



Research Workshop Series

Session 1: Data and Evidence

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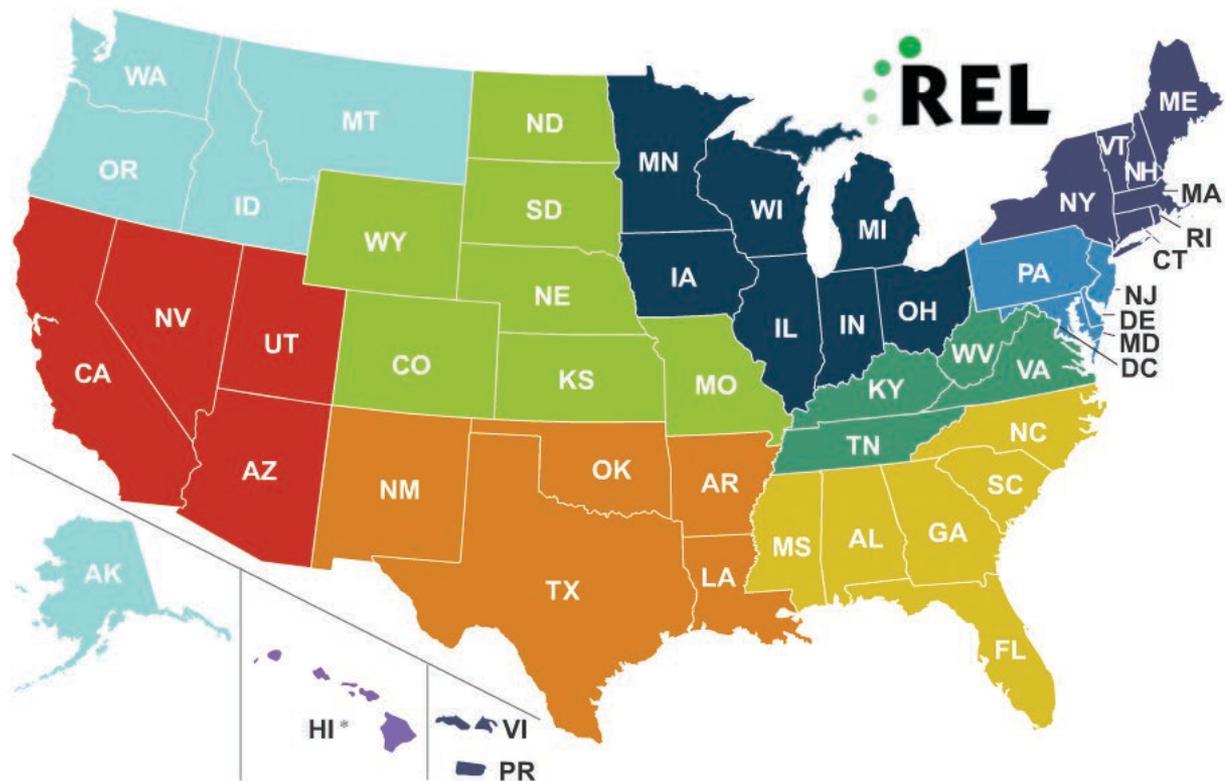
10 / 02 / 2018



Agenda

1. What is REL Midwest?
2. Overview of training series
3. Data collection methods
4. Types of research and levels of evidence
5. Continuous improvement model
6. Session close and evaluation

Regional Educational Laboratories



- | | |
|--------------|----------|
| Appalachia | NW |
| Central | Pacific* |
| Mid-Atlantic | SE |
| Midwest | SW |
| NE & Islands | West |

* The Pacific Region contains Hawaii, pictured on the map, and American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia (Chuuk, Kosrae, Pohnpei, & Yap), Guam, the Republic of the Marshall Islands, & the Republic of Palau, not pictured on the map.

REL Midwest States



Workshop Series

2018

October 2 **Data, Research, and Evidence Overview**
November 28 **Surveys and Focus Groups**

2019

January 29 **Interviews, Observations, and Rubric
Development**

March 4 **Understanding and Interpreting
Qualitative and Quantitative
Evidence**

April 1 **Research Resources and Data
Visualization**



Today's Goals

1. Discuss appropriate uses of different kinds of **data collection methods**.
2. Overview of different types of research and **levels of evidence**.
3. Discuss how ISBE uses data and evidence in the context of a **continuous improvement cycle**.

Data Collection Methods

Data Collection Options

Interviews?
Focus groups?

Surveys?

Observations?

Access
existing data?





Surveys are appropriate data collection tools for many purposes . . .

A survey can produce **quantitative descriptions** of the characteristics and viewpoints of a population.

Focus Groups



Participant interaction can provide a rich description of views and experiences.

Focus Groups



Explore quantitative findings

Use as a stand-alone data collection method

When to Use Focus Groups Instead of a Survey

Focus Groups



Surveys



Interviews are suitable for investigating complex topics without well-defined research questions.



Observations



Rubrics as Assessment Tools

	No implementation	Partial implementation	Full implementation
1.			
2.			
3.			
4.			

Analyzing Existing Data





Methods can work together to create better research tools and more comprehensive findings

Activity

Work in your group to select a data collection method (or combination of methods) that would be appropriate for each data need scenario.

Take a Break



Research and Levels of Evidence

Categories of Research



You want to know . . .

How successful are several different programs in your district at enhancing elementary students' digital literacy skills?



Foundational, Exploratory Research

- Supports development of a theory.
 - *Describes* what digital literacy means for K–3 children. **Documents** how K–3 children interact with and understand technology and digital devices.
- Establishes initial connections to outcomes of interest.
 - *Examines* what activities and experiences **relate** to higher levels of digital literacy.

Design and Development Research

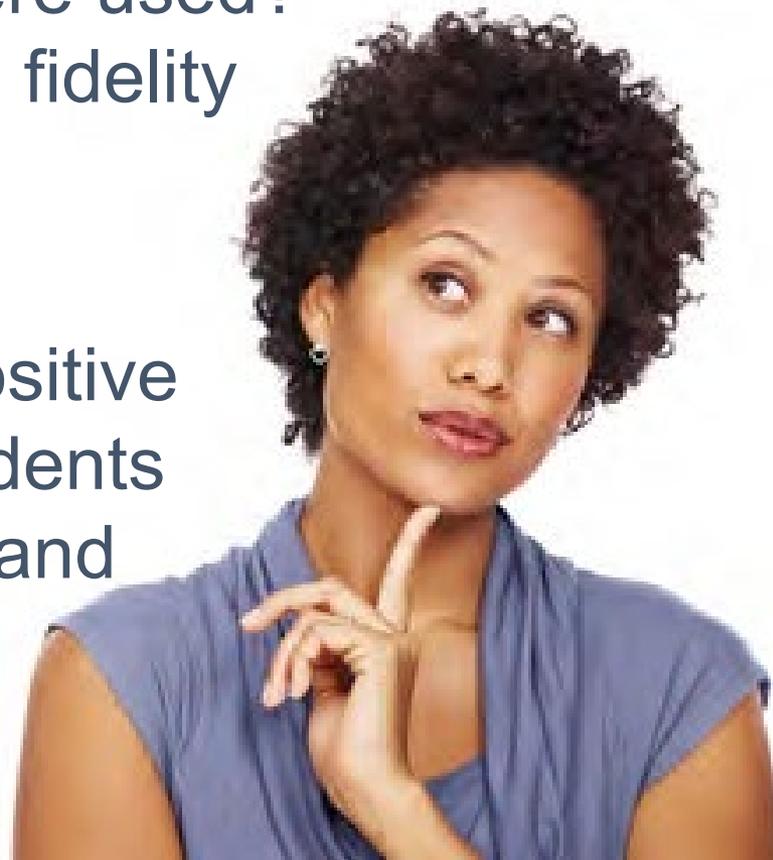
- Develops interventions or strategies based on theory.
 - *Designs a program to integrate digital literacy activities into K–3 curriculum. Develops measures to track implementation.*
- Tests components of intervention to inform the development process.
 - *Examines data from teachers about implementation challenges. Measures students' skill development. Refines components of program.*

Impact Research

- Determines if a well-defined program achieves its intended outcome and estimates impact.
 - *Conducts a large-scale study comparing digital literacy skills (using a reliable and valid assessment) of students in a randomly selected group of schools that are implementing the program and those in a group of schools that are not.*

Questions to consider when assessing research evidence . . .

- What kind of research has been done?
- What research methods were used?
Did researchers assess the fidelity of implementation of the intervention?
- Does the research show positive effects? If so, for which students and under what conditions and to what magnitude?



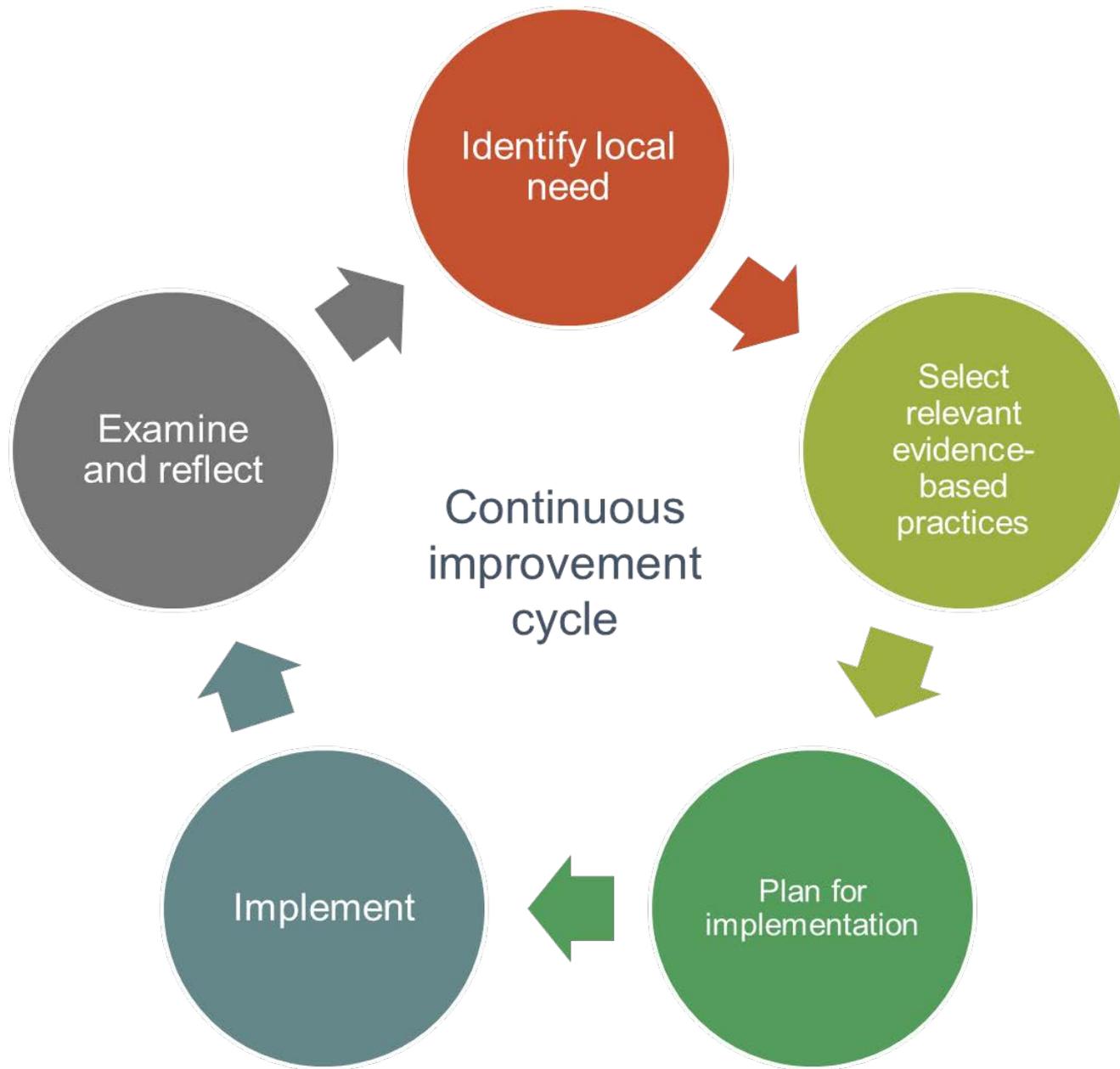
Activity

Briefly read through the research article focusing on methods and results.

Discuss at your table:

- What type of research design was used?
- What methods were used, and were they used appropriately?
- What questions do you have about the findings?

Continuous Improvement Cycle



Activity

Work in your group to identify examples of where your division is currently using locally collected data and/or evidence-based research to inform different elements of the continuous improvement cycle.



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