Leveraging Workforce Development to Build and Sustain Technology-Connected Communities

A Project of the
New Mexico Highlands School of School of Education
Victoria D. de Sanchez Teacher Education Center

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New Mexico Highlands University

- Hispanic Serving Institution
- 10% Native American
- 4-year public
- Master's College & University (larger programs)
- Open Admission
- Rural

- Las Vegas, Santa Fe, Rio Rancho, Albuquerque, Farmington, and Online
- Pell 53.5%
- 3,000 (1,750 undergrad/1,037 grad)
- High first-generation learners
Leveraging Workforce Development to Build and Sustain Technology-Connected Communities

NEW MEXICO: FUNDING HIGHER EDUCATION TO EXPAND ONLINE LEARNING CAPACITY

Governor Michelle Lujan Grisham has dedicated GEER Funds to higher education institutions to transition to online learning. Higher education can lead the state – early childhood, K-12, higher education and small businesses – to more fully participate in online learning.

Up to $4,007 million available.
Northern New Mexico IHE and Community Partners Consortia

Our Purpose

Collaboration and development of four Technology Learning Support Specialists (TLSS) micro credentials as a community investment and revitalization strategy to build and sustain technology-connected communities through workforce development.

The Power to Innovate and Scale is in the Collective
Programming Deliverables

**ACCESS AND ACCESSIBILITY**
- Handheld Technology

**NEW PARAPROFESSIONAL CAREER LADDER**
- Early Childhood to Grade 12

**NESTED LEADERSHIP MODEL**
- Equity and Culturally Sustaining Pedagogy
- Drive Instructional Design

**SEER PRINCIPALS FOR DISSEMINATION**
- Findings Open Source
- Cost Analysis
- Meaningful Outcomes

- Open Data
Access and Accessibility

DELIVERY MODEL
- LMS
- Coaching
- Asynchronous
- 60 Minute Modules
- 98% Rural Cell Phone Coverage

SKILLS GAP
Educational Services
Addressing Learning Loss
Use of Technology in Schools

Educational Services is currently the 5th largest projected growth industry identified by the New Mexico Department of Workforce both in the state as well as Northern NewMexico.

Figure 1: New Mexico Projected Employment Growth by Major Industry Sector (2020)
New Paraprofessional Career Ladder

TLSS Grow Your Own Workforce Pathways

Parents and Caregivers
Early Childhood PreK-Grade 3
Elementary K-8
High School

Technology Learning Support Specialist Boot Camps (TLSS)
Nested Leadership: The Power of a Consortium

Culturally Sustaining (Paris, 2012)

Theoretical Framework

- Problems of Practice (Earick, 2014)
- Placed-Based (Cajete, 2000)
- Organic Scholars (Earick, 2009)
- Unique Funds of Knowledge (Moll, 2005)
- Alignment of Contributions (Pillsbury, 2008)
- Decentralizing Whiteness (Earick, 2018)
## Data Snapshot

### Parents and Caregivers Pilot Data N=145

<table>
<thead>
<tr>
<th>Race*</th>
<th>Age</th>
<th>Education</th>
<th>Outreach</th>
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<tbody>
<tr>
<td>Native Hawaiian Pacific Islander</td>
<td>Over 65</td>
<td>4%</td>
<td>3% Community College</td>
</tr>
<tr>
<td>AA or Black</td>
<td>15-24</td>
<td>11%</td>
<td>7% NMPS</td>
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<tr>
<td>Multiracial</td>
<td>55-64</td>
<td>12%</td>
<td>9% NMHU</td>
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<tr>
<td>American Indian Alaska Native</td>
<td>35-44</td>
<td>15%</td>
<td>14% Other</td>
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<tr>
<td>Asian</td>
<td>25-34</td>
<td>27%</td>
<td>30% Employer, Friend, Family</td>
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<tr>
<td>White</td>
<td>45-54</td>
<td>31%</td>
<td>BA 37%</td>
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<table>
<thead>
<tr>
<th>Gender*</th>
<th>Experience</th>
<th>Employment</th>
<th>Language</th>
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<tbody>
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<td>Transgender</td>
<td>None</td>
<td>Student</td>
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<tr>
<td>Male</td>
<td>Little</td>
<td>Seeking</td>
<td>Bilingual-Spanish</td>
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<tr>
<td>Female</td>
<td>A lot</td>
<td>PT</td>
<td>Multi-lingual</td>
</tr>
<tr>
<td></td>
<td>Some</td>
<td>FT</td>
<td>English Only</td>
</tr>
</tbody>
</table>

*Socially Constructed

### BADGES & CERTIFICATES

- MOD 101/CERT (15) 13%
- MOD 104 (17) 15%
- MOD 103 (21) 18%
- MOD 102 (26) 22%
- MOD 105/CERT (15) 13%
Data Snapshot
Parents and Caregivers Pilot Data N=120

What was enjoyable, or you liked?

- Modularity .52
- Influence Distribution 100%
- Essence
  - Use of video technologies were now viewed as value added rather than only negative in the lives of children and can be enjoyed by all.
  - New skills in understanding how children learn or can learn created positive associations between caregivers and children and technologies.
  - The module created opportunities for families to learn together on how to best use technologies and how they impact health and well-being.
  - Participants saw the value of creating plans with children on technology use as well as how caregivers and optimize its use.
What was challenging or did you not like?

- Modularity .75
- Influence Distribution 80%
- Essence
  - Textbox submissions, saving features and time zones could be confusing.
  - Understanding what resources were in a community could be difficult for users.
  - The modules were more challenging for users with out children and activities need to be added for those users.
  - Additional videos, real-world examples and diverse resources would add value.
SEER Principles for Dissemination

Standards for Excellence in Education Research

- Pre-register studies.
- Make findings, methods, and data open.
- Identify interventions' core components.
- Document treatment implementation and contrast.
- Analyze interventions' costs.
- Focus on meaningful outcomes.
- Facilitate generalization of study findings.
- Support scaling of promising results.


Goal: Provide technology instruction to educators, parents, and caregivers to increase skills needed to participate in distance learning.

Objective 1: 80% of Northern NM instructional providers enrolled in the program will complete the module successfully as measured by satisfactory results on module assessments.

Objective 2: 80% of Northern NM parents and caregivers enrolled in the program will complete the module successfully as measured by satisfactory results on module assessments.

Objective 3: 5000 participants will enroll in the TLSS modules.

Objective 4: By the end of the project, NMHU and the project partners will develop rubrics, standards, and metrics to measure TLSS’s ability to meet industry standards in distance education.
“As states, districts, and schools prepare to restart and reinvent in response to the COVID-19 pandemic, it is imperative that we transform our ideas of school to match the demands of this historic moment. It is clear that returning to business as usual in education is not possible and that we must think of “school” in deeply different ways”

Hammond, et.al., 2020, p.xiii
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References


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