P20W and K-12 Longitudinal Data Systems:

Tracking Student Progress in STEM Curricula, Grade School Through College

Presented by Joseph Leakakos, Kathryn Zenoni, and Conrad Cordova
New Mexico Higher Education Department, Public Education Department

RISE NM
Research Informing Success in Education

DISCUSSION POINTS

Project Overview

Mission

RISE NM's mission is to expand the accessibility and usability of statewide educational and workforce cross-agency data. This tool will help drive informed decision- and policy-making that produces positive impacts to the education and workforce outcomes while protecting individual privacy and confidentiality.

Vision

RISE NM will be a resource for reliable statewide, cross-agency data and reports that guide decisions and policies that prepare and drive sustainable educational decisions and emerging workforce needs.

Key Stakeholders

Decision-Making Groups and Key Stakeholders

Decision-Making Groups
- Office of the Governor
- Executive Leadership: Cabinet Secretaries and Chief Information Officers (CIOs)
- Project Steering Committee (PSC)
- Data Governance Advisory Council (DGAC)

Key Stakeholders
- State Leaders
- State and Local Education Agencies
- Educators
- Workforce Developers
- Early Childhood Practitioners
- Internal and External Researchers
- Policymakers
- Public

4

Partners

Technical Partners

Google

carahsoft.

DOUBLE LINE

Tamr

NTT DATA
Trusted Global Innovator

VES VERITE Educational Services

State Partners

NEW MEXICO HIGHER EDUCATION DEPARTMENT
Fostering Student Success from Cradle to Career

NEW MEXICO Early Childhood Education & Care Department

NEW MEXICO Public Education Department

New Mexico Department of WORKFORCE SOLUTIONS

DVR
New Mexico Division of Vocational Rehabilitation
Public Education Department

Policy Partners

BILL & MELINDA GATES foundation

VERITAS HARVARD

STRATEGIC DATA PROJECT

SLDS

Setting the Stage: History of the K-12 Statewide Longitudinal Data System

- Why is the K-12 Statewide Longitudinal Data System (SLDS) important?

  - Used for district funding

  - Public and policymakers will have access to district data

- PED follows statute to collect student demographic and district data.

- The PED K-12 SLDS has existed for over 15 years.

- In August 2020, work on Nova started.

Current State of the Field: K-12 Longitudinal Data System

- Districts submit membership data to PED.

- The PED K-12 SLDS is one of many longitudinal data systems within the larger state educational system.

- PED utilizes a longitudinal data warehouse for storing district data over time.

- Certified data is moved from Nova year after year to the PED SLDS.

- The PED K-12 SLDS is a primary source of data for RISE NM.

The Future of the K-12 Statewide Longitudinal Data System

- Awarded a federal $4M grant to build K-12 SLDS and RISE NM.

- Standardize all PED data into Nova and SLDS.

- Facilitate easy access to the data for PED programs and districts.

- Build out federal reporting capabilities.

- Automate data sharing with RISE NM.

Data Sources

Agency	Data System
Early Childhood Education and Care Department (ECECD)	Early Childhood Observation Tool (ECOT)
ECECD	Enterprise Provider Information and Constituent Services (EPICS)
Public Education Department (PED)	Professional Licensure System
PED	PED K-12 State Longitudinal Data System
Higher Education Department (HED)	Electronic Data Editing and Reporting (eDEAR) System
HED	Literacy, Adult and Community Education System (LACES)
HED	National Student Clearinghouse
Division of Vocational Rehabilitation (DVR)	Case Management System (CMS)
Department of Workforce Solutions (DWS)	New Mexico Workforce Connection
DWS	Unemployment Insurance Tax and Claims System (UI Tax and Claims)

Data Pipeline

Implement Data Lake
Repository of data stored in its raw format

1

Data Ingestion
Data is ingested into NMLDS from ten data source systems across five agencies

2

Tamr Installation and MUID Creation
Create Master Unique Identifier (MUID) for records found across various data sources

3

Implement Data Warehouse
Repository of data that will be used to create data analysis and visualizations

4

Create Data Analysis and Visualizations
Data analysis and visualizations will help inform programmatic and policy decision-making

5

Data Privacy and Security

- Master Unique Identifier (MUID) through Tamr to protect Personally Identifiable Information (PII)
- Data warehouse and visualizations without PII
- Trend-based visualizations and reporting
- Range of cloud services to support security, governance, and oversight
- IT best practices for secure and automated processes with minimal human involvement

Research Process

Conducted Phase I of Stakeholder Engagement
Solicited feedback from various stakeholders in what they want to see in NMLDS and compiled requirements

Prioritized Research Questions
Developed descriptive, longitudinal research questions for the first iteration of NMLDS visualizations informed by alignment between stakeholder feedback and SLDS research agendas

Continue to Refine Research Language and Data Elements
Working with representatives from the state agencies to continue to understand data nuances and availability

1 2 3 4 5

Analyzed and Aligned with Other Statewide Research Agendas
Compared initial stakeholder engagement feedback with Statewide Longitudinal Data Systems (SLDS) research agendas

Met with Partner Agency Representatives
Discussed research questions, proposed visualizations, and proposed data elements with programmatic representatives at the five state agencies

Examples of Research Questions

1. How do measures of **school readiness** vary by early childhood programming factors and demographics?

2. How do measures of **college and career readiness** vary by demographics, district, and locale?

3. How do **employment metrics** vary by demographic characteristics, workforce area, educational attainment level, and study program?

Visualization Draft Examples
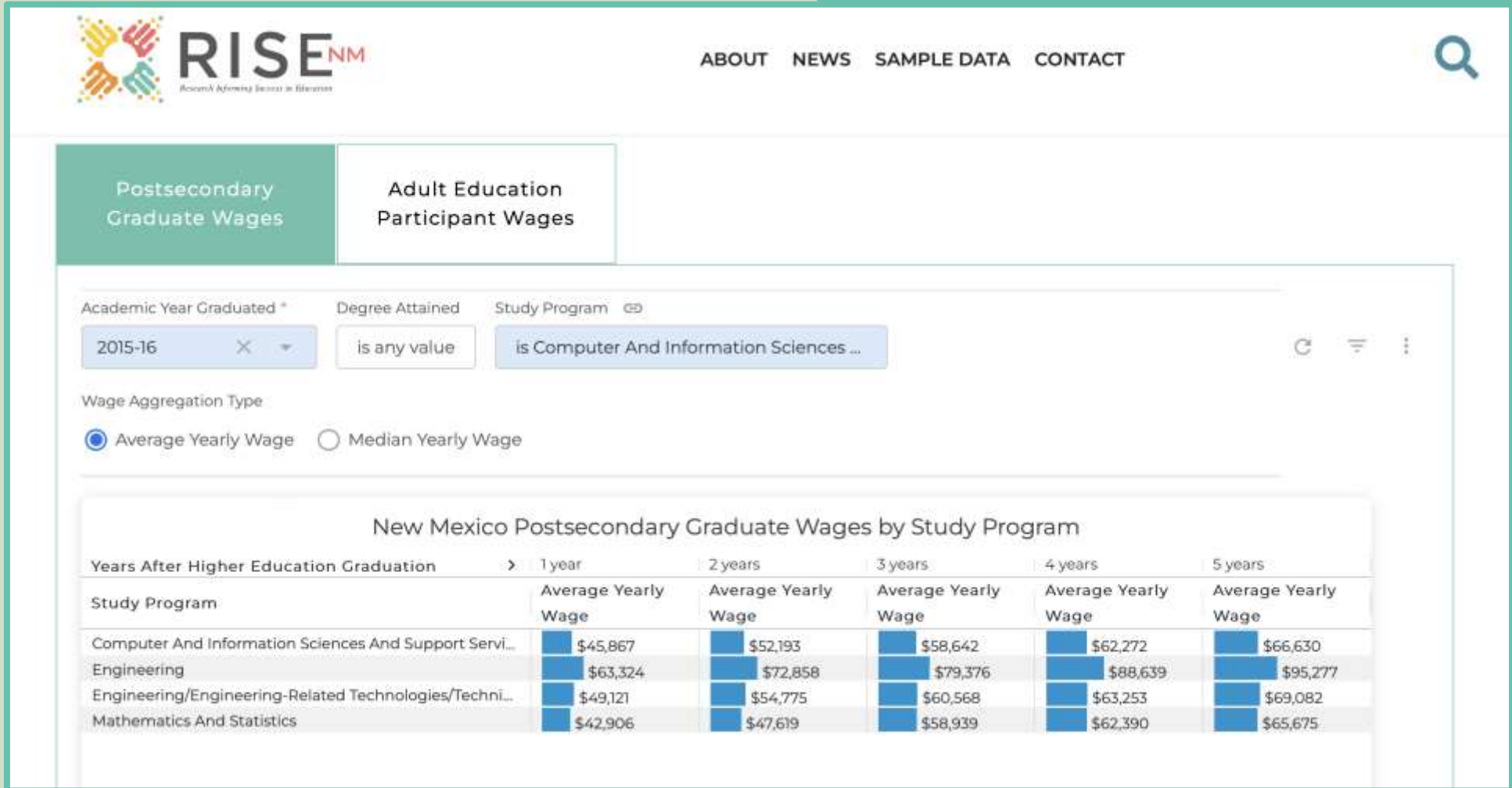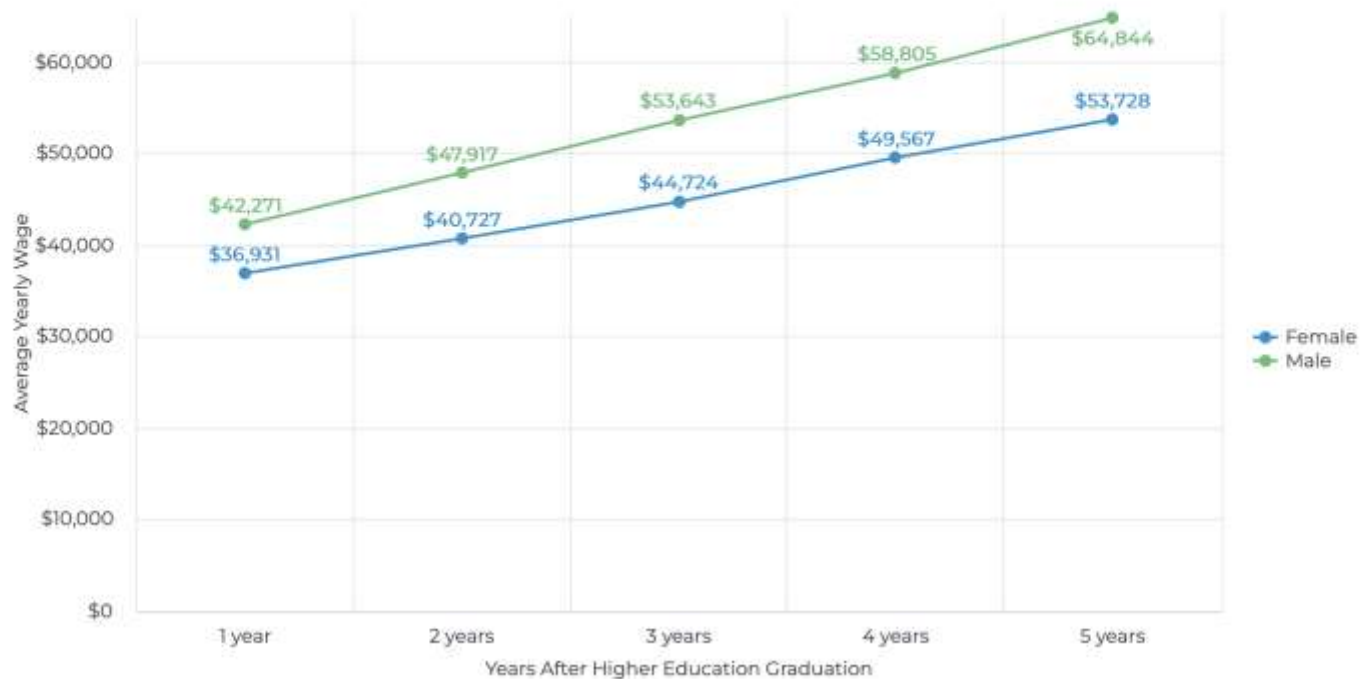
Visualization Draft Examples

Visualization Draft Examples

What's to come for RISE NM in Phase II?

1. Infrastructure Enhancements

2. Internal State Research

3. Access for External Researchers
- Data Request Portal

4. New Research Questions

5. New Data Sources

Questions?

Contact Us!

rise.nm.gov

Message the RISE NM Project Team:

RISENM@hed.nm.gov

THANK YOU!

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NEW MEXICO PUBLIC EDUCATION DEPARTMENT