Research Workshop Series
Session 1: Data and Evidence

Jill Walston

9 / 28 / 2017
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

* 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.
Workshop Series

2017

September 28  Data, Research, and Evidence
October 24    Survey Development and Administration
November 15   Interviews and Focus Groups

2018

January 17    Observations and Rubric Development
March 8       Data Analysis
April 25      Communicating Research Findings
Today’s Goals

1. Discuss appropriate uses of different kinds of data collection methods.
2. Present overview of different types of research and levels of evidence.
3. Discuss how DPI uses data and evidence in the context of a continuous improvement cycle.
Data Collection Methods
Surveys are appropriate data collection tools for many purposes ...
A survey can produce **quantitative descriptions** of the characteristics and attributes of a population.
Think about how survey results will be used.
Other Data Collection Options

Interviews?
Focus groups?

Observations?
Access existing data?
Focus Groups

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

Help formulate and pretest survey items.

Explore quantitative survey findings.

Use as a stand-alone data collection method.
When to Use Focus Groups Instead of a Survey
Focus Groups
Interviews are suitable for investigating complex topics without well-defined research questions.
Observations

1. Planning for a Survey
## Rubrics

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<th>No implementation</th>
<th>Partial implementation</th>
<th>Full implementation</th>
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Analyzing Existing Data
Activity: Handout 1

Work in your group to select a data collection method (or combination of methods) that would be appropriate for each data need scenario.
Research and Levels of Evidence
Different Types of Research Contribute to Our Knowledge in Different Ways.
Let’s say you are interested in early elementary programs aimed at advancing students’ digital literacy skills.
Foundational, Exploratory Research

• Supports development of a theory.
  • *Describes what digital literacy means for K-3 children. Determines 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) for students in a randomly-selected group of schools implementing the program and those in a group of schools that are not.
Questions to Consider about a Program or Intervention

• What kind of research has been done?
• Does the research show positive effects? If so, for which students and under what conditions?
• How large is the effect compared with other programs?
• How strong is the evidence?
Levels of Evidence in the Every Student Succeeds Act (ESSA)

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<th>Tier 1</th>
<th>Strong Evidence</th>
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<th>Tier 2</th>
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Levels of Evidence in the Every Student Succeeds Act (ESSA)

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Where Can We Find Information about Evidence-based Practices and Programs?

- What Works Clearinghouse

- Best Evidence Encyclopedia
  http://www.bestevidence.org/
Continuous Improvement Cycle
Identify local need

Continuous improvement cycle
Continuous improvement cycle

1. Identify local need
2. Select relevant evidence-based practices
Continuous improvement cycle

1. Identify local need
2. Select relevant evidence-based practices
3. Plan for implementation
Continuous improvement cycle

1. Identify local need
2. Select relevant evidence-based practices
3. Plan for implementation
4. Implement
Continuous improvement cycle

1. Identify local need
2. Select relevant evidence-based practices
3. Plan for implementation
4. Implement
5. Examine and reflect
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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