

# Using Evidence to Engage Rural Families

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Rural College and Career Readiness Partnership:

*Building Bridges to College and Career* Professional Learning Series

March 13 & 22, 2019



# Welcome!



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## Meeting Agenda

Welcome and Introductions

*Building Bridges to College and Career Series*

Understanding ESSA Levels of Evidence

Being a Discerning Consumer of Evidence and Applying the Evidence Locally

Review What We Learned

Next Steps

# Meeting goals

Our goals for the meeting are to:

- Introduce the Building Bridges Series
- Understand the levels of evidence as defined in the Every Student Succeeds Act (ESSA)
- Ensure we are all discerning consumers of the evidence
- Discuss practical considerations for the local adoption of the evidence
- Leave with a few strategies to apply locally



# Introductions

Please share your:

- Name
- Affiliation
- Role



# The *Building Bridges to College and Career Series*

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# The *Building Bridges to College and Career* Series

## ***What is it?***

- A series of content-focused professional learning opportunities
- Rural college and career readiness
- Evidence-based practices

## ***Why is this important to you?***

- Knowing how to identify evidence-based practices = better decisions about how to support students
- ESSA requires the use of evidence-based practices



# The *Building Bridges to College and Career Series*

Wall of Words from the Nov. 7 Workshop

## 3 workshops

- Parent/Family Engagement (11-7-18)
- Nonacademic Skills (4-10-19)
- Social-Emotional Learning (summer 2019)

## 3 virtual discussions

- Today!
- May 2019
- Summer 2019

Fall 2019 **ongoing series** to support implementation (*contingent upon demand*)



# The *Building Bridges to College and Career* Series: Review parent/family Engagement

- ***What do you know about parent and family Engagement in relation to college and career readiness?***
- ***What do you recall about the research on parent and family engagement?***
  - Parent and family engagement matters for academic success
  - Research in the rural context and specifically related to post-secondary readiness is limited.

# What strategies and skills will we cover today?

## Specific strategies

- Ideas for **structuring home visits**
- Type of **content to cover in home visits**
- Ideas for **structuring a texting program**
- Type of **content and timing for texting program**

## Specific knowledge and skills

- Understanding of ESSA evidence levels
- Tips for quickly reviewing research studies and evidence





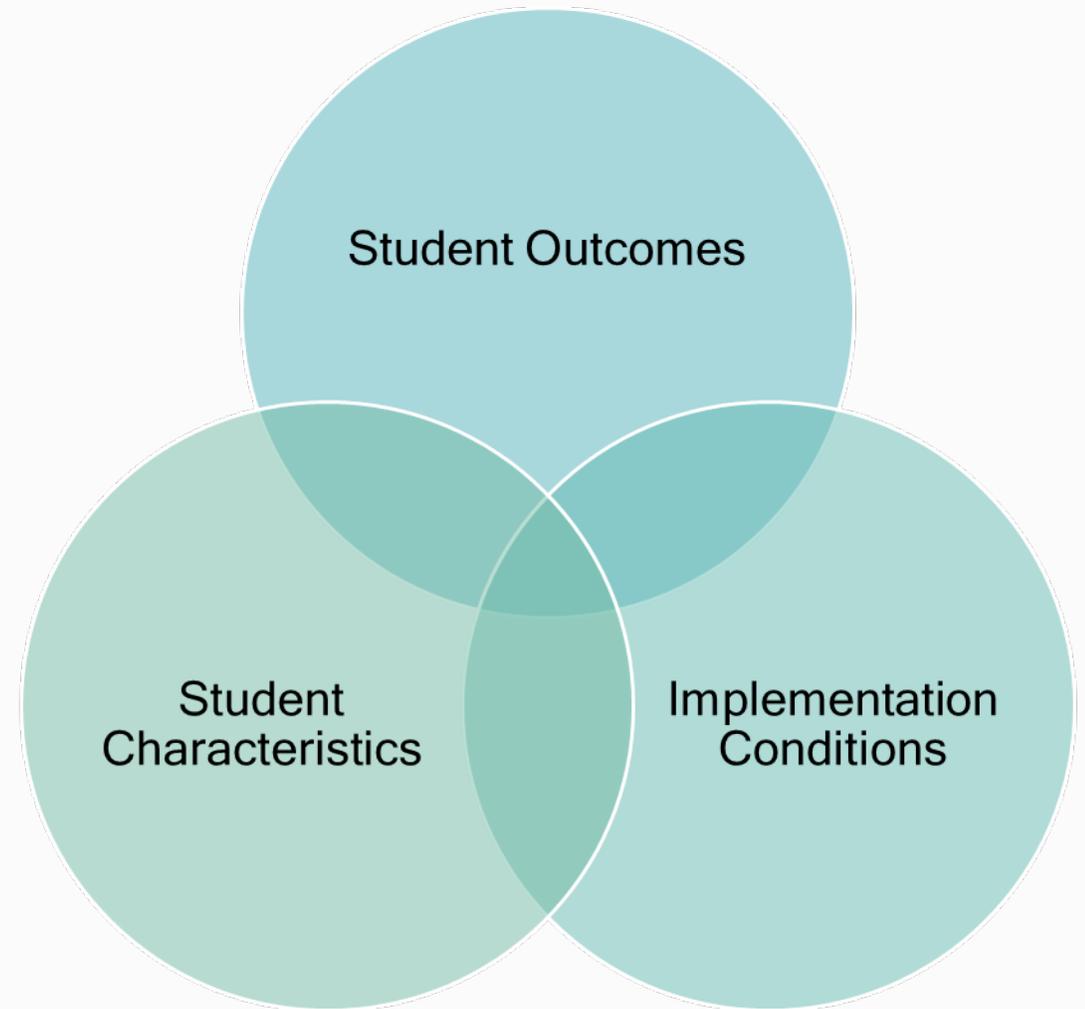
# ESSA Levels of Evidence

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# Why does evidence matter?

Evidence matters **throughout our work** to help students achieve

- **Before** you adopt a program or practice, you want to know whether it works, for whom, and under what conditions
- **During** a program or practice, you want to know if it is working, for whom, and under what conditions
- **After** a program or practice, you want to know if it worked, for whom, and under what conditions



# Four levels of evidence in ESSA



Strong

- At least one well-designed and implemented experimental study



Moderate

- At least one well-designed and implemented quasi-experimental study



Promising

- At least one well-designed and implemented correlational study
- Includes controls for statistical bias



Demonstrates a Rationale

- Well-specified logic model or theory of action
- Includes ongoing efforts to collect evidence

For full description of ESSA evidence standards, see <https://ed.gov/policy/elsec/leg/essa/guidanceuseinvestment.pdf>

# What Works Clearinghouse (WWC)

WWC: Meets standards **without** reservation



**Strong**

- At least one well-designed and implemented experimental study

WWC: Meets standards **with** reservation



**Moderate**

- At least one well-designed and implemented quasi-experimental study

WWC: Does not meet standards



**Promising**

- At least one well-designed and implemented correlational study
- Includes controls for statistical bias



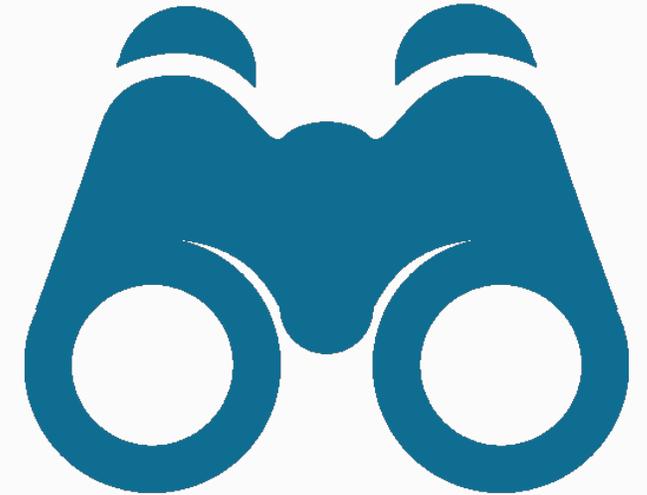
**Demonstrates a Rationale**

- Well-specified logic model or theory of action
- Includes ongoing efforts to collect evidence

WWC is a useful resource for finding evidence of programs, practices, and policies. See <https://ies.ed.gov/ncee/wwc>

# Does it work? Interpreting study findings

- Look for
- **Positive direction:** Favors the intervention group
- **Statistical significance:** The likelihood that the difference between groups is due to chance is less than 5% ( $p < .05$ )
- **Substantive importance:** Has an effect size—a standardized measure of the magnitude of an effect—of 0.25 or greater, regardless of statistical significance





# Study findings: What to look for

Outcome measure	Study sample	Sample size	Mean (standard deviation)		WWC calculations			
			Intervention group	Comparison group	Mean difference	Effect size	Improvement index	p-value
<b>Castleman et al., 2014<sup>a</sup></b>								
<i>Continuous first-year enrollment (%)</i>	Full sample	1,397 students	82.4 (na)	78.5 (na)	3.9	0.15	+6	< .05

Direction

Magnitude

Statistical Significance

# Kentucky ESSA evidence-based guidance

- Aligned with this presentation
- Guidance & tools
  - Overview of the ESSA evidence levels
  - Evidence-based Practices Glossary of Terms, FAQ, additional resources
  - Detailed tools and templates for reviewing and documenting evidence under ESSA

So you have supports from your state! You are NOT alone!

<https://education.ky.gov/school/evidence/Pages/default.aspx>

# Being a Discerning Consumer of Evidence and Applying Locally

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# Guiding questions

- What was the purpose of the study?
- What was the intervention, strategy, or practice as implemented?
- What student outcome(s) did the study look at?
- Where did the study take place?
- What was the study population of interest or analytic sample?
- What was the study design?
- If there were intervention and comparison groups, were they similar at baseline?
- What were the study findings on student outcomes?
- What were your key takeaways from the discussion?



# \*What was the purpose of the study?

**To see if a teacher home visit program leads to improvements in classroom behavior, academic achievement, and parent involvement in school**



Relevant article text:

- “This study’s purpose was to determine if a **teacher home visit program** implemented by a Texas-based charter school system resulted in differences in **K–12 students’ classroom behavior, academic achievement, and parent involvement in school.**” (abstract)
- Research questions (p. 74)

Photo credit: Aron on Unsplash  
<https://unsplash.com/photos/3jBU9TbKW7o>

# \*What was the intervention, strategy, or practice as implemented?

## The intervention is a teacher home visit program

Relevant article text:

- Teacher Home Visit Program Section (p. 72-73)
- “The school system conducts teacher home visit trainings at the beginning of the year during each school’s in-service programs for all participating teachers.” (p. 73)
- Teachers schedule visits and choose which students they visit. (p. 72)
- “Teachers visit students’ homes in pairs.” (p. 72)
- During the visit, “staff focuses on student’s interests, his/her hopes and dreams, as well as academic and social progress and needs.” (p.72) Staff also share a folder with relevant documents, such as the student’s academic and behavioral record, school calendar, list of extracurricular activities, and the school’s college readiness program. (p. 73)
- About 10% of students were visited, mostly in grades K-8. (p. 72)



# Reflection: Can you apply these locally?

## Let's talk about the intervention and your school or district



Intervention includes:

- “**Teacher home visit trainings** at the beginning of the year during each school’s in-service programs for all participating teachers.” (p. 73)
- Teachers schedule visits and **choose which students they visit.** (p. 72)
- “Teachers **visit students’ homes in pairs.**” (p. 72)
- During the visit, they
- Discuss “student’s interests, his/her hopes and dreams, as well as academic and social progress and needs.” (p.72)
- Share a folder with relevant documents, such as the student’s academic and behavioral record, school calendar, list of extracurricular activities, and the school’s college readiness program. (p. 73)
- About 10% of students were visited, mostly in grades K-8. (p. 72)

# \*What student outcome(s) did the study look at?

**Academic Achievement: Class grades in math, science, social studies, and English/language arts**

**Behavior: Points in the districts' behavior program**

- Relevant article text:
- RQ1: “Are there significant ( $p < .001$ ) differences in the **classroom behavior of school system students** who received a teacher home visit compared to similar students who did not receive a teacher home visit?” (p. 74)
- RQ2: “Are there significant ( $p < .001$ ) differences in the **academic achievement of school system students** who received a teacher home visit compared to similar students who did not receive a teacher home visit?” (p. 74)
- “Academic variables included **student core course grades in mathematics, science, social studies, and English/language arts** for the first two grading periods of the 2015–16 school year. Behavioral variables included the school system’s **Positive Reward System (PRS) points and Discipline Point System (DPS)** for the fall semester of 2015.” (p. 74)



# Reflection: Are these outcomes relevant for your school or district?

- Why might grades be an important outcome?
- Does your district have a behavior program or measure any behavioral outcomes?
- What other student outcomes interest you?

## **Academic Achievement:**

- Class grades in math, science, social studies, and English/language arts

## **Behavior:**

- Points in the districts' behavior program

# \*Where did the study take place?

**In a public K-12 charter school system that focuses on STEM teaching and learning and is located in a major city in Texas**

Relevant article text:

- “The study used data from a **Texas-based public charter school system**, mostly centered in **major metropolitan and the surrounding areas**, serving students in grades **K–12**. The school system has an explicit focus on **science, technology, engineering, and mathematics (STEM) areas**, reaching out to underserved communities across the state.” (p. 71)



# What was the study population of interest or analytic sample?

**The students in the study were about half Hispanic and economically disadvantaged**

Table 2. Teacher Home Visit and Comparison Group (No Teacher Home Visit) Student Demographics

	Home Visit Sample ( <i>n</i> = 3,681)		Comparison Group ( <i>n</i> = 3,681)	
	<i>n</i>	%	<i>n</i>	%
Ethnic distribution				
African American	555	15.1	753	20.5
Hispanic	1,925	52.3	1,764	47.9
White	697	18.9	669	18.2
American Indian	9	0.2	14	0.4
Asian	555	15.1	481	13.1
Socioeconomic status				
Economically disadvantaged	1,893	51.4	1,905	51.8
Noneconomically disadvantaged	1,788	48.6	1,776	48.2

Source. School System Program Records.

p. 75

# Reflection: Location and population

- **Let's take a closer look!**
- Do you think the location of the study is important contextual information?
  - Why or why not?
- Do you think the study population is important?
  - Why or why not?



# \*What was the study design?



**This study used a quasi-experimental design, which means that it used a comparison group but students were not randomly assigned to either the intervention or the comparison group**

Relevant article text:

- “The purpose of this **quasi-experimental explanatory mixed methods research** study was to determine if the school system’s teacher home visit program resulted in differences in classroom behavior and academic achievement of students who received teacher home visit(s) compared to students who did not receive teacher home visit(s).” (p. 73)
- “For determination of **the final sample, students who received a teacher home visit(s) (n = 3,681) were matched with a comparison group of students (n = 3,681) randomly drawn from the students who did not receive a teacher home visit.**” (p. 75)

# \*What were the study findings on student outcomes?



- **Academic**

- Students who received home visits had higher English/language arts and math grades than students who didn't receive home visits
- Home visiting didn't have any effect on students' science or social studies grades

- **Behavior**

- Students who received home visits had better scores on one measure of classroom behavior
- Home visiting didn't have any effect on a second measure of behavior

# \*What were the study findings on student outcomes?

**Direction** **Significance**

**Magnitude**

Table 5. Independent *t*-test Results and Effect Sizes (Cohen's *d*) for Student Academic Achievement

Second Quarter Grades	Home Visit ( <i>n</i> = 2,974)		No Home Visit ( <i>n</i> = 2,840)		<i>t</i>	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Math	84.53	10.14	83.18	9.97	5.617	.000*	0.13
Science	85.38	9.53	84.79	9.65	2.570	.010	0.06
English	84.53	10.14	83.18	9.97	5.143	.000*	0.12
Social Studies	86.76	9.16	86.20	9.03	2.524	.012	0.06

*Source.* School System Program Records.  
*Note.* \**p* < .001



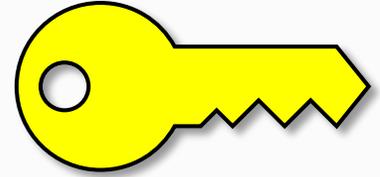
Table 5 (p. 80)

# \*What were the study findings on student outcomes?



Relevant article text:

- *“Students who received a teacher home visit had significantly higher PRS, or positive reward system, scores than students who did not receive a teacher home visit ( $p < .001$ ). Teacher home visits showed a small positive effect for positive classroom behaviors, as measured by PRS scores (Cohen’s  $d = 0.13$ ). However, there were no statistically significant differences between the DPS scores of students who received a teacher home visit compared to students who did not receive a teacher home visit.” (p. 77)*
- *“Students who received a home visit had statistically significantly higher mathematics and English/language arts second quarter grades than students who did not receive a teacher home visit. Additionally, teacher home visits showed a small positive effect for both subjects (mathematics, Cohen’s  $d = 0.13$ , English/language arts, Cohen’s  $d = 0.12$ ). (p. 80)*
- Table 3 (p. 78) & Table 5 (p 80)



# \*What are important takeaways?

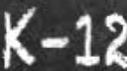
- Study findings show positive effect of home visits on academics, behavior, and parent involvement
- Cautions/limitations
  - The size of the difference between the home visit and non-home visit groups was not large
  - Couldn't take into account preexisting difference between the home visit and non home visit groups (e.g., prior grades, prior behavior)

• Discussion p. 86

# Evidence already reviewed: The WWC

IES :: WWC What Works Clearinghouse MENU  Go

Select topics to **Find What Works** based on the evidence

 Literacy	 Mathematics	 Science	 Behavior
 Children and Youth with Disabilities	 English Learners	 Teacher Excellence	 Charter Schools
 Early Childhood (Pre-K)	 K-12 Kindergarten to 12th Grade	 Path to Graduation	 Postsecondary

# “Texting Parents” review: Key takeaways

- Meets WWC findings without reservations = STRONG ESSA rating
- What’s the texting intervention? Parent Engagement Project (PEP)
  - Yearlong; schoolwide parent texting intervention
  - Types of messages sent:
    - Advanced notice of tests and important deadlines (4-day and 1-day notice)
    - Missing homework notice
    - Daily lesson summaries with conversational prompts (rotated across subjects).
  - Sent by schools via existing school information system
  - Designed to send approx. 65 texts; average of 30 sent

# “Texting Parents” review: Key takeaways (continued)

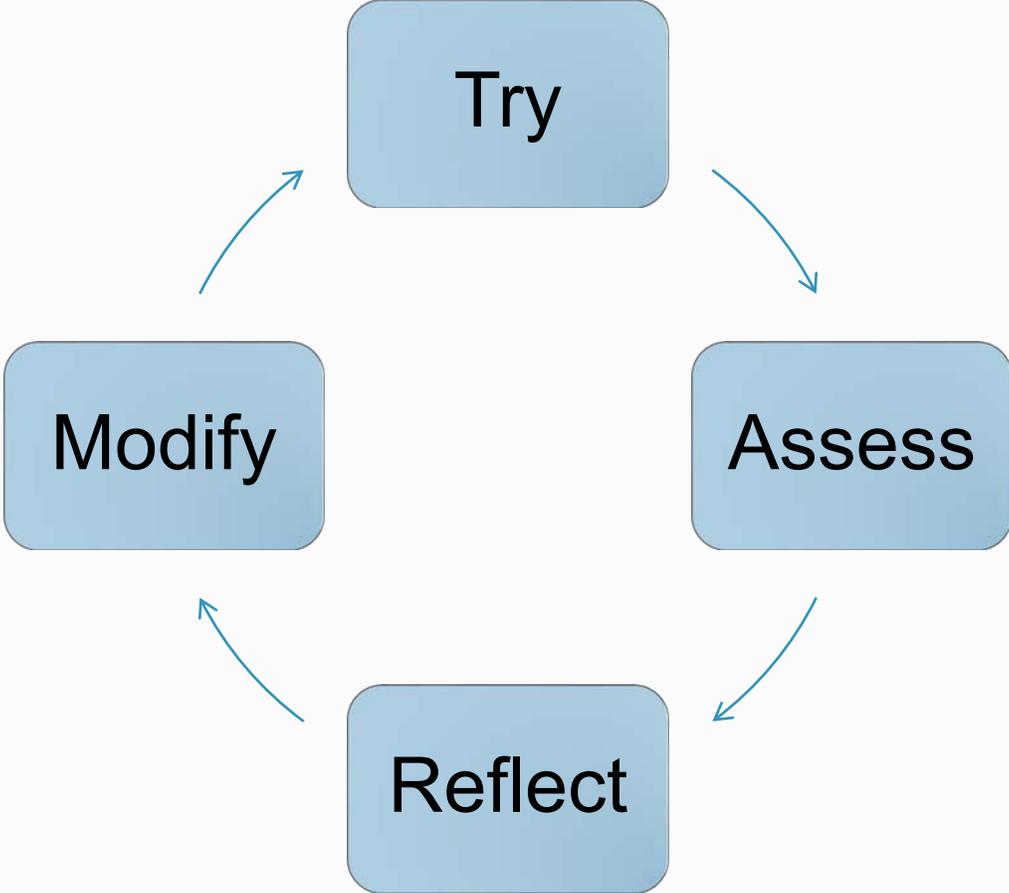
- Setting: secondary schools in England, students about 11 to 16 years old
- How did they do it?
  - Used existing school information and texting system
  - Training for staff
  - School-based coordinator
  - Coaching support from research team
- Findings
  - Improved math achievement and attendance

# Reflection: Applying the evidence locally

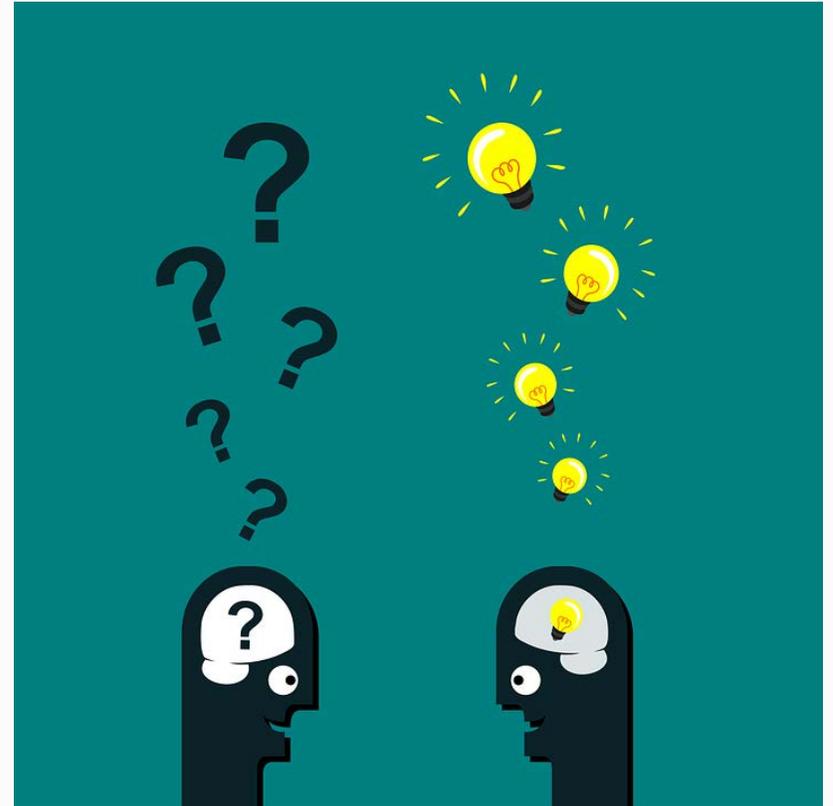
- What are you doing locally?
- What can you apply?
- What can you adapt?
- What will it take to implement?



# Quick reminder: Try, assess, reflect



Questions?





# Review What We Learned

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# Review what we covered

We hoped to:

- Introduce the Building Bridges Series
- Understand the levels of evidence as defined in the Every Student Succeeds Act (ESSA)
- Ensure we are all discerning consumers of the evidence
- Discuss practical considerations for the local adoption of the evidence
- Leave with a few strategies to apply locally



# Review: What strategies did we cover?

## Home Visits Program

- Provide training
- Visit in pairs
- Prepare discussion points in advance
- Target specific students
- You don't have to visit everyone

## Texting Program

- Provide training
- On-site coordinator
- Strategically target messages for important news





# Next Steps

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# Designing the next virtual discussion: Your input

Next discussion: Follow-up to April 10 in-person workshop on non-academic skills that support college and career readiness

- What would you like to see in our next virtual discussion? What will support your needs?
  - A deeper dive into how to review research?
  - In-depth review of a few strategies?
  - High-level overview of multiple strategies?
  - More or less technical detail?
  - Review of one or more articles?
  - Other?



# Next steps



## REL AP

- **Share additional information via email**
  - Ask A REL reference lists
  - Another example of an evidence-based intervention that may be of interest
  - Slides from today's discussion
- **Prepare for the April 10 Workshop and the May virtual discussion**
- **Respond to your requests!**

## Community Members

- **Consider applying a strategy from today's discussion or last meeting**
  - Is broader application in your school or district of interest?
- **Consider reviewing the additional materials we will share.**
- **Contact us with questions or ideas; we are here to support you!**
- **Share information with your colleagues!**

# Help us grow!

## Meeting feedback

- Please access the link provided to share feedback on this meeting. This will help us better plan and deliver our next virtual discussion.

**[Add link]**



Photo by Markus Spiske on Unsplash



# Thank you!

## Contact REL Appalachia

General inquiries:

[RELAppalachia@sri.com](mailto:RELAppalachia@sri.com)

Ask A REL:

<https://ies.ed.gov/ncee/edlabs/askarel/>

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