Using Data and Evidence to Facilitate Action: Developing a Research and TCTS Agenda

June 22, 2018

Meeting of the REL Appalachia Cross-State Partnership

Agenda

- 9:30   Welcome, introductions, and purpose

- 9:40   Review research agenda and state comments

- 9:50   Literature and landscape scan results (preliminary)

- 10:20   Review and refine research activities

- 11:20   Wrap-up & next steps

Welcome

INTRODUCTIONS AND PURPOSE

Introductions

- Name

- Affiliation

- Share one update on data-use activities since we met in February

Handout 1

REL AP Staff

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Key Goals for the REL Program

- Sustain **partnerships** that use research to address high-leverage issues.

- Complete coherent and cumulative **research agendas**.

- Use REL AP as a **key resource** for credible research and support.

- **Increase capacity** to access, understand, interpret, apply, and conduct research.

- **Increase use** of research findings in education decisionmaking.

Cross-State Partnership Goal

To build capacity among local data users to access, understand, and use state data resources to facilitate action at the local level.

…. helping to address "data rich, information poor" (DRIP) syndrome.

Workshop Objectives

- Finalize research agenda for the partnership.

- State partners provide input that will advance the research activities and inform the project plan.

- Discuss landscape and literature results to inform research activities.

Review of Research Agenda

Your Research Agenda

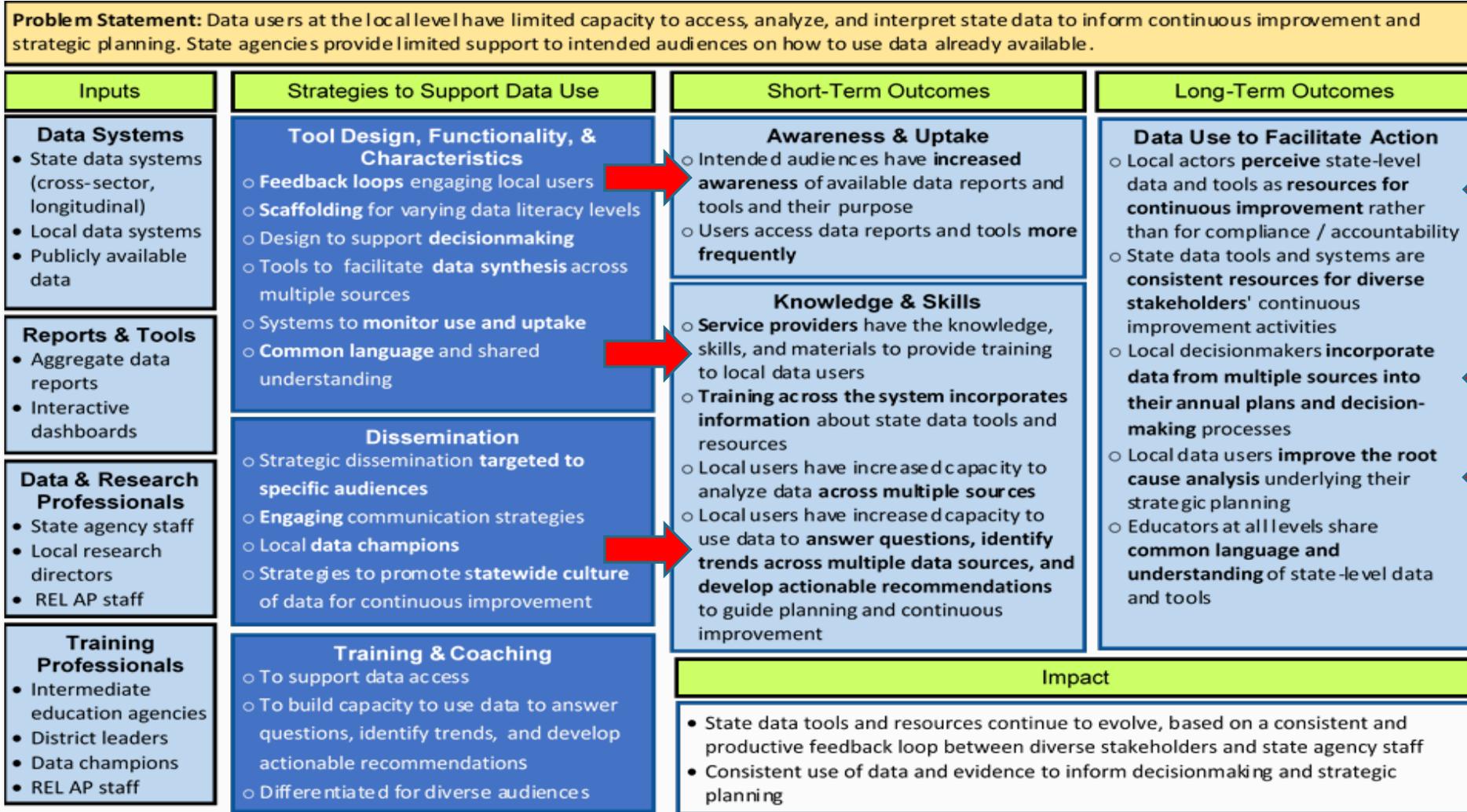Addresses a high-leverage need:

- *Bolsters ability of state agency staff' to support local stakeholders and others in using data to develop and monitor policy and practice.*

- *Supports local stakeholders' interests in using the data already being collected through multiple data systems.*

- *Supports local efforts to strengthen the use of statewide data in data-based decisionmaking efforts.*

Cross-State Logic Model

Problem Statement: Data users at the local level have limited capacity to access, analyze, and interpret state data to inform continuous improvement and strategic planning. State agencies provide limited support to intended audiences on how to use data already available.

Inputs	Strategies to Support Data Use	Short-Term Outcomes	Long-Term Outcomes
Data Systems • State data systems (cross-sector, longitudinal) • Local data systems • Publicly available data	**Tool Design, Functionality, & Characteristics** ○ **Feedback loops** engaging local users ○ **Scaffolding** for varying data literacy levels ○ Design to support **decisionmaking** ○ Tools to facilitate **data synthesis** across multiple sources ○ Systems to **monitor use and uptake** ○ **Common language** and shared understanding	**Awareness & Uptake** ○ Intended audiences have **increased awareness** of available data reports and tools and their purpose ○ Users access data reports and tools **more frequently**	**Data Use to Facilitate Action** ○ Local actors **perceive** state-level data and tools as **resources for continuous improvement** rather than for compliance / accountability ○ State data tools and systems are **consistent resources for diverse stakeholders'** continuous improvement activities ○ Local decisionmakers **incorporate data from multiple sources into their annual plans and decision-making** processes ○ Local data users **improve the root cause analysis** underlying their strategic planning ○ Educators at all levels share **common language and understanding** of state-level data and tools
Reports & Tools • Aggregate data reports • Interactive dashboards		**Knowledge & Skills** ○ **Service providers** have the knowledge, skills, and materials to provide training to local data users ○ **Training across the system incorporates information** about state data tools and resources ○ Local users have increased capacity to analyze data **across multiple sources** ○ Local users have increased capacity to use data to **answer questions, identify trends across multiple data sources, and develop actionable recommendations** to guide planning and continuous improvement	
Data & Research Professionals • State agency staff • Local research directors • REL AP staff	**Dissemination** ○ Strategic dissemination **targeted to specific audiences** ○ **Engaging** communication strategies ○ Local **data champions** ○ Strategies to promote **statewide culture** of data for continuous improvement		
Training Professionals • Intermediate education agencies • District leaders • Data champions • REL AP staff	**Training & Coaching** ○ To support data access ○ To build capacity to use data to answer questions, identify trends, and develop actionable recommendations ○ Differentiated for diverse audiences		

Impact
• State data tools and resources continue to evolve, based on a consistent and productive feedback loop between diverse stakeholders and state agency staff • Consistent use of data and evidence to inform decisionmaking and strategic planning

Research Questions & Activities

Do local leaders understand the connection between available data, results, their inferences and actions?

Support survey development across states	Administer survey, provide input on interpretation and reporting

What skills, structures, and supports do district and state leaders need to create a culture of data-driven decisionmaking?

Conduct literature scan; support states in identifying resources; facilitate protocol development	Conduct scan of internal tools and resources that can be shared; conduct cognitive interviews

In what ways do local users improve their capacity to use student, classroom, schoolwide and linked data to improve their instructional program? How do they determine what works?

Co-lead professional learning community	Co-lead professional learning community

Proposed Time Line for Activities

RQ 1 · · · · · · Survey · · · Interviews · · · · · · RQ 3 → Professional Learning Community

Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020

RQ 2 —— Literature & landscape scan · · · Cognitive interviews
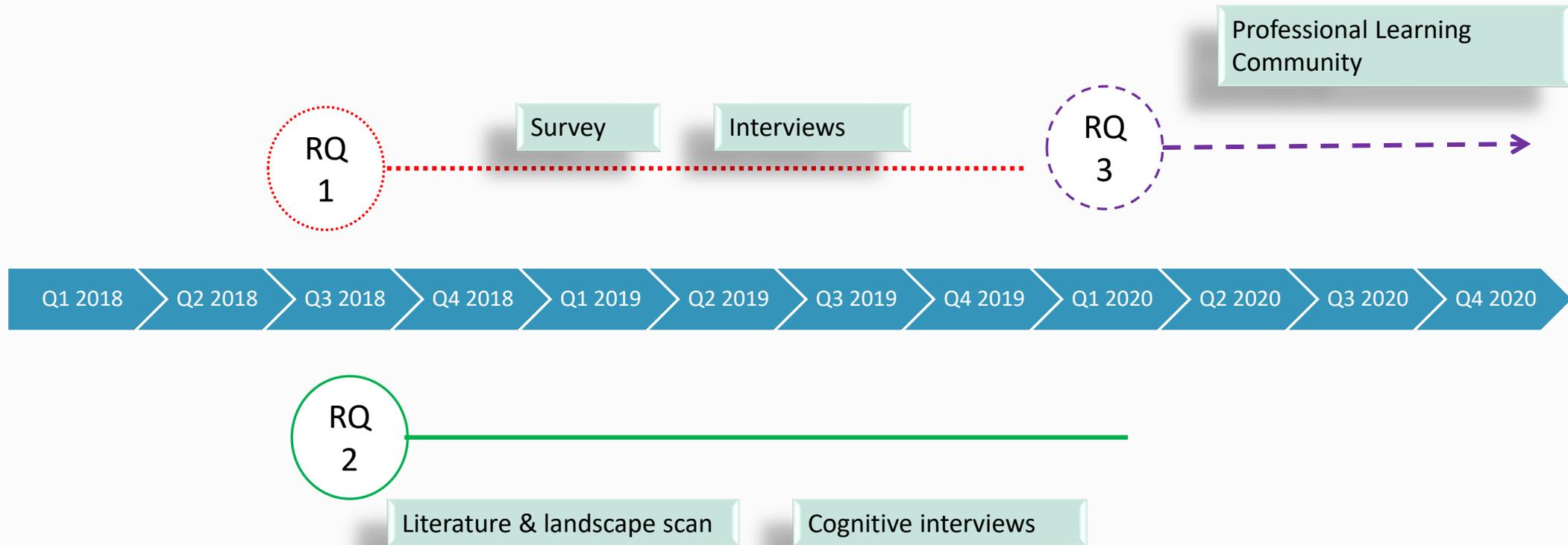
Data Use Scans

Data Use Scans

Supports Research Question 2

What skills, structures, and supports do district and state leaders need to create a culture of data-driven decisionmaking?

*Preliminary search was focused on K12 education; additional effort may be invested in understanding unique feature of leaders' data use in postsecondary and workforce development initiatives.

Purpose of Preliminary Scans

Literature and Tools

- Review and summarize literature related to leaders' data use.

- Identify measures and instruments that may assess leaders' data use.

- Identify tools and resources to support leaders' use of data.

- Summarize potential topics and of interest for partnership.

Preliminary Search Process

Resource Types

- Research articles

- Reports and briefs

- Case studies

- Toolkits and guides

Sources

- ERIC and PsychINFO

- IES and REL Websites

- Doing What Works

- Strategic Use of Data

- Google and Google Scholar

*Preliminary search was focused on K12 education; additional effort may be invested in understanding unique feature of leaders' data use in postsecondary and workforce development initiatives.

Three Categories of Findings

1. Research on leaders' data use.

2. Resources to support leaders' data use.

3. Instruments to measure leaders' data use.

Handout 3

Research on Data Use

What types of data do studies reference?

- Student achievement data.

- Teacher evaluation and effectiveness data.

- Attendance records, discipline reports, dropout data, graduation data.

- Surveys of students, teachers, or parents.

Key Themes from Research

Leaders use data to:

- Improve curricula and instruction.
- Inform professional development.
- Inform student placement.
- Meet accountability reporting requirements.
- Improve organizational operations and management.
- Measure effectiveness of outreach to families and the local community.
- Track and modify school or district goals.

Capacity to use data is dependent on:

- Culture of data use.
- Personnel and school staff support.
- Effective collaborations and partnerships.
- Data accessibility.
- Data analysis skills.
- Extent to which data collected align with systems-wide goals.

Tools & Guides to Support Data Use

- Toolkit for a workshop on building a culture of data use.

- Getting State Education Data Right: What We Can Learn from Tennessee.

- Doing What Works protocols

  o Using Student Achievement Data to Support Instructional Decision Making

  o Planning to Use Data for Instructional Improvement: District and State Levels

Example Instruments to Measure Data Use

- Principal Data-Driven Decision Making Index (P3DMI; Mingchu, 2008).

- Scales of Data Quality, Accessibility and Analysis Skills (SDQAAS; Mingchu, 2008).

- Strategic Use of Data Rubric is a self-assessment of organizations' use of data to improve (Center for Education Policy Research, 2014).

Example Topics Measured

- Frequency of data use.
- Accessibility of data.
- Perceptions of data use.
- Perceptions about capacity to use data.
- Extent to which data are available.
- Extent to which data are used for decision making.
- Extent to which data is used for monitoring.

- Data quality.
- District requirements for data-driven decisionmaking.
- Capacity and skills to analyze data.
- Leaders' education and experiences.
- Types of data collected.
- What data are used for.
- Whether or not data are used for strategy or goal setting.

Discussion of Example Topics

- Which research themes, tools, guides, and example topics are of interest to you?

- Is there anything missing?

- Do you currently measure any of these topics? Others?

Activity 1

Research Question 1 Activities

DO LOCAL LEADERS UNDERSTAND THE CONNECTIONS AMONG AVAILABLE DATA, RESULTS, AND THEIR INFERENCES AND ACTIONS?

Activities that Support Research Question 1:
Do local leaders understand the connections among available data, results, and their inferences and actions?

Surveys of local leaders

- Develop items that measure
  - What data sources local leaders use and don't use
  - How local leaders use data
  - What data local leaders need

- Support states in administration and analysis

- Identify tools and resources used for decision making

Interviews with nonusers of data

- Develop interview questions that measure
  - Local leaders' use/non-use of data tools
  - Local leaders' needs related to data tools

- Support states in conducting and analyzing interview data

Communication and Dissemination plan

- Two-page briefs of survey and interview results
- Brief about data use for continuous improvement
- Inventory of tools and resources

Handout 4

REL APPALACHIA
Regional Educational Laboratory
At SRI International

Questions to Support Activities

- Are there any themes from the literature that are priorities to measure of local leaders?

- Are these proposed activities duplicative of any work in your department?

- Who might be the appropriate respondents for the survey? Interviews?

- How might you use the results of the surveys? Interviews?

- Frequency of data use.
- Accessibility of data.
- Perceptions of data use.
- Perceptions about capacity to use data.
- Extent to which data are available.
- Extent to which data are used for decision making.
- Extent to which data is used for monitoring.
- Data quality.
- District requirements for data-driven decisionmaking.
- Capacity and skills to analyze data.
- Leaders' education and experiences.
- Types of data collected.
- Whether or not data are used for strategy or goal setting.
- What data are used for.

Activity 2

Proposed Roles

REL Activities

- Develop survey items that can be used across states.
- Work with states to develop internal items that support their data use goals.
- Describe results that typical state data sets produce.
- Document reasons why local leaders are/are not using state data sets to make decisions.
- Document the data sources and tools they currently use to make decisions.
- Analyze survey data.

State Activities

- Identify who within partnership's respective departments will be responsible for survey development and distribution.
- Administer survey and jointly interpret results.
- Identify dissemination strategies.
- Identify key informants for interviews.
- Conduct interviews.
- Analyze interviews.

Research Question 2 Activities

WHAT SKILLS, STRUCTURES, AND SUPPORTS DO DISTRICT AND STATE LEADERS NEED TO CREATE A CULTURE OF DATA-DRIVEN DECISIONMAKING?

Activities that Support Research Question 2

Scans of research, tools, and instruments related to data use

- Conduct comprehensive literature scan to identify evidence- or research-based practices.
- Conduct comprehensive landscape scan of tools.
- Create resource with results of the scan.
- Support states in cataloguing data use tools in use in the REL AP region.

Cognitive interviews about data use tools

- Develop cognitive interview protocol to investigate how local users employ data use tools.
- Provide support for states to conduct cognitive interviews with stakeholders in their states.

Handout 5

Questions to Support Activities

Scan of research, tools, and instruments related to data use

- Is this scan duplicative of any work at your department?
- How might you use the resource we propose to develop (based on what we presented today)?
- Does your state already employ specific data use tools or resources (for local users)?
- Are there other department staff who need to be included?

Cognitive interviews about data use tools

- Is this proposed activity duplicative of any work in your department?
- How might you use the results of the interviews?
- What need/capacity do you have to conduct interviews?
- Who might be the appropriate respondents for the interviews?

Is one of these activities more relevant or necessary than the other?

Activity 3

Proposed Roles

REL Activities

- Conduct comprehensive literature scan to identify evidence- or research-based practices.
- Conduct comprehensive landscape scan of tools.
- Catalog results and topics based on partnership needs.
- Support development of cognitive interview protocols for state staff use.

State Activities

- Repeat scan to identify intra-departmental tools to include on the list of tools to support strategic planning.
- Conduct cognitive interviews with small sample of users.

Research Question 3 Activities

IN WHAT WAYS DO LOCAL USERS IMPROVE THEIR CAPACITY TO USE STUDENT, CLASSROOM, AND SCHOOLWIDE DATA TO IMPROVE THEIR INSTRUCTIONAL PROGRAM? HOW DO THEY DETERMINE WHAT WORKS?

Activities that Support Research Question 3

Professional Learning Community

- Identify leaders

- Develop a shared agenda

- Design practical measures

- Develop engagement plan

Proposed Roles

Activities (initiate professional learning community)

- Work with state staff to create practical measures around data usage for program improvement.

- Co-design community's agenda.

- Work with state representatives identify leaders and their roles in the group.

Handout 6

Next Steps

PREPARING THE PROPOSAL

Next steps

- Compile a summary research agenda from this meeting.

- Develop TCTS proposal using state recommendations.

- Collaborate to:

  - Refine study and data collection designs.

  - Ensure activities and time lines meet state expectations.

  - Suggest product dissemination time lines.

- Proposal is due fourth quarter 2018.

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Thank you!

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