

More Research Needed: How to Build an Evidence Base for Interventions to Support Postsecondary Transitions in Rural Settings

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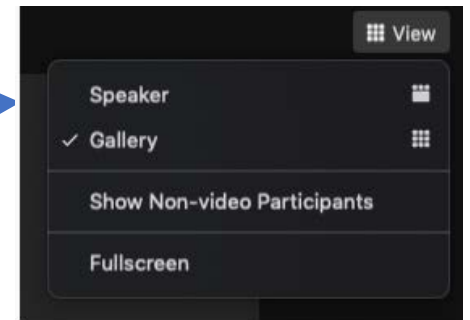
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Quick tour of Zoom features

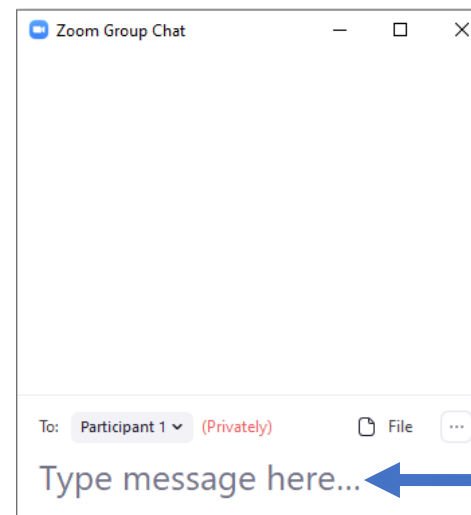
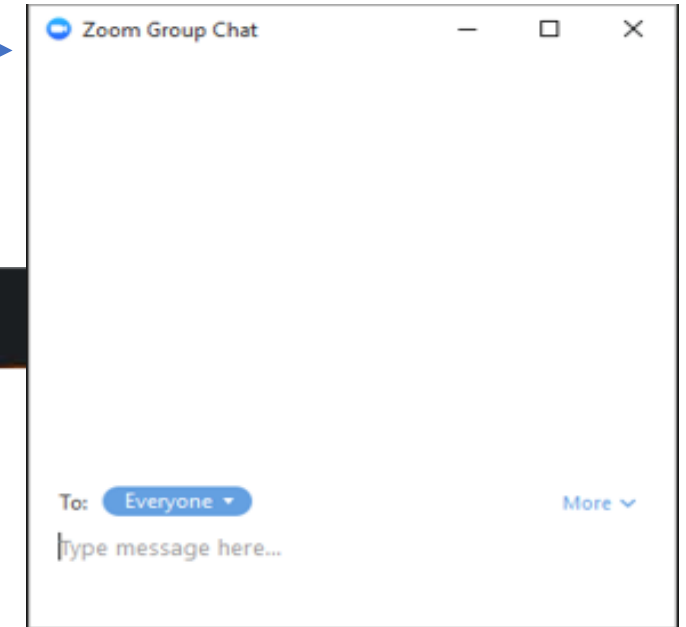
Pro Tip: Mute your mic unless speaking to limit background noise.

Select view

To view and use **Chat**



Pro Tip: Turn video off if you are experiencing low bandwidth.



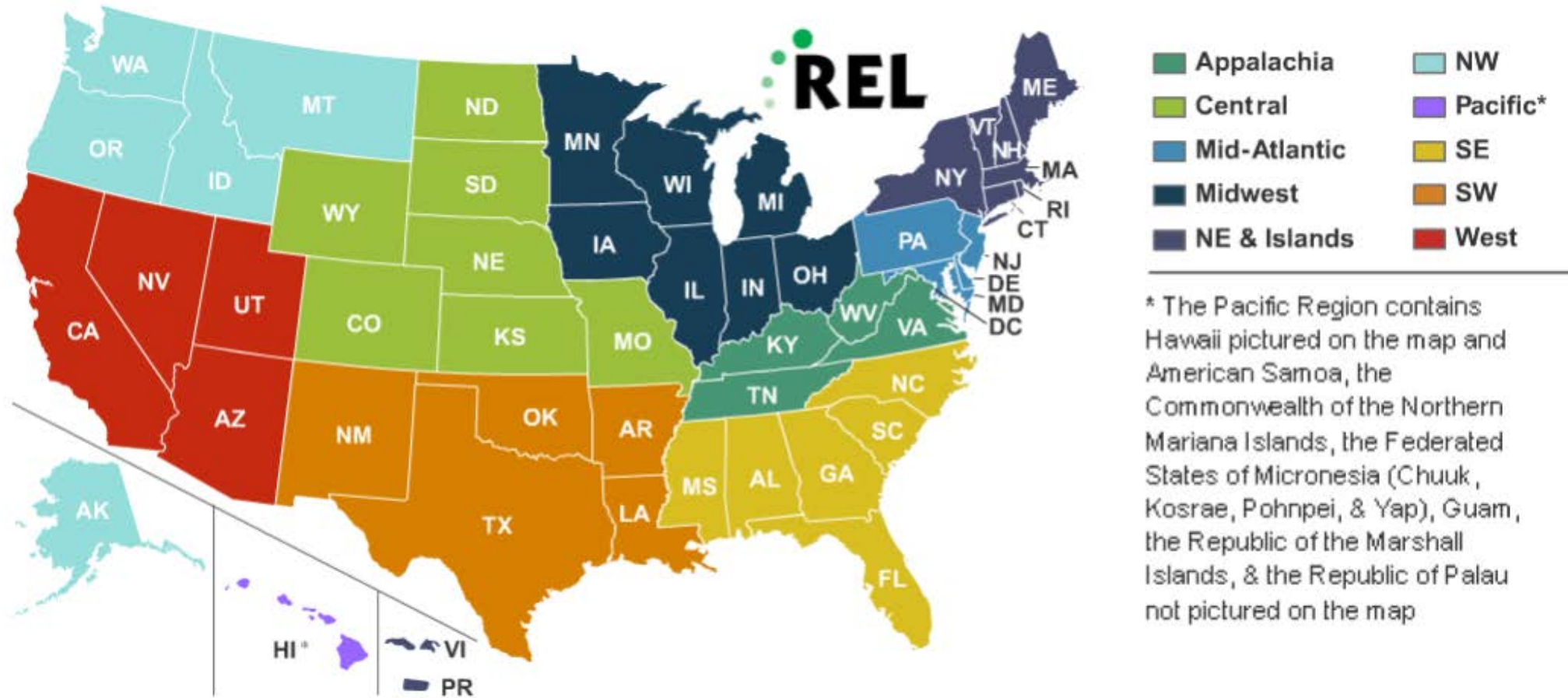
You can send a Chat message to Everyone in the meeting or select a specific person from the dropdown.

Agenda

- Welcome
- Why do we need rigorous research in rural communities?
 - Practitioner perspective
 - Findings from REL Appalachia's systematic evidence review
- Challenges to conducting research in rural settings
- Solutions to challenges to conducting research in rural settings
- Perspectives from the field
- Wrap-up

Introduction to REL Appalachia

The Regional Educational Laboratories



The **10 RELs** work in partnership with stakeholders to **support a more evidence-based education system.**

Administered by the U.S. Department of Education, Institute of Education Sciences (IES)

Find us on the web! <https://ies.ed.gov/ncee/edlabs/regions/appalachia/>

Applied Research



Regional Educational Laboratory Appalachia

At SRI International

What Tools Have States Developed or Adapted to Assess Schools' Implementation of a Multi-Tiered System of Supports/ Response to Intervention Framework?

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Training, Coaching, and Technical Support



Dissemination

Supporting Your Child in Developing Math Skills For Future Success

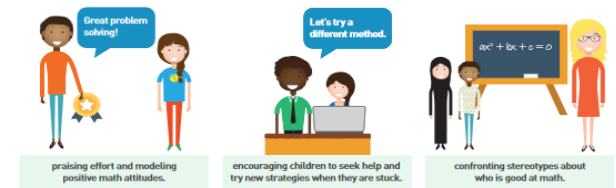
Math success opens doors to college and careers.

The technical and professional jobs of the future demand more mathematical knowledge and problem solving skills.



- Children who believe they can be successful in math are more willing to put in effort, even when they struggle, and this results in better performance.¹
- Success in elementary school math predicts future achievement in middle and high school math and other subjects.^{2,3}
- Students who complete higher-level math in high school earn higher incomes in the future.⁴
- The number of STEM (science, technology, engineering, and mathematical) jobs is growing and half of all STEM jobs are available to workers without a four-year college degree. STEM jobs pay 10% more than other jobs available to these workers.⁵

Families can support children in developing math skills for the future by^{iv}:



REL APPALACHIA

¹Bealer, J. (2015). Mathematical mindset: Unleashing students' potential through creative math, inspiring messages and innovative teaching. San Francisco, CA: John Wiley & Sons.

²Claessens, A., & Engel, M. (2015). How important is where you start? Early mathematics knowledge and later school success. *Teachers College Record*, 117(6), 1-29. <https://doi.org/10.1177/0013164415022177>

³Singler, R. S., Duncan, G. J., Deater-Deckard, K. E., Doolittle, M. K., Claessens, A., Engel, M., & Chen, M. (2015). Early predictors of high school mathematics achievement. *Psychological Science*, 26(7), 971-977.

⁴Ashby, J. (2004). Closing the opportunity gap: An annual SDG-1000 progress report on the alignment of high school policies with the demands of college and work. Washington, DC: Author.

⁵Rothwell, J. (2015). The Hidden STEM Economy. Brookings Institution, Washington, DC.

^{iv}Epstein, J.L. (2001). School, family, and community partnerships: A review of the research. Boulder, CO: Westview Press.

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Why Do We Need Rigorous Research in Rural Communities?



Allen Pratt

- Executive Director of the National Rural Education Association
- Former executive director of the East Tennessee Center of Regional Excellence for the Tennessee Department of Education
- Focus is on providing a unified voice for rural schools and communities
- Previously also served as a teacher, coach, principal, and assistant superintendent



Source: https://www.nrea.net/About_NREA

Sherry Horner

- Organizational Results and Data Officer for Partners for Education at Berea College
- More than 25 years leadership experience working in the non-profit and education sectors
- Designed, implemented, and led educational cradle-to-career initiatives in Appalachian Kentucky
- Designed data-driven continuous improvement and provided strategic data and evaluation leadership



Source: <https://www.berea.edu/pfe/leadership-team/>

A systematic evidence review



What is the existing evidence for *positive effects* of **nonacademic interventions** on student postsecondary enrollment, academic persistence, and completion for...

- all students?
- rural populations?
- high-poverty populations?



What additional research is needed?

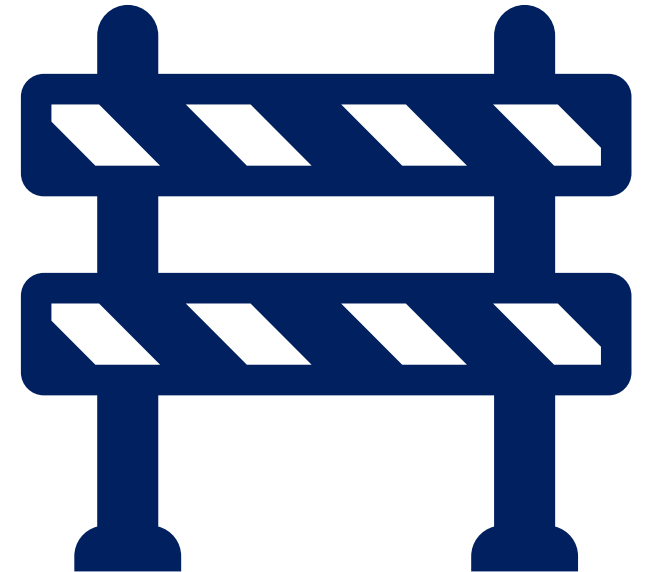


Nonacademic Interventions for Postsecondary Enrollment and Success with Rural and High-Poverty Populations:
A Systematic Evidence Review

Rebecca A. Schmidt and C.J. Park

Nonacademic barriers to postsecondary transition

- **Confidence** (Ali & McWhirter, 2006; Ali & Saunders, 2008; Irvin et al., 2011)
- **Geographic isolation** (Bennett, 2008)
- **Localism** (Hlinka, 2017; Hlinka et al., 2015)



Interventions to address nonacademic barriers

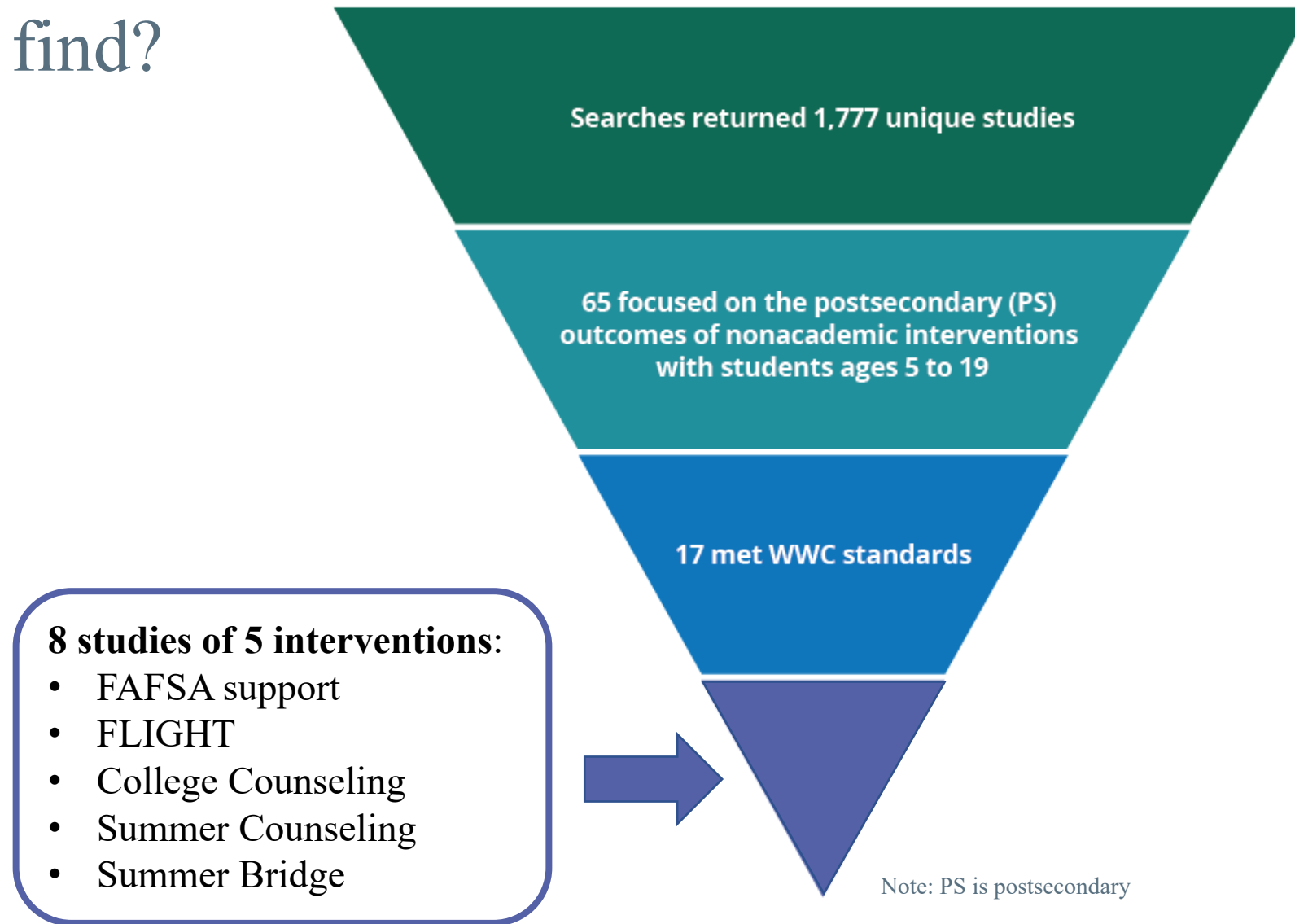
- Programmatic supports or activities that address at least one nonacademic barrier.
- For example, these types of supports could address:
 - Knowledge of the postsecondary enrollment and registration process,
 - Challenges of living independently for the first time,
 - Adapting to cultural norms of dorm living, or
 - Strengthening students' connections to the college community.

Methods

- Systematic review of rigorous impact studies
- Nonacademic interventions with K–12 students or summer after high school
- Evidence of positive impact on students' postsecondary success



What did we find?



Only one intervention showed positive effects in rural high-poverty settings

- A study of Upward Bound found a positive impact on postsecondary enrollment.
- However, the program changed substantially since the study period (1992 to 1994), and the findings of the study may not be generalizable to current conditions.



Source: Personal photo taken by Rebecca Schmidt

Significant gaps in research

- There were few studies of the impact of nonacademic interventions on student postsecondary outcomes.
- Many studies focused on postsecondary interventions, rather than K–12 or the transition.
- Most studies did not meet WWC standards.
- Most interventions with positive impacts have not been tested with rural and high-poverty populations.



Challenges to Conducting Research in Rural Settings

Why isn't there more rigorous rural research?



Size

- Impact studies require large samples.
- Rural sites have fewer students per school and per district.
- Rural impact studies will not show effects if the sample is too small.



Cost

- Collecting data from multiple districts can be costly.
- Finding 50 schools in one urban district is common, but you may need up to 20 rural districts to find the same number of schools.

Making more informed decisions

- Rigorous causal research helps us decide where to best invest limited educational funds.
- It is important to create usable research that is responsive to rural communities and contributes to a broader understanding of an issue.



Solutions to Challenges to Conducting Research in Rural Settings

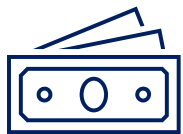
What can we do?



Researchers: conduct **more impact studies** in rural settings and with high-poverty populations.



Policymakers: think about ways to **aggregate data systems** across rural districts (e.g., rural consortia, state data systems).



Funders: consider providing **additional support** to offset the challenges of conducting research in these settings.

Perspectives from the Field

Jennifer Ash

- Director of the National Center for Rural Education Research Networks (NCRERN) at the Center for Education Policy Research (CEPR)
- Former middle school teacher
- Managed the production of research reports, policy briefs, and blog posts about rural education policy issues in Arkansas
- Led a study of a college scholarship program based in a rural district



Source: https://www.nrea.net/About_NREA

Katie Kieninger

- Ohio State Network Manager, National Center for Rural Education Research Networks
- Manages the network of 20 rural school districts across Ohio to implement interventions addressing absenteeism, postsecondary readiness, and postsecondary enrollment



Source: https://www.nrea.net/About_NREA

Ann O'Connell

- Program Chair for Quantitative Research, Evaluation and Measurement, Department of Educational Studies, The Ohio State University
- Research interests in evaluation and educational statistics, research and data use, and methodology capacity building
- PI on IES-funded methods training grant to build capacity for selection and use of evidence-based interventions in US schools/districts (<https://u.osu.edu/ebitraining/>)
- Co-author on 2021 OH Report: Investing in Student Wellness and Success (Miami University, case studies; rural, urban, suburban)
- Case study on District Data Use (ongoing; rural, urban, suburban)



Source: <https://ehe.osu.edu/educational-studies/directory/?id=oconnell.87>

Discussion with the panel

- What **barriers** or challenges have you faced in conducting research in **rural settings**?
- Have you faced **barriers** that are specific to research **on postsecondary transitions in rural settings**?
- How are the **barriers different** / the same for **causal** impact research as compared to **qualitative or descriptive** studies?
- How have you been able to **address** these **barriers** to carry out rural research?
- What additional **supports** or **policies** would **help** ensure rural stakeholders have access to research on educational programs in their settings?
- What **strategies** can **researchers** use to increase their capacity to conduct research in rural settings?

Q&A - Audience



Wrap-up

For our growth...

We appreciate your feedback as we continue to improve our work to meet your needs!



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