

# Virtual Workshop for Arizona Local Education Agencies:

Strategic Use of Elementary and Secondary School  
Emergency Relief III Funds: Selecting and Measuring the  
Effectiveness of Evidence-Based Practices

October 27, 2021

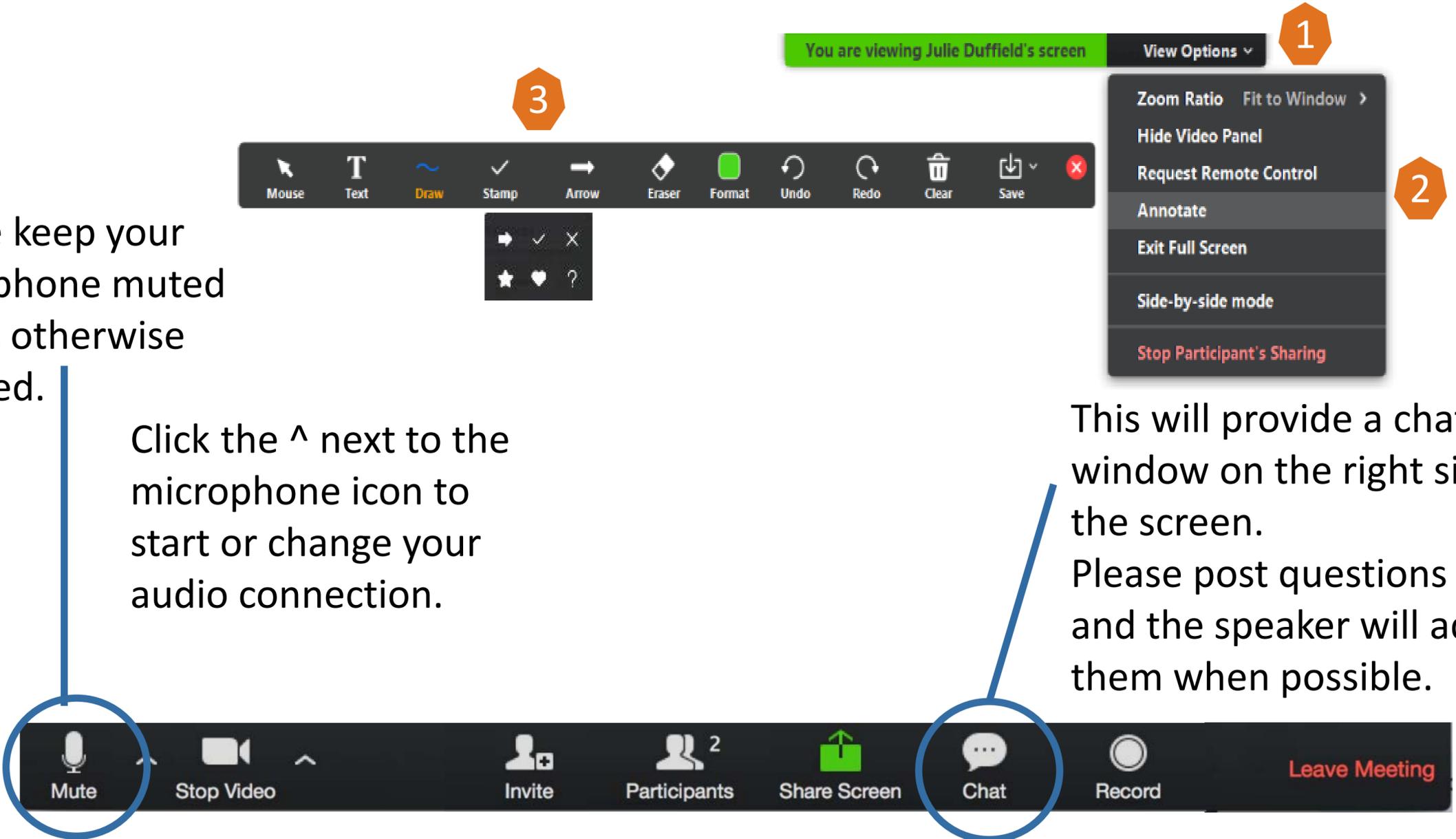


# Housekeeping: Using ZOOM

Please keep your microphone muted unless otherwise directed.

Click the ^ next to the microphone icon to start or change your audio connection.

This will provide a chat window on the right side of the screen. Please post questions here and the speaker will address them when possible.



# Participation Tips

If your connectivity is poor, turn off your video



Discussion will take place via polls and breakout sessions



Use the chat to post questions at any time



The slides and recording will be posted to a Box folder



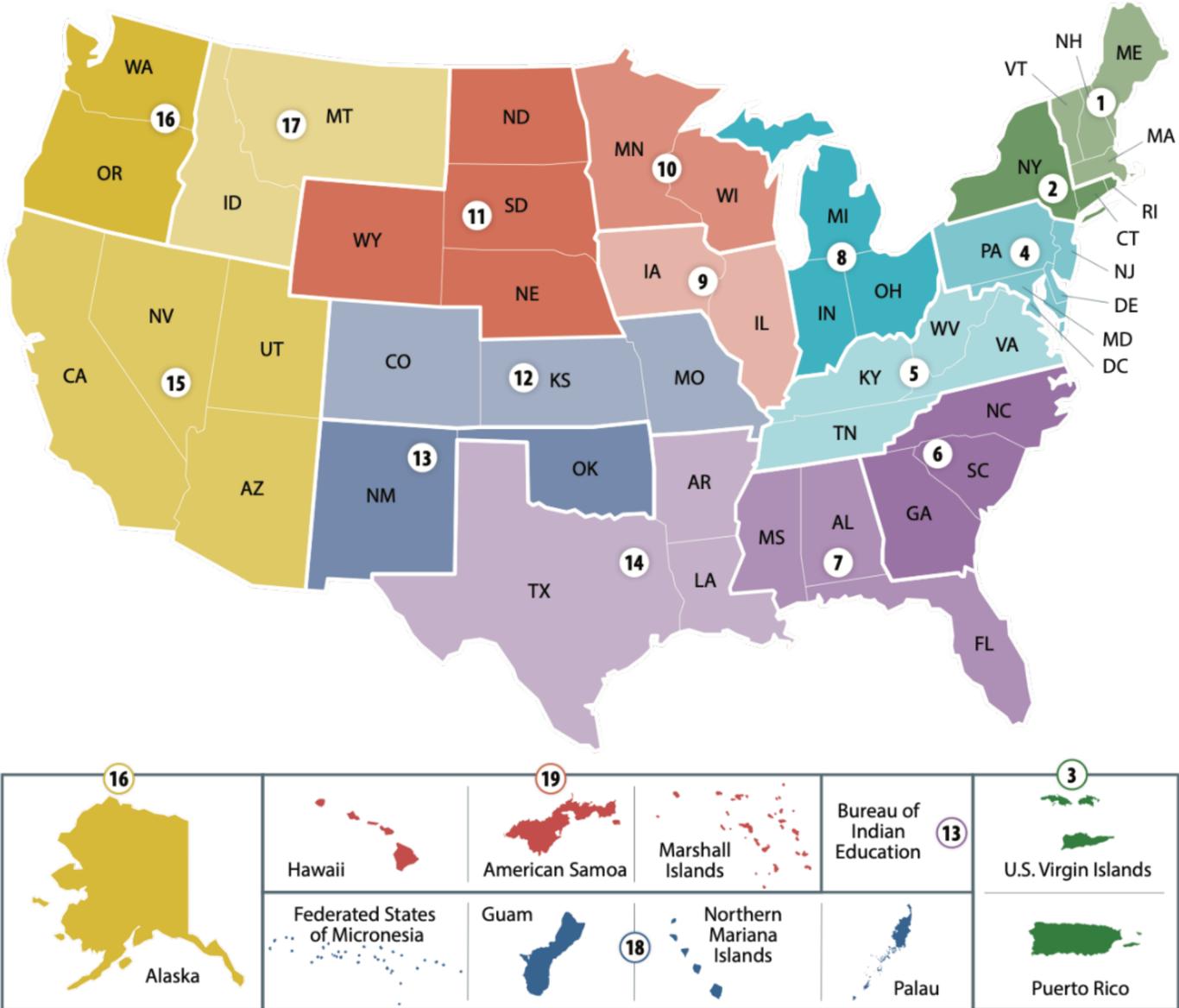
Break Time: stay logged in, turn off your camera



# Comprehensive Centers Program (2019–2024)

The Comprehensive Centers Program is a federally funded network of technical assistance centers comprised of 19 regional centers serving clusters of states and one national center providing universal and targeted multi-state support to address common high-leverage problems among states.

## CCNetwork Regional Centers



# Welcome and Opening Remarks

*Devon Isherwood,  
Deputy Superintendent at ADE*

# Selecting and Measuring the Effectiveness of Evidence-Based Practices

October 27, 2021

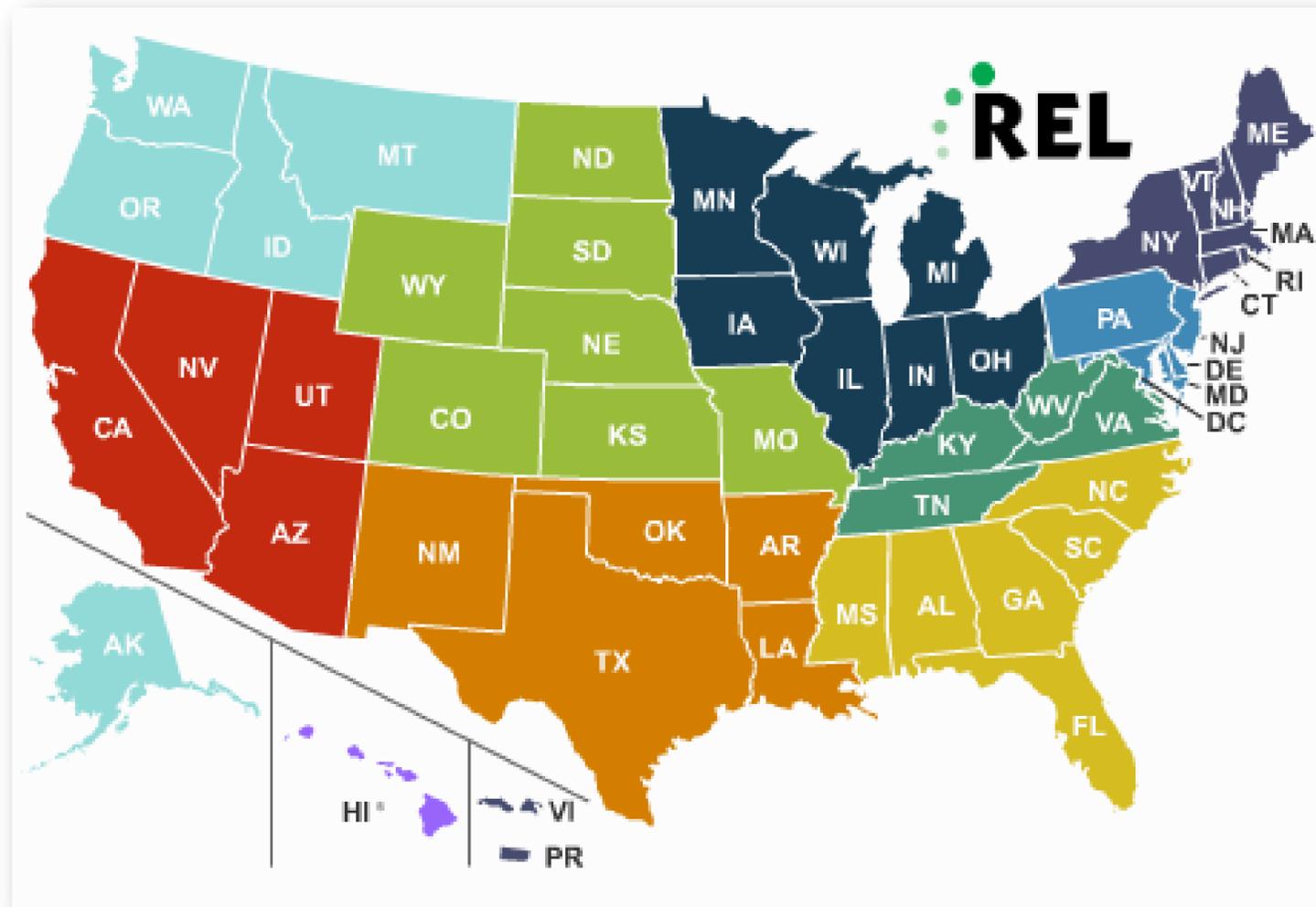
John Rice, PhD, Director

Lenay Dunn, PhD, Deputy Director

Tran Keys, PhD, Senior Research Associate

Regional Educational Laboratory West (REL West) at WestEd

Ten RELs work in partnership with LEAs, SEAs, and others to use data and research to improve academic outcomes for students

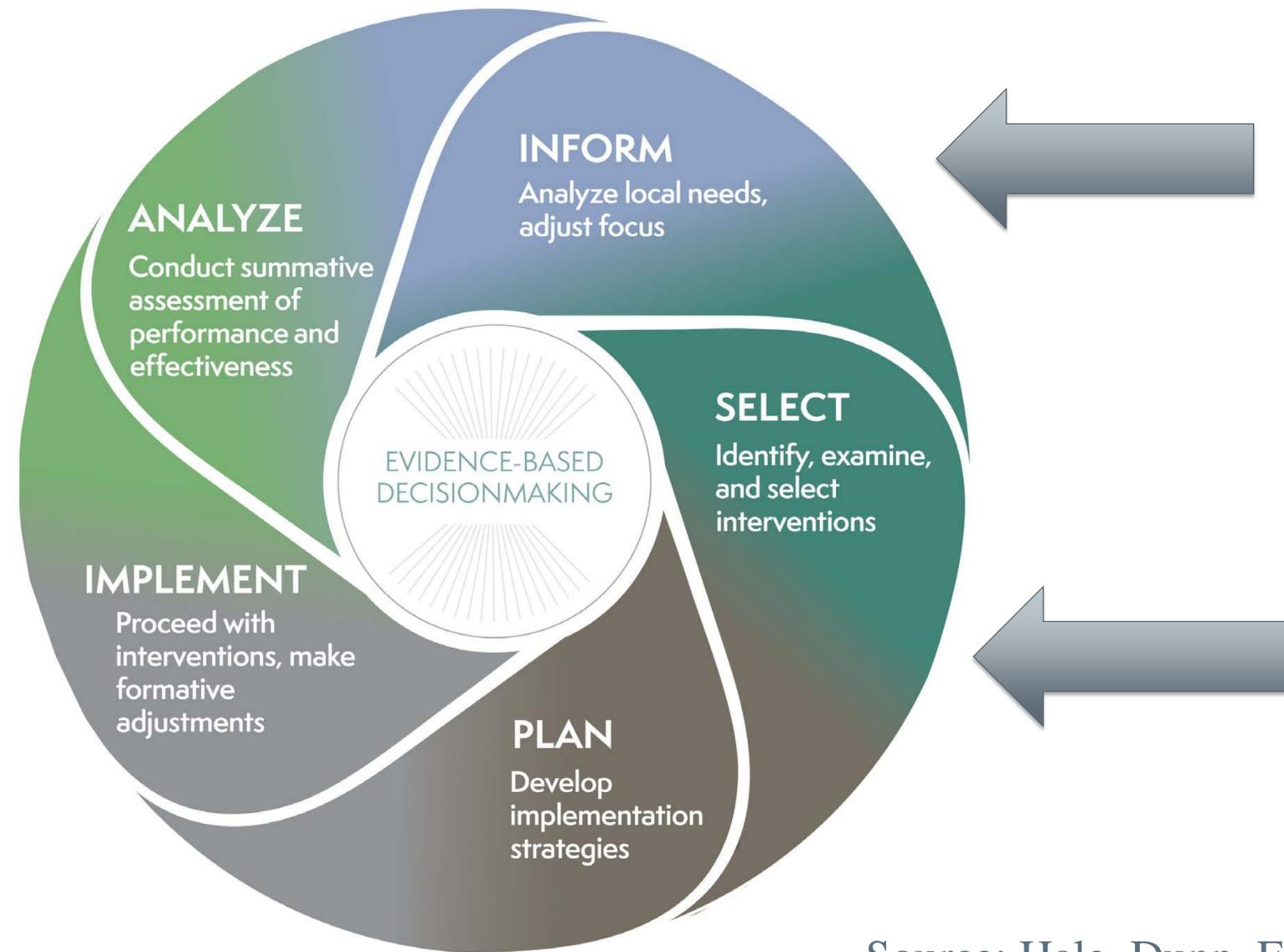


# Session Goals

- Gain deeper knowledge about ESSA evidence requirements as they relate to ESSER III
- Begin to develop LEAs' strategies for supporting the use of their ESSER III funds to select evidence-based interventions and strategies around accelerated learning and socioemotional supports
- Gain a better understanding of how to measure progress as part of a continuous improvement process

# Evidence-Based Practices as Continuous Improvement

# Framework: Evidence-Based Improvement



Source: Hale, Dunn, Filby, Rice, & Van Houten (2017)

<https://www.wested.org/resources/evidence-based-improvement-essa-guide-for-states/>

# Grounding in Needs

What are the most pressing problems or issues to address?

Where can your efforts have the most impact?

What outcomes would you like to achieve, and what possible interventions to help achieve those outcomes?

# ESSER III Emphasis on Evidence-Based Practice



Reserve funds to respond to learning loss using evidence-based interventions to **respond to students' academic, social, and emotional needs**

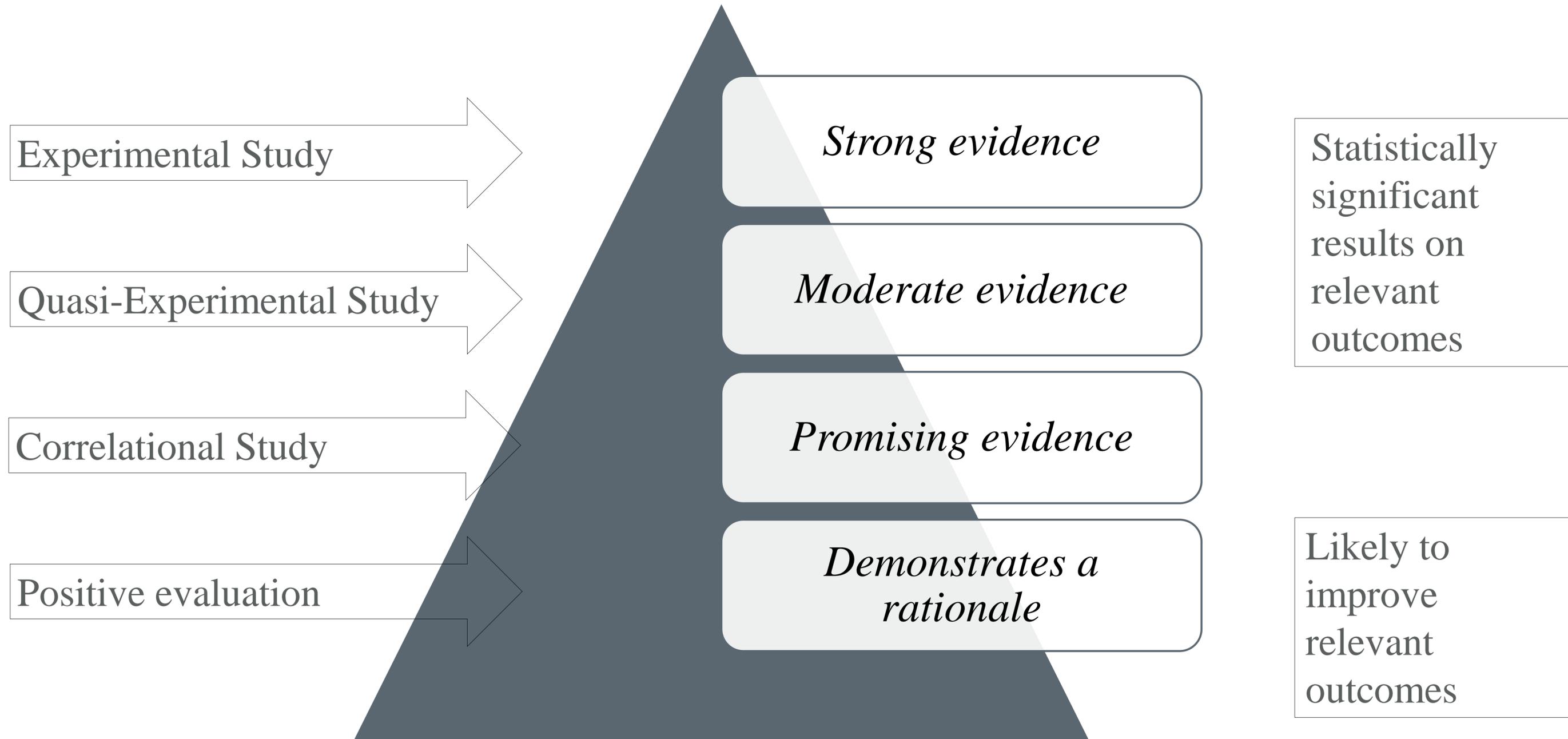


Address the **disproportionate impact of COVID-19** on underrepresented student groups



Unprecedented opportunity to **build capacity of staff**

# Refresher on ESSA Evidence Levels



# Chat: Addressing Needs

Type in the chat:



What information are schools using to select evidence-based practices related to ESSER III needs and priorities?

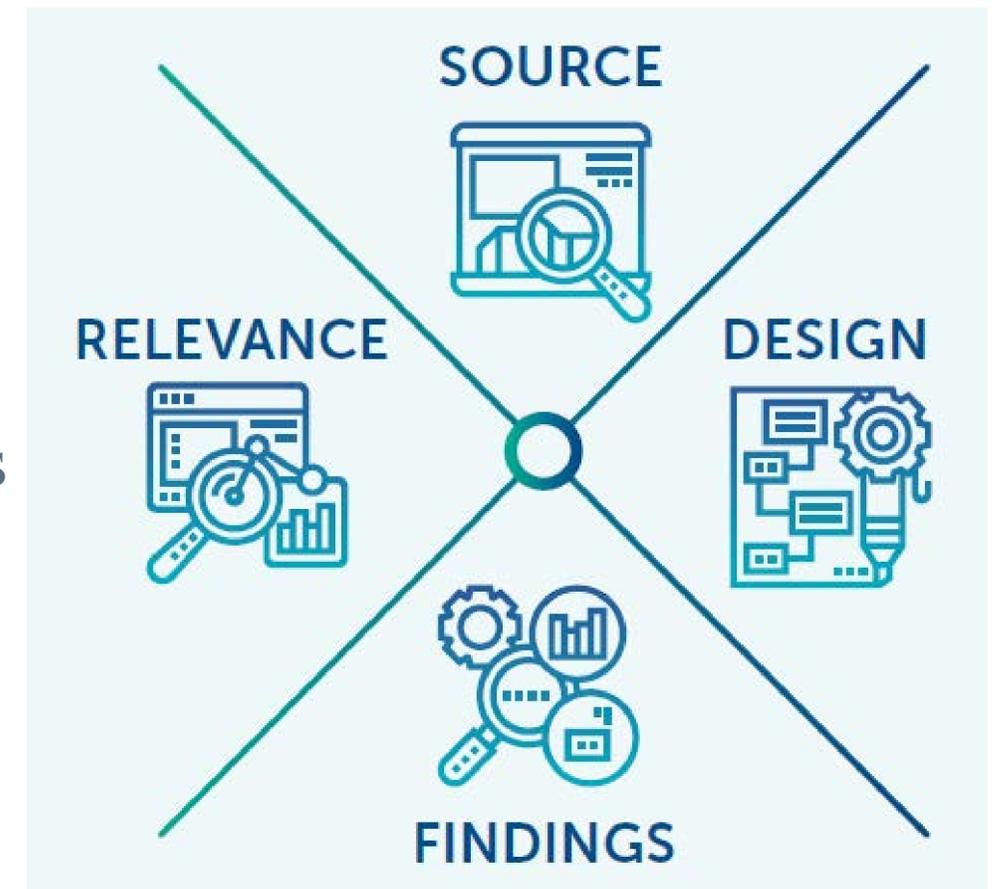
What questions are emerging from schools?

# Scenario

- A school you work with is looking for a high school intervention for character development and social-emotional learning to contribute to the goal of improved school climate and graduation rates across the school.
- The school has identified Connect with Kids as a possible evidence-based intervention.
- The school is a suburban high school with ~2500 students.
- Together, we will help the school consider the quality of the intervention and its fit to their needs.

# Basics of Reviewing a Research Study

- **Study Source:** Where the research comes from
- **Study Design:** How the study was designed and carried out
- **Study Findings:** The measures of the intervention's effectiveness and strength
- **Study Relevance:** How the research may apply to your context



<https://ies.ed.gov/ncee/edLabs/regions/west/Publications/Details/300>



# Consideration: Study Source

- Credibility
- Peer Review
- Independent Researchers

## CONFIDENCE IN STUDY'S CREDIBILITY

Less confidence

More confidence



- Study not from a credible source
- Not peer reviewed
- Researcher developed the intervention

- Study from a credible source
- Peer reviewed
- Researcher was independent from intervention development

# Study Source – Credible Sources (1)

SOURCE



<https://ies.ed.gov/ncee/wwc/>



[eric.ed.gov](http://eric.ed.gov)



[evidenceforessa.org](http://evidenceforessa.org)



[campbellcollaboration.org](http://campbellcollaboration.org)

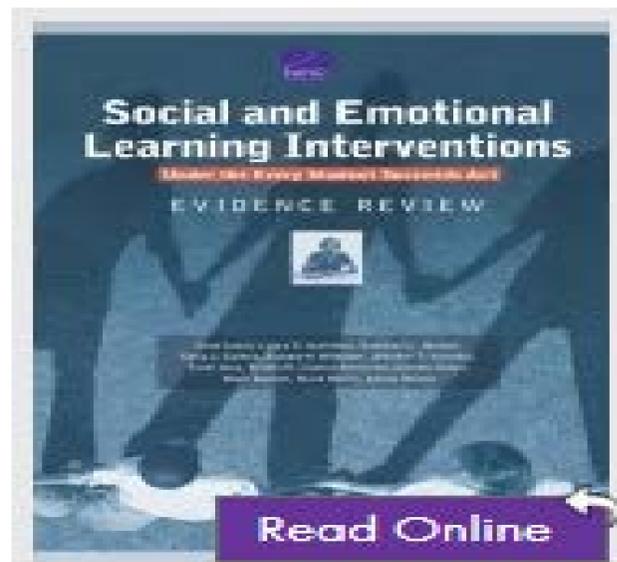
# Study Source – Credible Sources (2)



<https://bestpracticesclearinghouse.ed.gov/>

National Center on  
**INTENSIVE INTERVENTION**  
at American Institutes for Research ■

<https://intensiveintervention.org/>



[https://www.rand.org/pubs/research\\_reports/RR2133.html](https://www.rand.org/pubs/research_reports/RR2133.html)



## Study Source – Example EBP: Connect With Kids

- **Purpose:** Promote prosocial attitudes and positive behavior of grades 3–12 students by teaching core character values.
- **Source:** Reviewed by WWC:  
<https://ies.ed.gov/ncee/wwc/EvidenceSnapshot/104>



# Considerations: Study Design

- Study Design
- Baseline
- Equivalency
- Sample
- Outcome Measures

## CONFIDENCE IN STUDY'S DESIGN

Less confidence

More confidence

- Weaker research design
- No comparison group
- Smaller sample
- Many study participants drop out of the study
- Use of an outcomes measure designed by the developer
- None of the outcomes measured are relevant to the intervention

- Stronger research design
- Use of a comparison group
- Larger sample
- Few study participants drop out of the study
- Use of an established outcome measure not designed by the developer
- At least one of the outcomes measured is relevant to the intervention



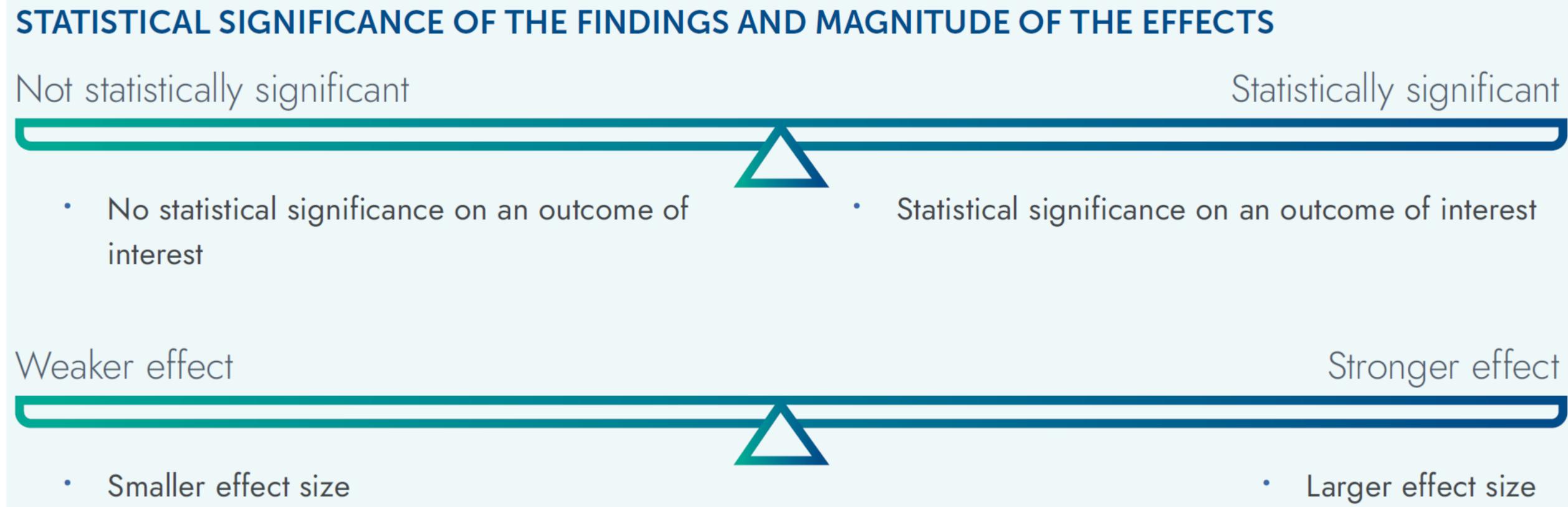
## Study Design – Example EBP: Connect With Kids

- **Research Design:** Quasi-experimental, met WWC evidence standards with reservations (may meet ESSA Tier II)
- **Sample:** More than 800 elementary, middle, and high school students from 46 classrooms in eight urban, suburban, and rural school districts in Kansas and Missouri
- **Outcomes:** Measures of behavior; knowledge, attitudes, and values; and academic achievement

# Consideration: Study Findings



- Statistical Significance
- Effect Size



# Study Findings – Example EBP: Connect With Kids



- **Findings:**

- WWC found potentially positive effects on behavioral outcomes.
- Two student behavior outcome measures for middle and high school students were positive and statistically significant.
- The average effect size across the four student outcomes examined in this study was also positive and statistically significant (average of +16 percentage points).
- WWC found no statistically significant effects for elementary school students.

# Consideration: Study Relevance



- Match to Population and Setting
- Match to Needs

## RELEVANCE OF THE STUDY'S FINDINGS

Less relevant

More relevant

- Population in the study does not match your population
- Setting of the study does not match your setting
- Outcomes in the study do not match your outcomes of interest

- Population in the study matches your population
- Setting of the study matches your setting
- Outcomes in the study match your outcomes of interest

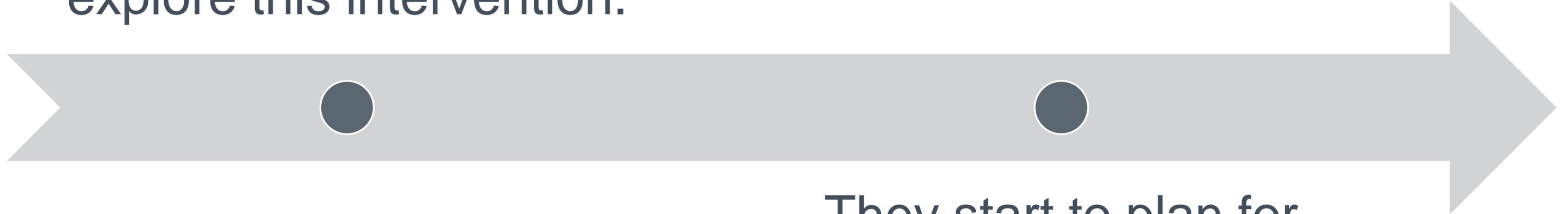
# Study Relevance – Example EBP: Connect With Kids



- **Sample:** More than 800 elementary, middle, and high school students in 46 classrooms in eight urban, suburban, and rural school districts in Kansas and Missouri
- **Outcomes:** Statistically significant differences favoring the intervention group for middle and high school students' reports of their own and their classmates' behavior (middle/high school student survey part I and part II)
- **School Setting:** Suburban high school with ~2500 students, looking for an intervention for character development and social-emotional learning

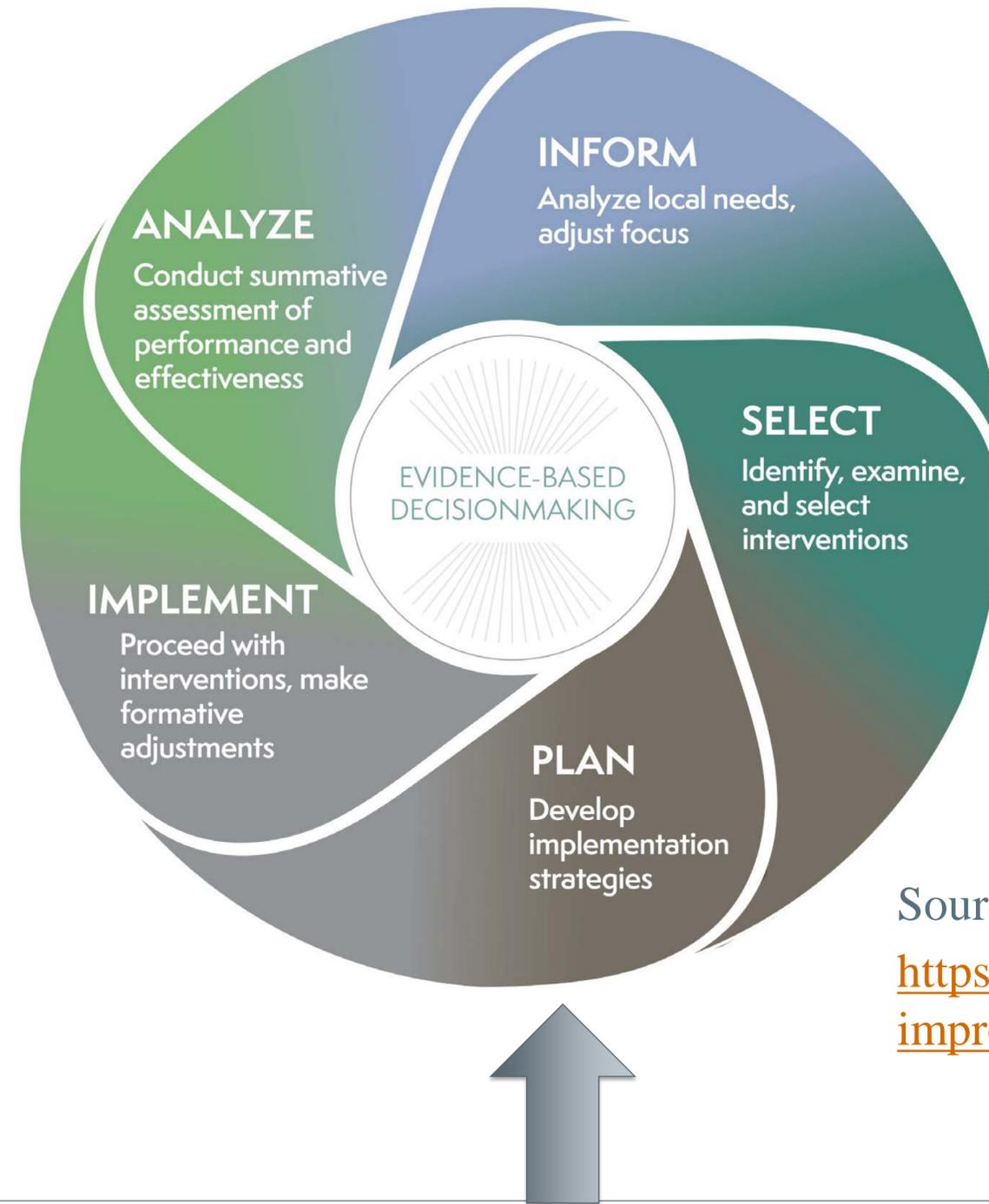
# Example EBP: Connect With Kids

The high school decides to explore this intervention.



They start to plan for implementation.

# Framework: Evidence-Based Improvement



Source: Hale, Dunn, Filby, Rice, & Van Houten (2017)

<https://www.wested.org/resources/evidence-based-improvement-essa-guide-for-states/>

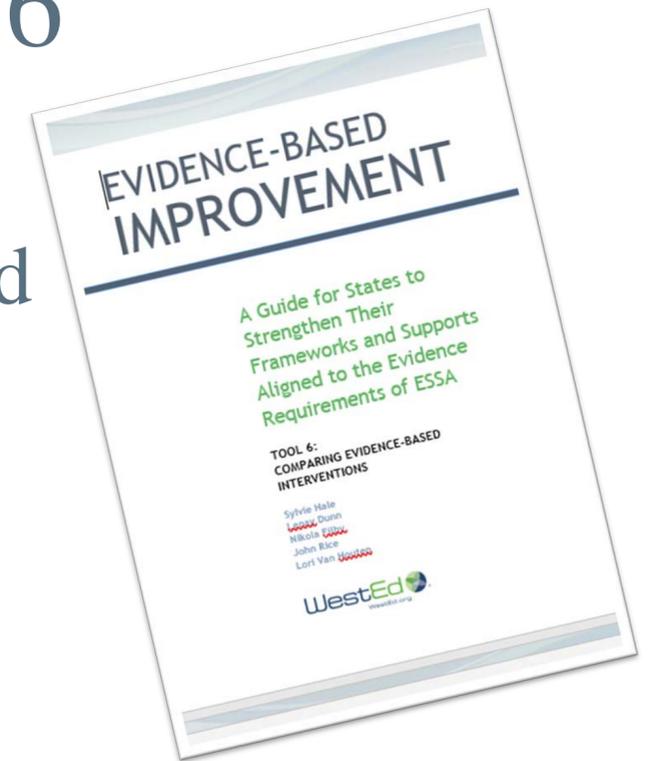
# Moving from Selection to Implementation

What will it take to implement this strategy to produce effective outcomes?

How well does the strategy fit our context and constraints?

# WestEd Evidence-Based Improvement Guide: Tool 6

- Offers considerations for how well an evidence-based intervention would fit into the context of your educational setting.
- Facilitates discussions around the feasibility of selecting and implementing each intervention in your educational setting, and the advantages and disadvantages of each intervention as it pertains to your educational context.
- <https://www.wested.org/wp-content/uploads/2016/12/Evidence-Based-Improvement-Guide-FINAL-122116-TOOL-6.docx>



# Example EBP: Connect With Kids

## Tool 6

- Alignment
- Leadership and staff buy-in
- Physical infrastructure
- Organizational structure
- Staff capacity and time
- Partners or other outside supports needed
- Start-up (initial) implementation costs
- Ongoing costs

## Connect With Kids Factors

- Program can be incorporated into an existing curriculum or used as a standalone program
- The school or teacher decides on the number of character traits covered in each session, so the program duration may vary from one semester to an entire academic year
- Lesson plans, website component, and schoolwide and community outreach components
- The program, associated PD, and support for one year costs \$4,000 per school
- Ongoing support is an extra cost

# REL West Applicability of Evidence-Based Interventions Tool

- Contextual Factors
- Key Considerations
- Guiding Questions
- Additional Resources

**APPLICABILITY OF EVIDENCE-BASED INTERVENTIONS**

**PURPOSE**

You have identified an evidence-based intervention<sup>1</sup> that may meet your needs, but you are not sure if it will fit your context. When determining if an evidence-based intervention is worth further review, state and local education agencies can find it useful to think through how contextual factors may influence its fit. To help in that process, this document identifies seven contextual factors, each with related questions. Considering these factors helps decision-makers assess how a particular intervention might meet their needs, regardless of where the evidence of its effectiveness was generated and helps inform further investigation into the feasibility of its implementation in your context.

**INTENDED USE**

This document may be especially useful for districts and schools that tend not to see themselves represented in the research literature related to the effectiveness of interventions. This group of districts and schools includes, for example, those in rural communities and those serving indigenous populations.

This tool assumes that, prior to using it, you have engaged in a comprehensive analysis of needs, identified interventions to address those needs, and would like to further narrow the promising options for more intensive review (see the additional resources at the end of this document).

It is likely that as you examine interventions, there will be pluses and minuses to each one. This tool is designed to frame conversations about considerations of fit, but does not provide a formula to weigh those pluses and minuses. Instead, this tool helps you identify which interventions you would like to further examine for potential use in your setting.

**REL WEST**  
Regional Educational Laboratory At WestEd  
MARCH 2020

Contextual Factors	Considerations and Questions
<b>Research alignment to outcome of interest and student population</b>	<b>KEY CONSIDERATION:</b> In research studies of the intervention, was the intervention successful in schools that are similar to the schools you seek to assist?
	<ul style="list-style-type: none"><li>» How closely aligned is the outcome that was studied with your outcome of interest?</li><li>» Is the evidence supporting the effectiveness of the intervention based on research that was conducted with a student population similar to yours (e.g., grade level, family income level, race/ethnicity, English learner students, students with disabilities)?</li><li>» If your student demographics are dissimilar from those in the study, how might that difference influence implementation of the intervention?</li></ul>

[https://ies.ed.gov/ncee/edlabs/infographics/pdf/REL\\_WE\\_Applicability\\_of\\_Evidence\\_Based\\_Interventions.pdf](https://ies.ed.gov/ncee/edlabs/infographics/pdf/REL_WE_Applicability_of_Evidence_Based_Interventions.pdf)

# Example EBP: Connect With Kids

## Applicability Tool

- Research alignment to outcome of interest and student population
- Staffing availability
- Access to technology and connectivity
- Potential for family engagement
- Professional development
- Importance of community leaders
- Travel time to and from school

## Connect With Kids Factors

- May need more information on the demographics of the study sample
- Flexible staffing, but would have to fit it in
- Need computer access for videos, materials
- Includes a parent outreach set of videos
- Option for remote training and PD
- Opportunities to engage community groups
- Offered in class during the school day

# Connect With Kids Viability

Think about which choice below most closely matches your conclusion based on your review of contextual factors, key considerations, and related questions. Given your selection, what are your next steps related to this intervention?

- This intervention is viable in our context. However, we may still need to do further review of one or more aspects of the intervention to make a final determination.
- This intervention may be viable in our context. We definitely will need to do further review of one or more aspects of the intervention before making a final determination.
- This intervention does not appear to be viable in our context.

# Key Questions to Encourage Schools to Ask



Who produced the study on the effectiveness of the intervention and where was it published?



How was the study designed and carried out? Was there a comparison group?



What outcomes were measured, and did they improve significantly?



How well does the study setting and population reflect our context? Are the outcomes relevant to what we are trying to improve? Does the intervention require supports that exceed our capacity?

# Small Group Breakout

# Small Group Breakouts

## Goal:

- Begin/continue to develop strategies for supporting schools in using their **ESSER III** funds to select evidence-based interventions and strategies around accelerated learning and socioemotional supports

## Topics (two options):

1. What guidance will schools need when selecting EBPs for accelerating learning and social-emotional supports?
2. What fit and applicability considerations should be highlighted for schools?

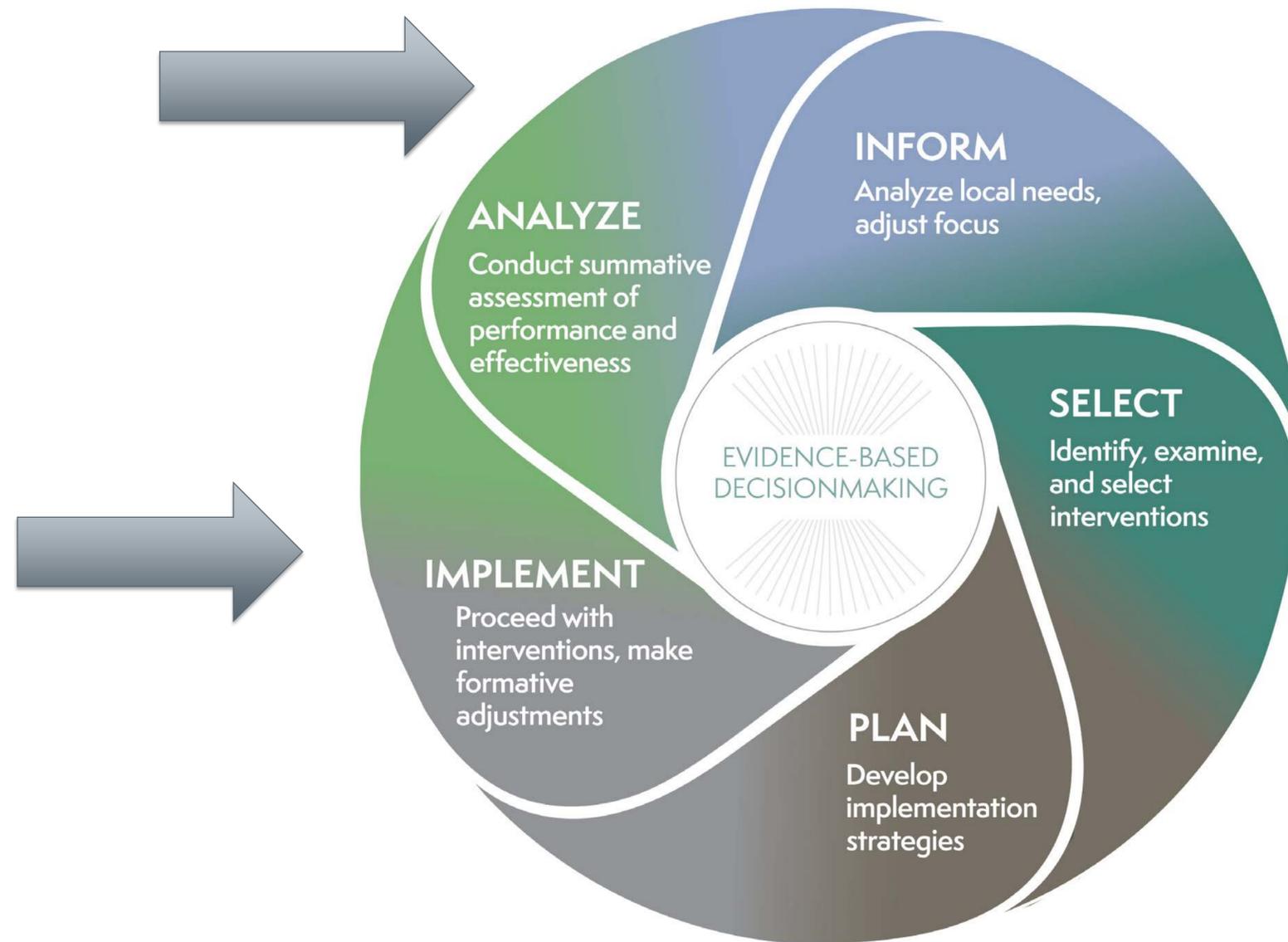
# Share Out



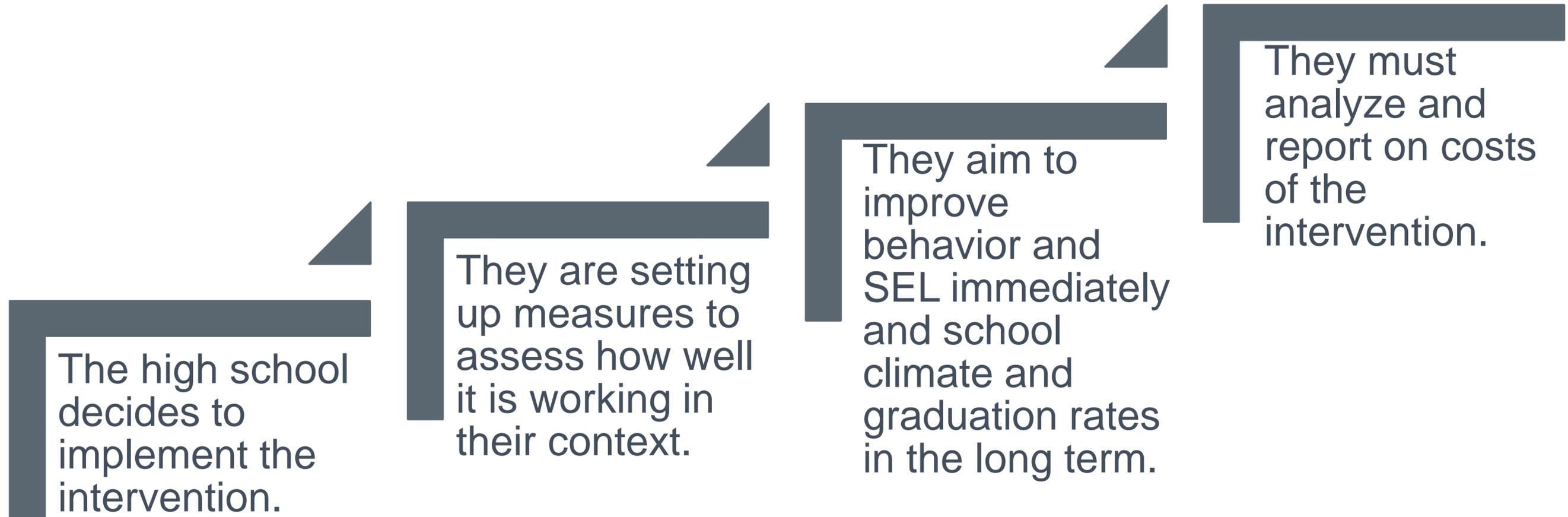
- Which topic did your group choose to discuss?
- What is one next step/action you will take as a result of your discussion?

# Measuring the Effectiveness of Evidence-Based Practices

# Framework: Evidence-Based Improvement



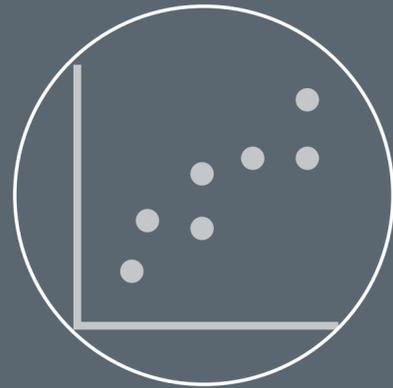
# Example EBP: Connect With Kids



# Implementing and Analyzing Interventions



How well is this program working in our context?



What factors are contributing to our results?

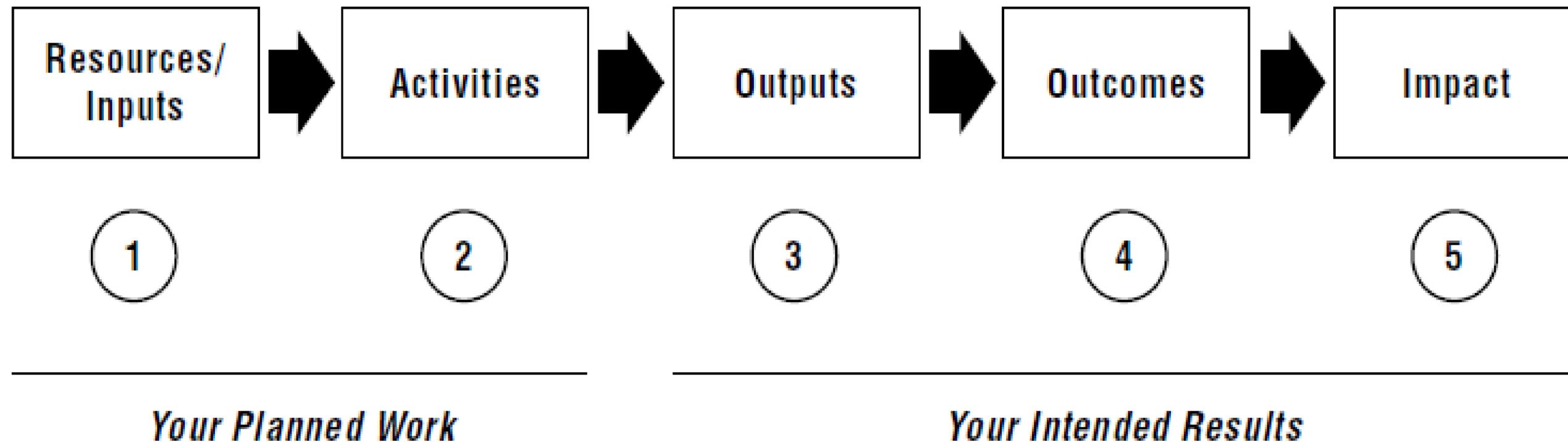


What data should we examine to assess this?



# Theory of Action and Logic Model

A systematic and visual way to present and share your understanding of the **relationships** among the **resources** you have to operate your program, the **activities** you plan, and the **changes or results** you hope to achieve.



# Process vs. Outcome Measures

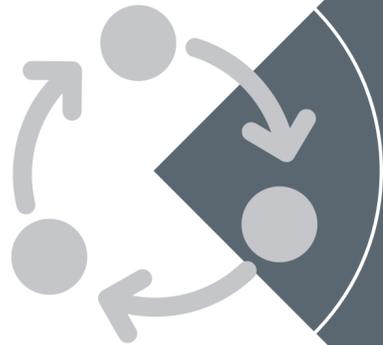
## Process measures

- Assess the quality of implementation
- Focus on formative adjustments to implementation

## Outcome measures

- Assess the progress on targeted changes in teacher and student outcomes
- Can inform formative adjustments and summative assessments of effectiveness
- Focus on results

# Example EBP: Connect With Kids



## Potential process measures

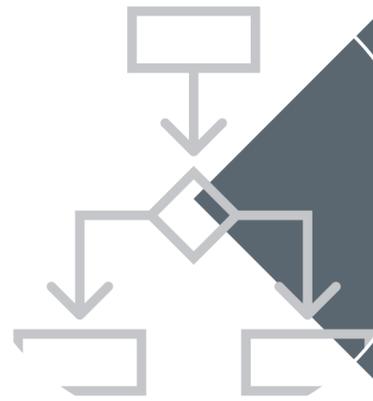
- Number of teachers trained
- Number of students served
- Number of program hours delivered
- Number of family outreach activities conducted
- Program fidelity observations



## Potential outcome measures

- School climate survey results
- Teacher survey results
- Student risk team referrals
- Chronic absence rates
- Graduation rates

# Outcome Measurement: Setting Targets



Identify short, medium, and long-term outcomes you aim to improve



Set targets and benchmarks to show progress along the way

# Outcome Measurement: Academic

## Common formative and interim benchmarks

- Entry and exit slips
- Teacher-developed quizzes or embedded assignments
- Off-the-shelf assessments (e.g., NWEA MAP Growth)

## Common summative benchmarks

- State standardized assessments
- Publishers' summative assessments
- Graduation rates

# Outcome Measurement: Social and Emotional

## Common formative and interim benchmarks

- % of individual students whose strengths and needs are reviewed
- % of students with a personalized plan that tailor supports and opportunities to each individual student's needs
- # of students referred to risk teams (coordinators, school administrators, and other student support staff)
- # of services provided/delivered
- Absence rates
- # of agency partners delivering individualized services across the district
- Student satisfaction survey results

## Common summative benchmarks

- Social-emotional development metrics (e.g., CASEL framework)
- Youth Risk Behavior Survey
- School climate surveys
- # of and types of disciplinary incidents

# Example EBP: Connect With Kids



## Potential progress benchmarks

- 5% improvement in annual climate survey safety measure annually
- 20% less referrals to student risk teams based on behavioral issues alone in the first year
- Graduation rates improve by 1% annually



## Potential outcome targets

- 90% of students across the district indicate feeling safe at school by 2024 on the annual climate survey
- District graduation rates improve by 5% by 2024

# Cost Analysis

# Cost Analysis: The Why

Supports addressing related federal requirements

- American Rescue Plan maintenance of equity provisions

Helps to gather more complete and accurate information about cost to inform resource use

- i.e., What does it truly cost to implement a program and meet its intended objective?

Provides information on aspects of cost that official accounting may miss:

- In-kind resources
- Owned resources
- True expenditures vs. budgets

# Cost Analysis: The What

## Three Basic Steps

- Identify resource “ingredients” necessary to implement a program
- Place a value on each ingredient
- Sum the value of each ingredient to determine total cost

Includes analysis by source of each ingredient (i.e., who pays?)

Describes differences in ingredients and use depending on the implementation context

Organizes ingredients by resource categories (e.g., personnel, materials)

Relies heavily on program/implementation data to identify ingredients and resource use

# Cost Questions from the Evidence-Based Improvement Guide Tool 6

## Start-Up Costs

- How much time would be required for staff training, in terms of hours or days?
- What is the cost (in dollars) of start-up materials?
- What is the cost (in dollars) of start-up equipment?
- What is the cost (in dollars) of start-up (initial) training?
- What are other start-up (initial) implementation costs (in dollars)?

## Ongoing Costs

Question	In each column, address the question for each intervention, make notes in the columns if needed.	Intervention 1	Intervention 2	Intervention 3
18	How much time would be required for staff training, in terms of hours or days?			
19	What is the cost (in dollars) of start-up materials?			
20	What is the cost (in dollars) of start-up equipment?			
21	What is the cost (in dollars) of start-up (initial) training?			
22	What are other start-up (initial) implementation costs (in dollars)?			
23	Add values in rows 19 through 22. These are the total start-up implementation costs.			
24	What are the estimated annual costs of the intervention after start-up?			



Source: Hale et al., 2017

# Example EBP: Connect With Kids



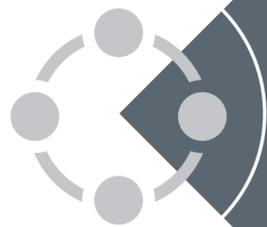
## Cost Analysis Ingredients

- Program materials
- PD and training fees
- Staff time for training
- Administrator time for supporting teachers
- Training costs for new staff who join after the initial training
- Computers for every classroom
- Ongoing PD and support
- Number of teachers and hours to implement
- Number of students served

# How LEA Leaders Can Facilitate Cost Analysis



Data Collection: encourage the collection of information relevant to cost analysis as part of program implementation reporting.



Technical Support: provide support to district leaders to integrate cost analysis in local decision-making, monitoring, and evaluation.



Pair with Evaluation Studies: include in any program evaluation a requirement to analyze and report on costs.

# Increasing the Use of Results



How can you embed stakeholders throughout the process?



How can you build in opportunities to reflect on results at regular intervals?



How will you share results with (and between) different stakeholders?



How can you use data as a continuous improvement and learning opportunity?



# Reflection and Wrap-Up

# Feedback Survey

Please take a few moments to fill out this brief survey about this session:

[https://www.surveymonkey.com/r/REL\\_ADE\\_LEA\\_Oct27](https://www.surveymonkey.com/r/REL_ADE_LEA_Oct27)

# Resources

# Key Resources

- Continuous Improvement Approach to Evidence:
  - Hale, S., Dunn, L., Filby, N., Rice, J., & Van Houten, L. (2017). *Evidence-based improvement: A guide for states to strengthen their frameworks and supports aligned to the evidence requirements of ESSA*. San Francisco: WestEd. Retrieved from <https://www.wested.org/wp-content/uploads/2016/12/Evidence-Based-Improvement-Guide-FINAL-122116.pdf>
- ESSA Evidence Tiers:
  - REL Midwest <https://ies.ed.gov/ncee/edlabs/regions/midwest/pdf/blogs/RELMW-ESSA-Tiers-Video-Handout-508.pdf>
- ED COVID-19 HANDBOOK
  - Roadmap to Reopening Safely and Meeting All Students' Needs (Volume 2)  
<https://www2.ed.gov/documents/coronavirus/reopening-2.pdf>
- Program Evaluation Toolkit:
  - Stewart, J ., Joyce, J ., Haines, M ., Yanoski, D ., Gagnon, D ., Luke, K ., Rhoads, C ., & Germeroth, C . (2021) . Program Evaluation Toolkit: Quick Start Guide (REL 2022–112) . U .S . Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Central . <https://ies.ed.gov/ncee/edlabs/projects/project.asp?projectID=4641>

# SEL Center Guide

- Compendium of resources for district leaders to consider as they seek to implement evidence-based support for SEL
- Categorized resources according to the implementation need they address (e.g., create a vision, ensure equitable practices) and within a continuous improvement cycle

[https://selcenter.wested.org/wp-content/uploads/sites/3/2020/09/SELCenter\\_CompendiumofResources.pdf](https://selcenter.wested.org/wp-content/uploads/sites/3/2020/09/SELCenter_CompendiumofResources.pdf)



This guide was developed under the auspices of the Center to Improve Social and Emotional Learning and School Safety at WestEd, authored by Katie Buckley of Transforming Education.

The cover features a photograph of a young boy in a graduation cap and gown, smiling. The text "Integrating Social and Emotional Learning throughout the School System" is overlaid in a large, purple font. Below it, in a smaller font, is "A Compendium of Resources for District Leaders".

## Integrating Social and Emotional Learning throughout the School System

A Compendium of Resources for District Leaders

# Relevant Cost Analysis Resources

- Chambers, J. G. (2000). Measuring resources in education: A comparison of accounting and the Resource Cost Model Approach. *School Business Affairs*, 66(11), 26–34. Retrieved from <https://nces.ed.gov/pubs99/199916.pdf>
- Institute of Education Sciences. (2020). *Cost analysis: A starter kit* (IES 2020-001). U.S. Department of Education. Washington, DC: Institute of Education Sciences. Retrieved from <https://ies.ed.gov/pubsearch/pubsinfo.asp?pubid=IES2020001rev>
- Levin, H. M., & McEwan, P. J. (2000). *Cost-effectiveness analysis: Methods and applications, 2nd edition*. SAGE Publications.
- Cost Analysis Standards Project. (2021). *Standards for the economic evaluation of educational and social programs*. American Institutes for Research. <https://www.air.org/sites/default/files/Standards-for-the-Economic-Evaluation-of-Educational-and-Social-Programs-CASP-May-2021.pdf>
- The Center for Benefit-Cost Studies of Education @ the University of Pennsylvania. <https://www.cbcse.org/>

# References

- CASEL. (2020). *CASEL'S SEL Framework: What are the core competence areas and where are they promoted?* <https://casel.org/wp-content/uploads/2020/12/CASEL-SEL-Framework-11.2020.pdf>
- Center for Optimized Student Support. (2021). *The whole child: Building systems of integrated student support during and after COVID-19: An action guide*. Author, Boston College. Chestnut Hill, MA. [https://www.bc.edu/content/dam/bc1/schools/lsoe/sites/coss/COVID%20Action%20Guide\\_V7.pdf](https://www.bc.edu/content/dam/bc1/schools/lsoe/sites/coss/COVID%20Action%20Guide_V7.pdf)
- Hale, S., Dunn, L., Filby, N., Rice, J., & Van Houten, L. (2017). *Evidence-based improvement: A guide for states to strengthen their frameworks and supports aligned to the evidence requirements of ESSA*. San Francisco: WestEd. Retrieved from <https://www.wested.org/wp-content/uploads/2016/12/Evidence-Based-Improvement-Guide-FINAL-122116.pdf>
- Regional Educational Laboratory (REL) Central & Colorado Department of Education ESEA Office. (2019, December). *Program evaluation training modules* (Presentation materials). Retrieved from <https://www.cde.state.co.us/fedprograms/progevaltrainings>
- Learning Policy Institute & Turnaround for Children. (2021). *Design principles for schools: Putting the science of learning and development into action*. <https://turnaround.ams3.digitaloceanspaces.com/wp-content/uploads/2021/06/08173320/Design-Principles-for-Schools.pdf>

# Thank you!

This presentation was prepared for the Institute of Education Sciences (IES) under Contract ED-IES-17-C-0012 by Regional Educational Laboratory (REL) West at WestEd. The content of the presentation does not necessarily reflect the views or policies of IES or the U.S. Department of Education, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

# Thank you!

