington	Las Cruces
Alamogordo	Cobre	Grady	Los Lunas
Bernalillo	Espanola	Hagerman	Rio Rancho



Early Indicators of Impact from Structured Literacy Implementation Pilot Program

37 participants; **12** NM School Districts; **10** NM Counties

Participants reported

- **45%** Knowledge Gain across all areas measured
- **100%** of participants implemented multiple strategies learned through the program

"The ECHO program solidified concepts I learned in LETRS and made the importance of structured literacy very clear. After I completed LETRS I was excited to implement what I had learned but was not 100% on how it should look. The ECHO program helped me bridge what I learned through LETRS training with information and resources."

Increased teacher efficacy is linked to improved student outcomes

Student outcomes for this program will be measured in school years 2023-2024 and 2024-2025

Fall 2023 Structured Literacy Implementation Program

80 teachers grades **K-2**

"The importance of assessment to drive my teaching is my biggest takeaway."

"My 2nd grade team struggles to create intervention groups. We stare at iStation results but we aren't convinced which pieces we should break kids into to strengthen their reading skills. Today we learned exactly which report to pull up and how to use it to create meaningful intervention groups."

"Children need to be explicitly exposed to high level language in context AND they need to actually use that language in context in order for them to acquire the high level language."

What our participant are saying…

This program gave me the excitement, changed my attitude towards my literacy block - new resources, new things to try out with students; a community to be able to talk to."
~ Participant in Structured Literacy for the Classroom ECHO Program

"I feel that these sessions have provided very valuable ideas and resources that would be impactful in my school. I am a principal at a K-8 charter school that really stresses social emotional foundations to all our learning. Some of the resources I have been able to share and put into play right away." *~ Participant in Educator Resilience through Social and Emotional Learning ECHO Program*

"I really enjoy the sharing in the small groups. I get motivated to try something tomorrow."
~ Participant in Elementary Math ECHO Program

"Thank you! I just love collaborating and sharing ideas. We all talked about lack of materials being a challenge, and you provided ideas (and resources) to help alleviate the problem. Very helpful – thank you" *~ Participant in STEM through Literacy ECHO Program*

"I teach in a rural community so joining the sessions provided me with the tools I need to reach outside of my community to the different resources our state provides"
~ Participant in Educator Resilience through Social and Emotional Learning ECHO Program

Participant Level Interim Indicators for Impact on Students: Existing ECHO Education Programs

Implementing Strategies

% of Surveyed Participants implementing strategies learned through Program

100% Literacy

94% STEM

Knowledge Growth

% of Surveyed Participants reporting knowledge growth in program area averages all sessions

100% Literacy

72% STEM

Net Promoter Scores

of Surveyed Participants (ranges from -100 to 100, > 50 considered very high)"

84 Literacy

85 STEM

Recognizing the profound connection between education and health is vital for us to reduce health disparities

“If we really want to save lives in this country, prevent disease, reduce health care costs, we have to do something about education.”

Steve Woolf, Director, VCU Center on Society and Health.

Education is a key social determinant of health

College graduates can expect to live 5 years longer than individuals who have not finished high school

An additional 4 years of education reduces risks of diabetes, heart disease, obesity and smoking

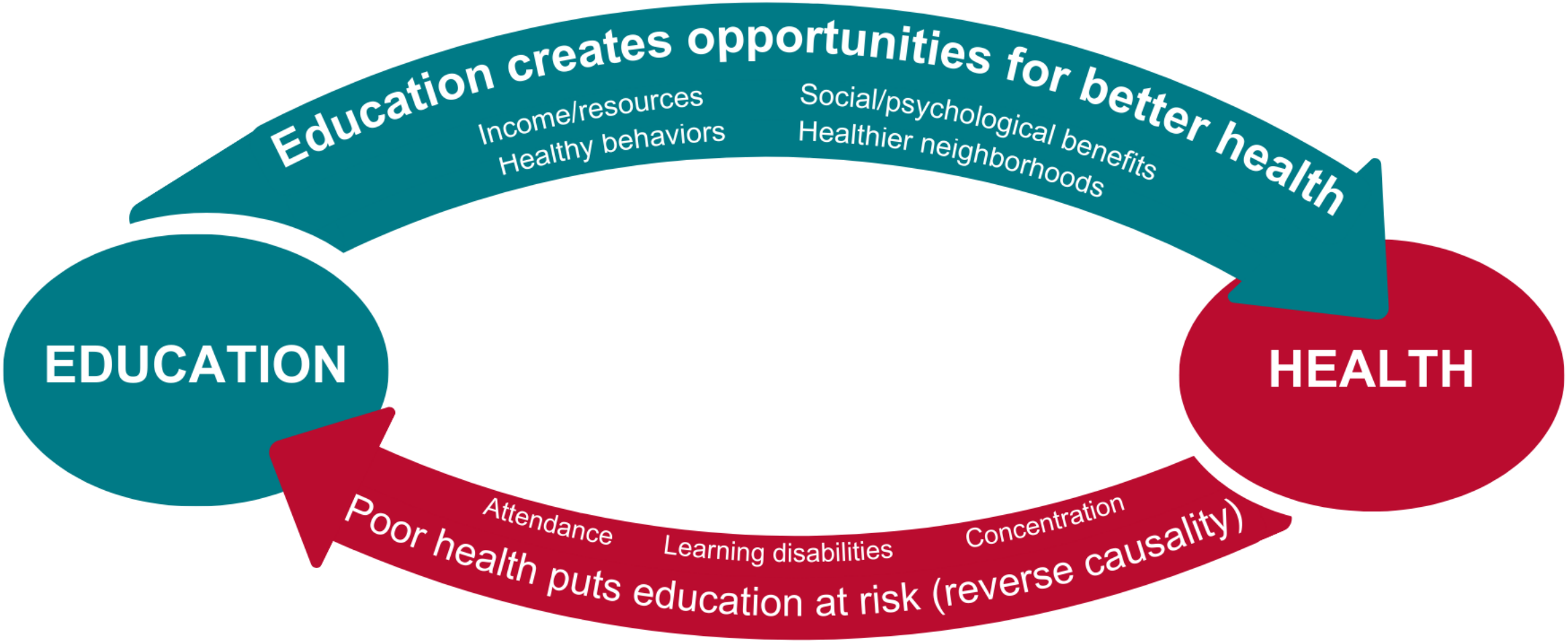
The more years of education a mother has received, the more likely her infant is to survive and thrive

Education has generational effects – the likelihood of a child completing school is linked to their parents' educational attainment

The lifetime earnings of someone with a graduate degree are more than 4 times that of a high school graduate

Those with higher earnings live in communities with more educational and health resources

Health and Education Intertwined



Enhancing and evaluating primary and secondary education—a major social determinant of health and a key driver of economic development in New Mexico: Improving Student Achievement with a Literacy Focus

FY25 RESEARCH AND PUBLIC SERVICE REQUEST

Problem Statement

38% of children are at or above proficient in reading at 3rd grade

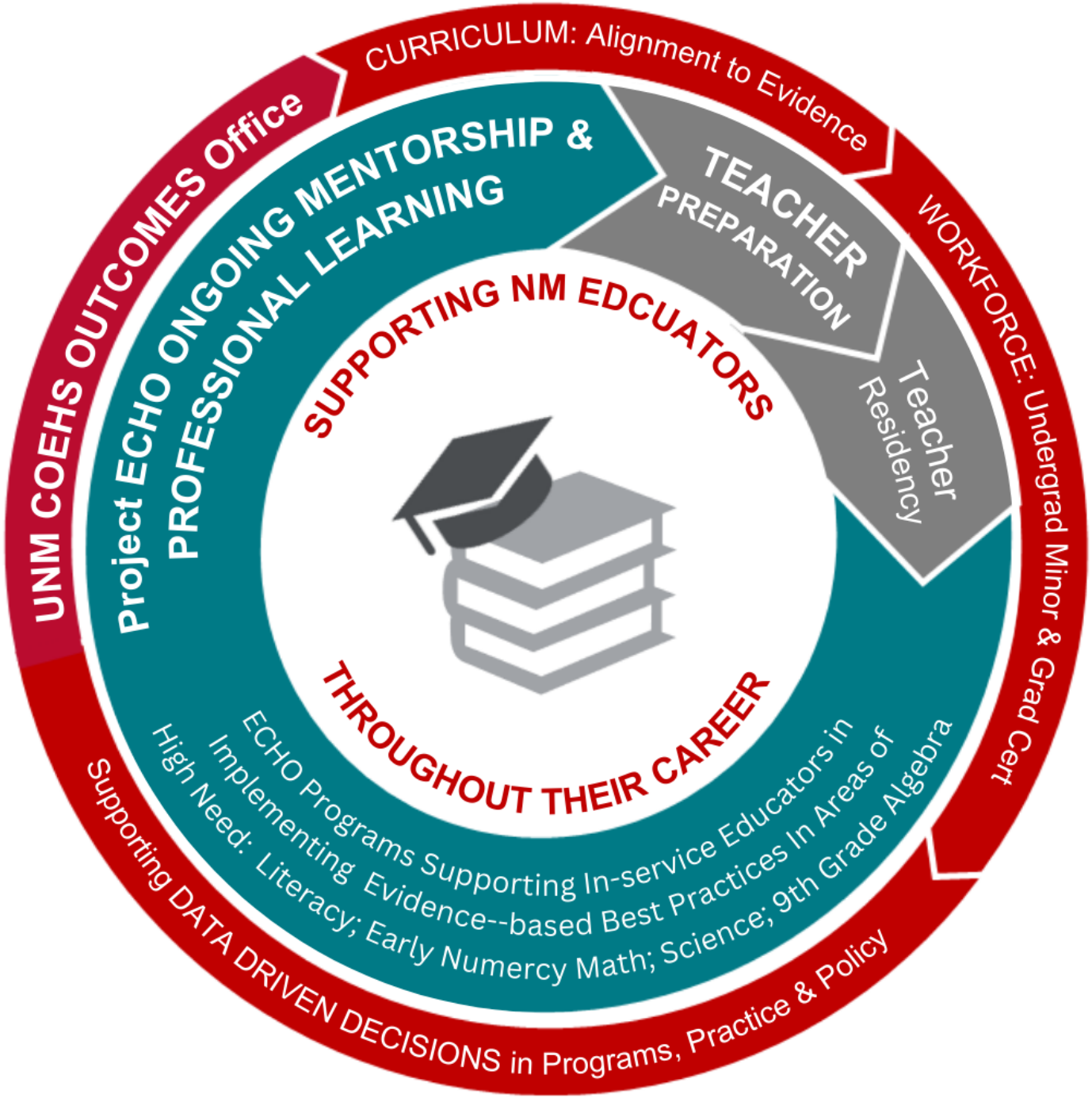
(NMPED 2023)

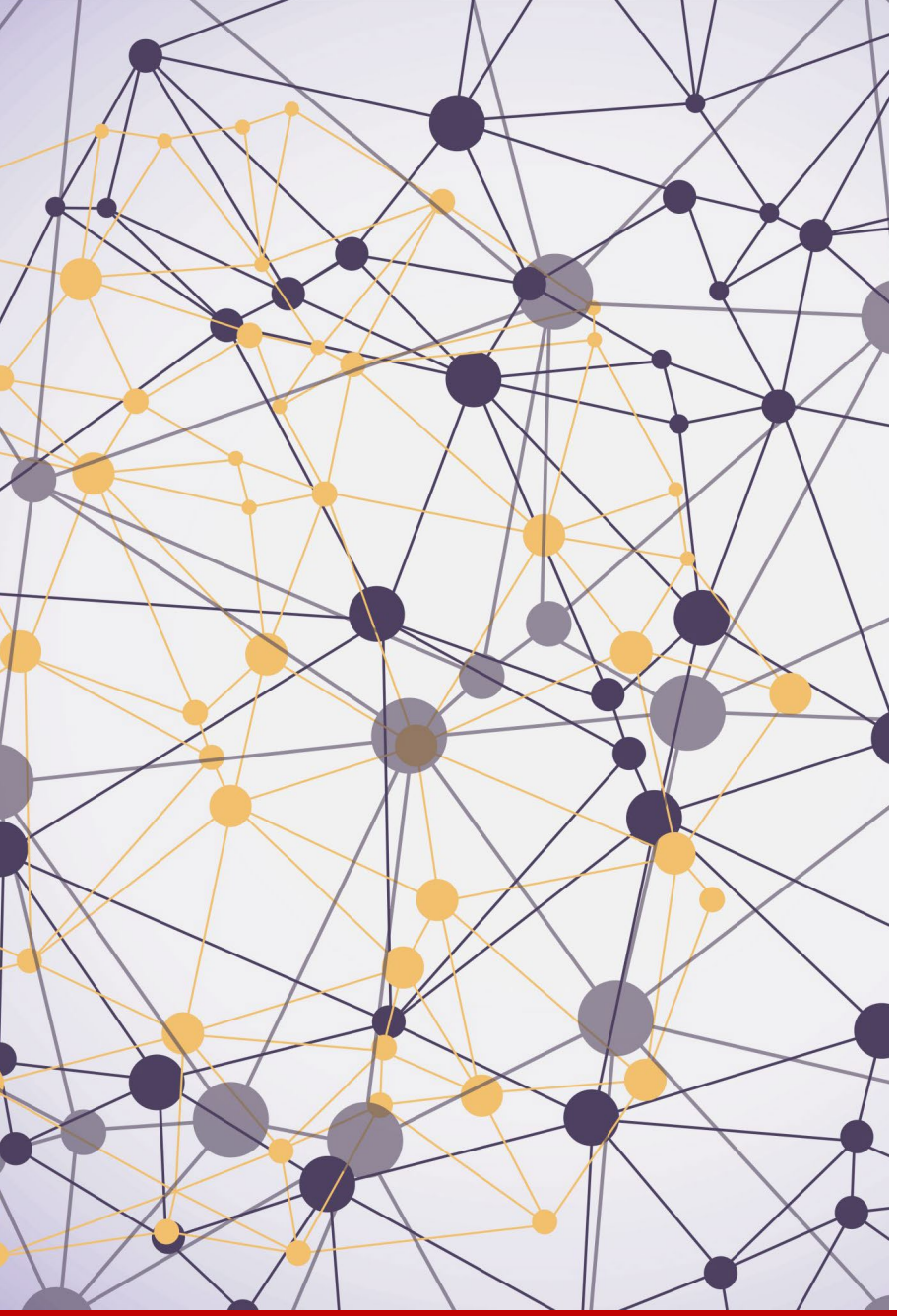
19% of children are at or above proficient in math at 4th grade

(NAEP 2022)

UNM College of Education and Human Sciences & Project ECHO

Building a system of career long support for educators in New Mexico





DATA DRIVEN DECISION MAKING to increase equity: COEHS OUTCOMES Office

Primary activity of the OUTCOMES Office is to provide important and timely information for community members, educational leaders, university professors and policymakers regarding what is needed to reduce barriers and improve equity in New Mexico classrooms in multiple other ways.

Key data areas:

1) improve the curriculum and educational practices offered at UNM's College of Education and Human Sciences to ensure they are informed by best educational practice and are research-based,

2) inform the State of New Mexico to support educational policy development, such as shaping future revisions to educational standards and/or practices in Santa Fe as well as at other educational entities across the state, and

3) improve ECHO Education programs and ensure that they are truly meeting the needs of learners in New Mexico.

Workforce Capacity Building: COEHS OUTCOMES Office

This proposal includes training the next generation of education researchers in the methods, analysis, and ethics of applied educational research.

We will establish a new Undergraduate Minor and Graduate Certificate in in applied educational research including data science

Our goal is to increasing the workforce in New Mexico available to do this important work.

ECHO Education Program Focus: **Teacher effectiveness**

The single most important influence on student achievement

A more effective teacher can advance student learning by 1.5 years in a school year*

New Mexico educators are committed to their students' success

New Mexico kids can learn as well as kids anywhere

ECHO Education Program Focus Areas for increasing teacher effectiveness

Structured Literacy Implementation support for the classroom	A series of K-5 grade-level programs developed in collaboration with the Literacy and Humanities Bureau at NMPED and national literacy experts to support the classroom implementation of evidence-based science of reading practices.
Numeric Literacy	A series of programs for PK-4 – 6th grade teachers in developing their student's conceptual understanding of numbers and math. Evidence shows that developing conceptual understanding of math
Algebra 1	Algebra 1 is a gateway course for High School graduation, and ensuring effective instruction in this key course is important for increasing graduation rates in New Mexico
Science	The Next Generation Science Standards Elementary Science NM ECHO Program will train teachers in evidence-based content and pedagogical preparation for effectively implementing the Next Generation Science Standards,

How do we support educators in implementing evidence-based best practices?

Effective interventions alone do not produce meaningful and sustainable results – we must support implementation

There are three levels of support that can be given when implementing new knowledge:

ECHO Model: Make it Happen

Traditional Training

Workshops / Webinars
Courses separated from classroom practice

Participants travel to experts

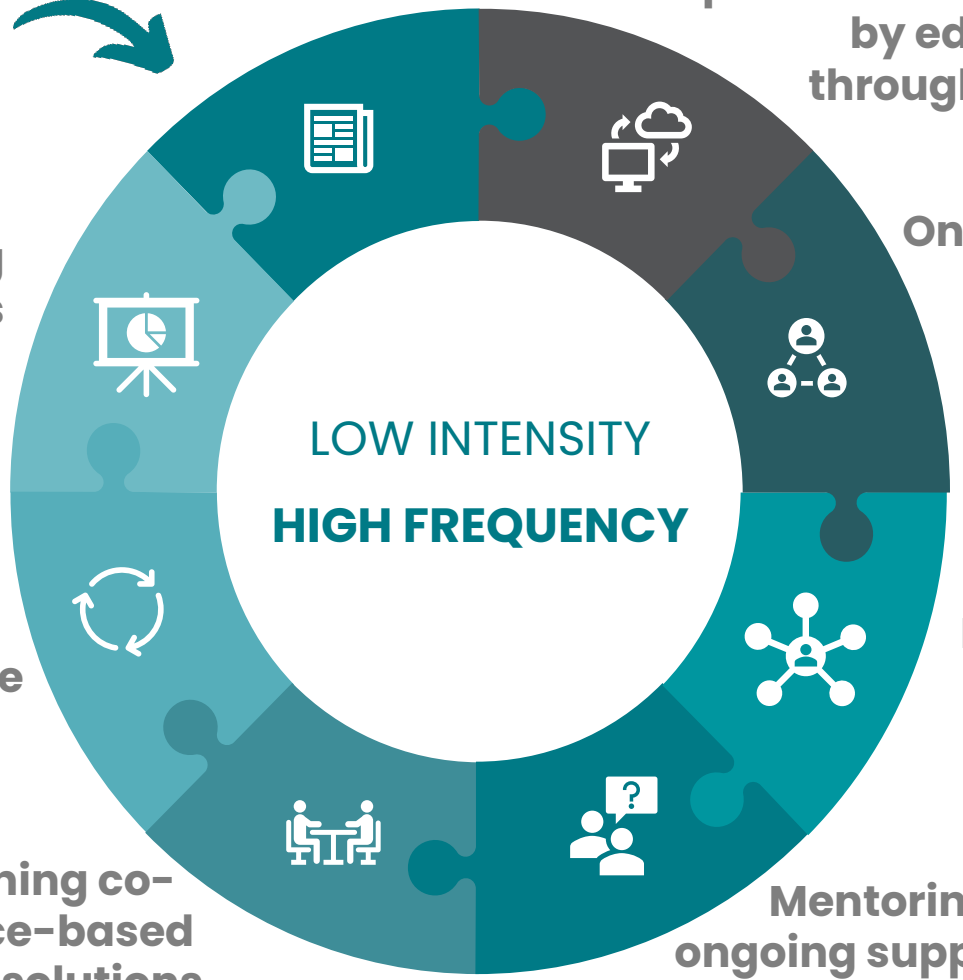
HIGH INTENSTITY

LOW FREQUENCY

Conferences

Learning and discussions led by experts

Evidence Based Best Practices



Virtual platform accessible by educators throughout NM

Ongoing virtual Community of Practice

Learning best practices led by experts

Mentoring & ongoing support

Collaborative learning co-producing evidence-based locally responsive solutions

Feedback loops for guided iterative practice

Measuring effectiveness

What are our anticipated outcomes?

Increase 3rd grade reading proficiency by 10 points: from 38% to 48%

Run 34 ECHO programs in key areas with a focus on literacy

Recruit 60 local and national experts to support high-quality ECHO PL programs for NM Teachers • Recruit experts from UNM COEHS, NM Institutes of Higher Ed, NM School districts, and other state and national experts.	Impacting ~22,260 students per year • Over 110,000 student years of learning impacted over 5 years • Educators participating in ECHO implement best practices with fidelity to increase teacher effectiveness: current rate 94%	Increase alignment of curricula to research and evidence-based practices through the OUTCOMES Office

Reduce Teacher Burnout by 10%

ECHO participants gain knowledge and self-efficacy through expert mentorship, collaborative learning & virtual communities of practice

Reduce burnout

Enhance the quantity and quality of teacher residency programs in collaboration with COEHS and PED

540 ECHO Professional Learning sessions annually

1320 Participating educators in ECHO programs annually

Increase teacher retention by 10%

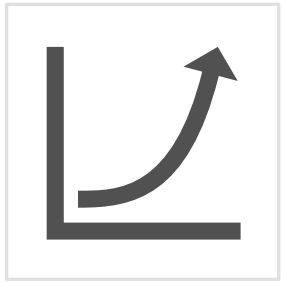
Access to effective mentorship through ECHO's trusted human network supporting teachers in implementing evidence-based best practices wherever they are.

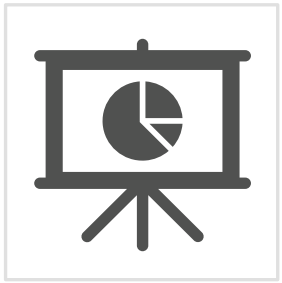
Increase resiliency of new teachers entering the workforce through research on programming such as Social Emotional Learning

Increase Data-Driven Practices, Programs and Policies in our Education System

Establish a new state resource for educational research and evaluation OUTCOMES Office

Increase in evidence-based best practices implemented in schools and educational system





Support data-informed decision making in curriculum, future professional development and support policy decision making

10% increase in diversity and people trained for educational research

Establish undergraduate minor and graduate certificate in applied educational research and/or data science in COEHS

Support state workforce in educational research and policy development

Contact Information

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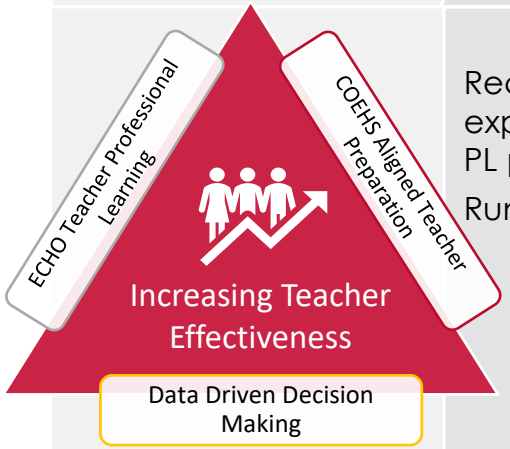
Theory of Change: Project ECHO & UNM COEHS

GOAL

Increase student achievement in the key areas of reading, math and science, with a focus on literacy in New Mexico and improve state capacity for data driven decision making in education.

METHOD

Project ECHO will use the ECHO model to provide high-quality professional learning and mentorship equally accessible to all teachers in New Mexico ensuring that students in grades K-5, and 9th grade have access to teachers and instructors proficient in training core skills in math, science and literacy. COEHS will create a new state resource for educational research and evaluation, the Office of Outcome-Based Educational Evaluation (OUTCOMES) supporting curricular alignment in teacher prep and data driven decision making and program evaluation in NM.

KEY STRATEGIES	ACTIVITIES	OUTPUTS	OUTCOMES	RESULTS
 Effective support for teachers through their career span	Recruit ~ 60 local and national experts to support high-quality ECHO PL programs for NM teachers Run 34 programs in key areas of Structured Literacy, Science, Math Monitor shared metrics Establish a **new state resource for educational research and evaluation**, the Office of Outcome-Based Educational Evaluation (OUTCOMES)	540 ECHO Professional Learning sessions **1320 participating teachers** annually An undergraduate minor and graduate certificate in applied educational research and/or data science at COEHS	ECHO participants gain knowledge and self-efficacy through expert presentations and collaborative learning. Participating educators implement best practices with fidelity increasing teacher effectiveness Impacting **~22,260 students annually** Enhance adoption of evidence-based best practices in COEHS	Increases in student achievement in key areas: **Reading Math Science** Reduced Teacher Burnout Increased Teacher Retention Increase in evidence-based best practices implemented in schools and education system