# Research-Based Strategies for Effective Remote Learning:
## *Designing effective instruction for a hybrid model*

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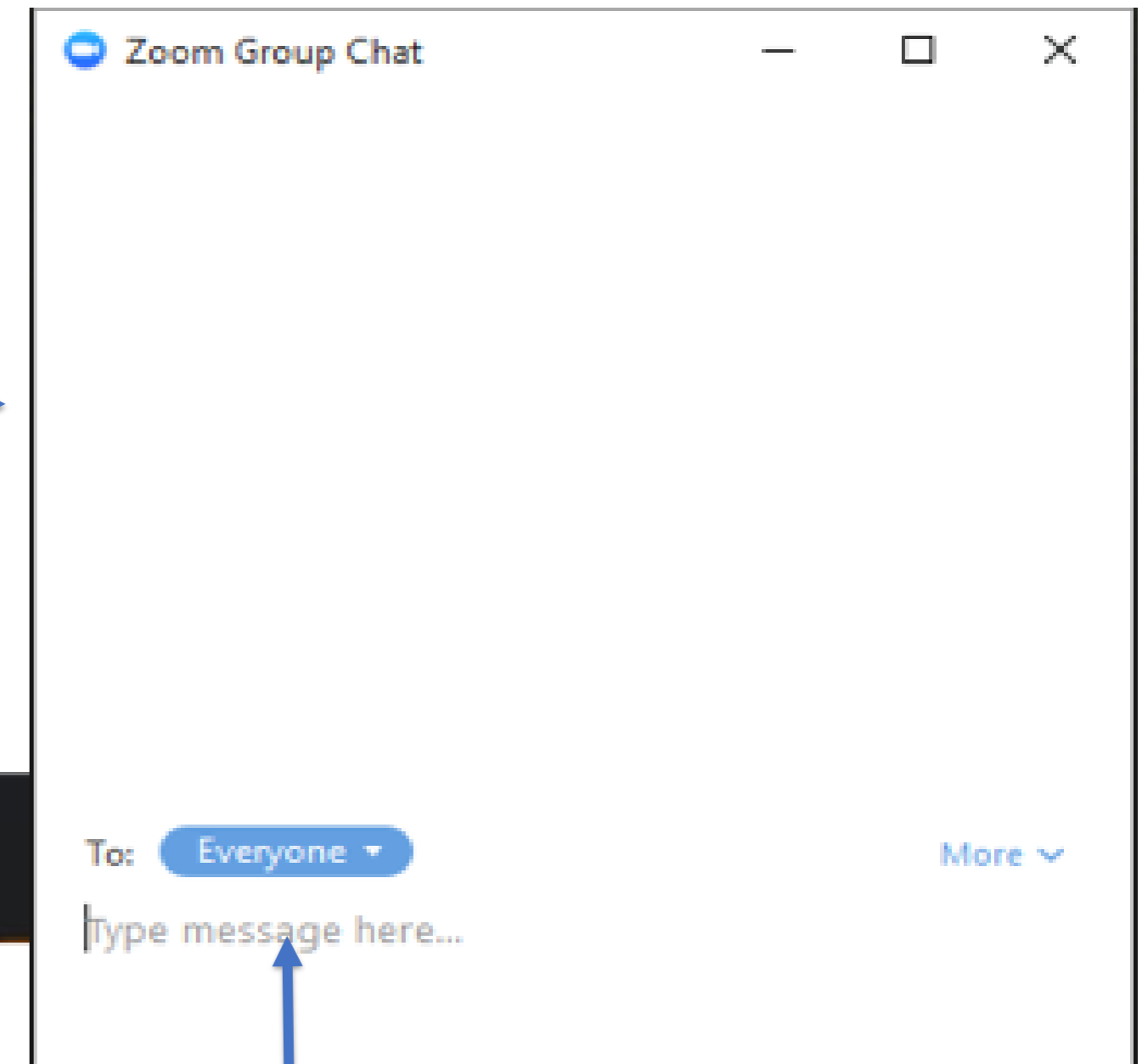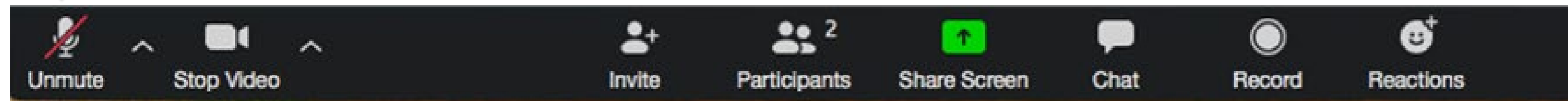REL Appalachia

Emnet Shibre
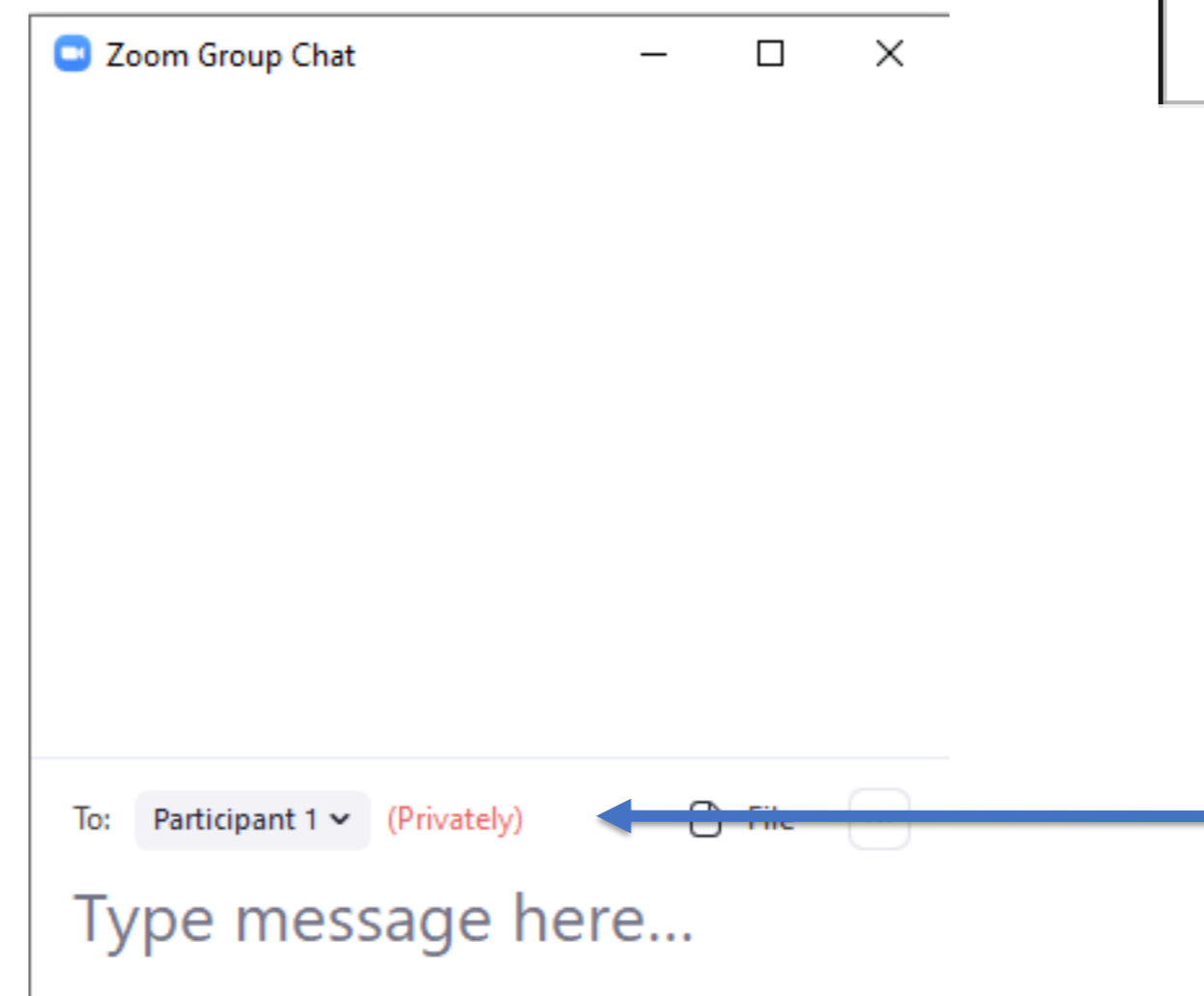REL Appalachia

# Quick tour of Zoom features

Mute/unmute **microphone**

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

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.

# Breakout groups

- Wait for an invitation to appear on your screen and click "Join Breakout Room."
- When the breakout room closes, you will automatically be returned to the full group.

You have been assigned to Breakout Room:

Breakout Room 2

Join Breakout Room

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# Agenda

- Welcome and introductions
- Train-the-trainer structure
- Overview of hybrid learning
- Alternating hybrid learning
- Synchronous hybrid learning
- Wrap-up and next steps

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# Poll

What is your role?

- Teacher
- School Administrator
- District Administrator
- Instructional Coach
- Other

# Meet the presenters

Emma Pellerin
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Jill Marcus
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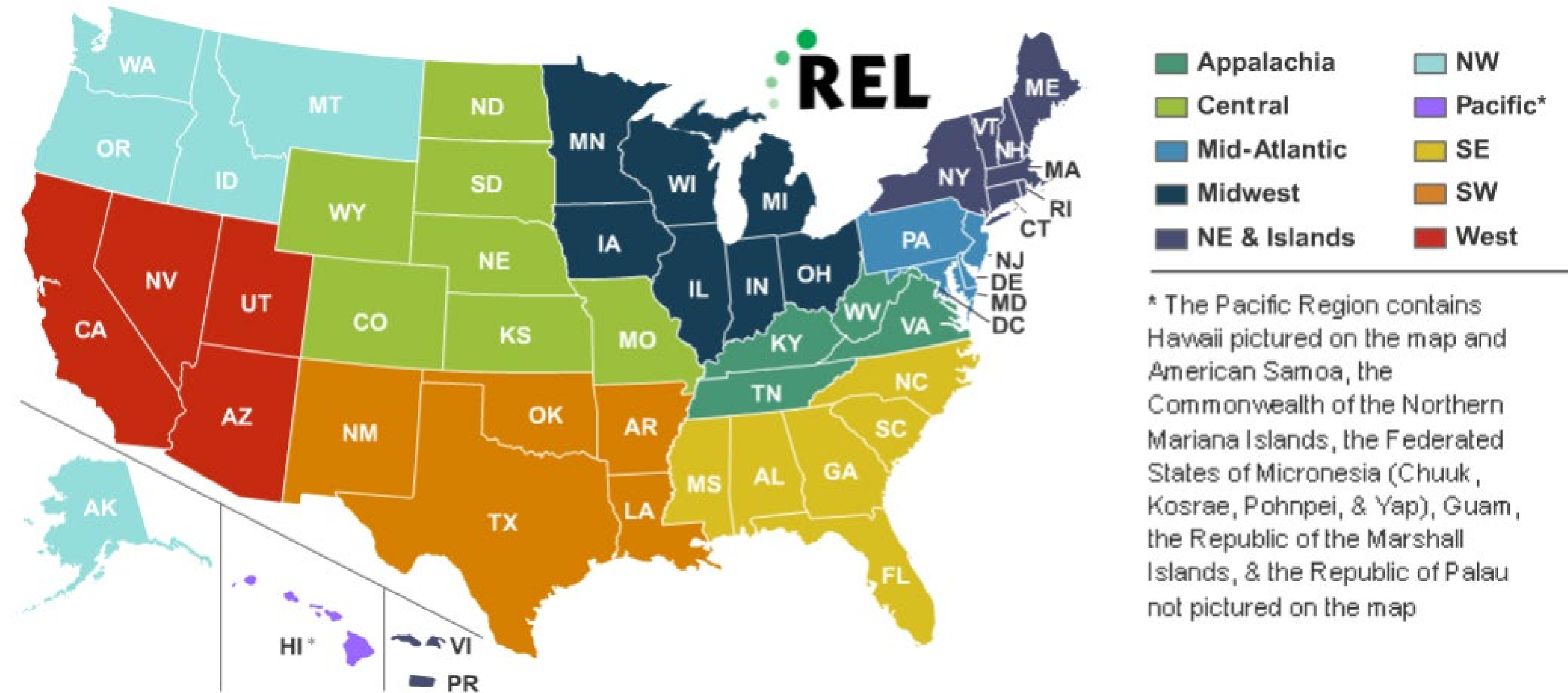
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- Brooke Drinnon, Niswonger Foundation
- Mia Hyde, Comprehensive Educational Resources

- Krisi Wallin, Greene County Schools
- Angie Wills, Johnson County Schools
- Denise McKee, Hawkins County School District
- Kevin Cline, Jefferson County School District
- Lori Hill, Sevier County School System

# The Regional Educational Laboratories



**Legend:**
- Appalachia
- Central
- Mid-Atlantic
- Midwest
- NE & Islands
- NW
- Pacific*
- SE
- SW
- West

\* 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

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/

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# Applied Research

# Training, Coaching, and Technical Support

# Dissemination

Community Math Nights

WV

VA

KY

Workforce Readiness

Student Success in Mathematics

A B C Boosting Early Literacy and Numeracy

Implementing Performance Assessments

Postsecondary Transitions

Using Data & Evidence

Postsecondary Transitions

Cross-State Collaborative to Support Schools in the Opioid Crisis

TN

Practices for Remote Learning

Early Literacy
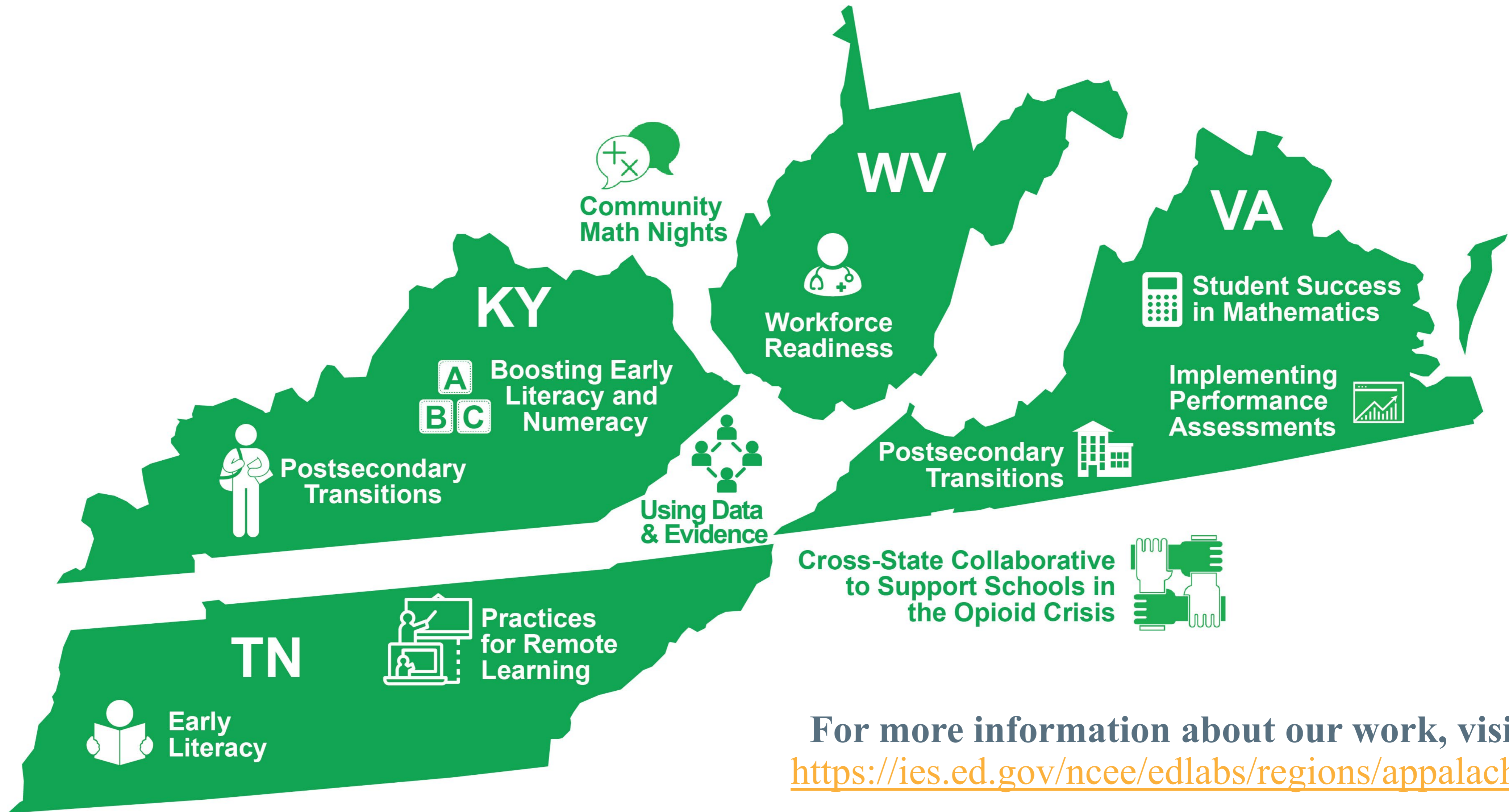
**For more information about our work, visit:**
https://ies.ed.gov/ncee/edlabs/regions/appalachia/

# Train-the-Trainer Structure

# Train-the-trainer structure

The workshop is divided into three sections:
- Overview of hybrid learning
- Alternating hybrid learning
- Synchronous hybrid learning

The three sections can be presented all together or separately.

We have provided you with a slide deck you can use in your trainings and handouts.

# Facilitator's handbook



Research-Based Strategies for Effective Remote Learning: Designing Effective Instruction for a Hybrid Model

*Facilitator's Handbook*
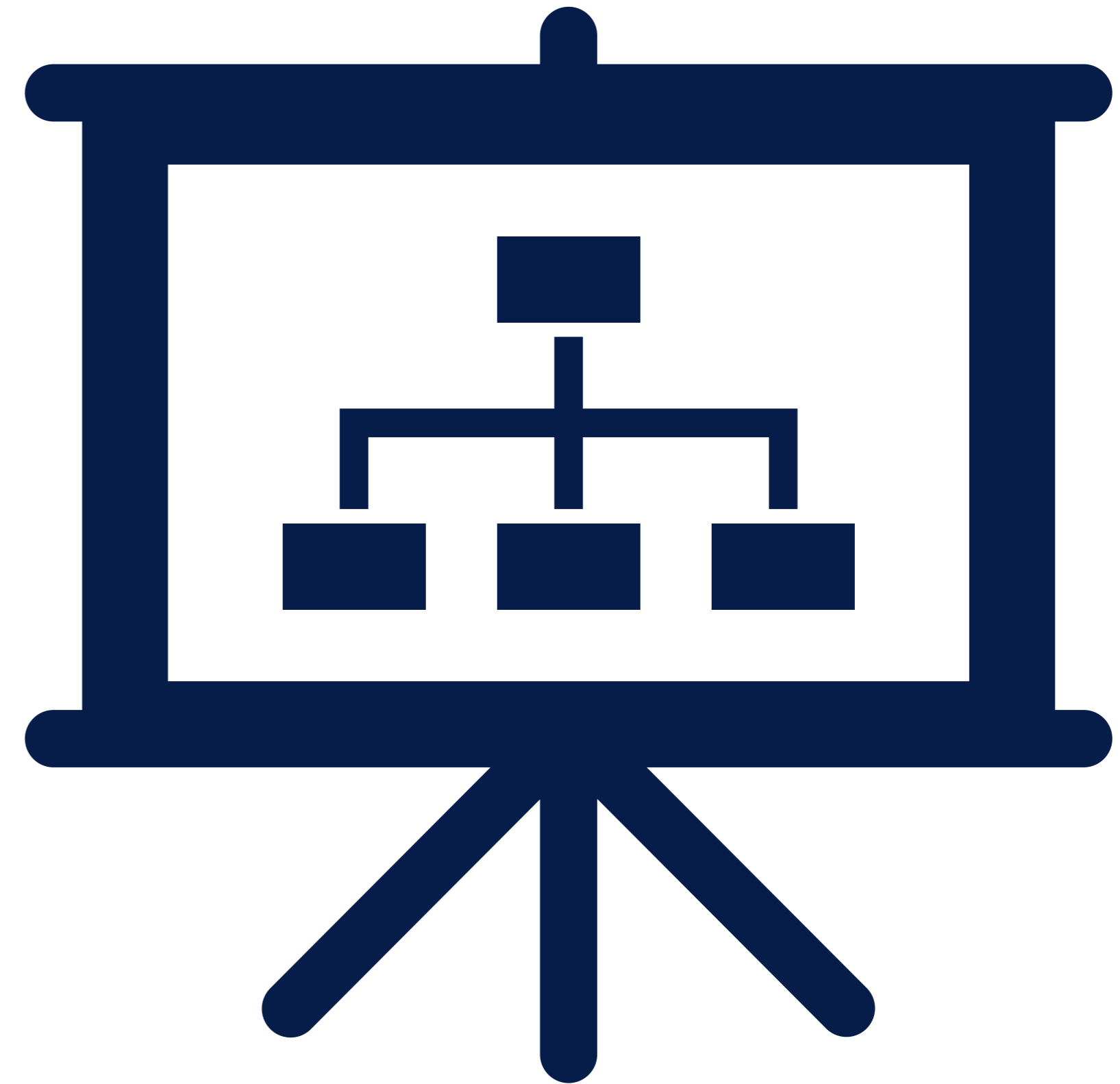
Regional Educational Laboratory Appalachia at SRI International

March 2021

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- How to use the facilitator's handbook
- Welcome and introductions
- Overview of hybrid learning
- Alternating hybrid learning
- Synchronous hybrid learning
- Wrap-up and next steps
- Best practices in facilitation
- Handout
- Sample workshop invitation
- Alternative suggestions for creating breakout rooms and polls

# Additional supports

Office hours for trainers to share ideas and problem-solve

Q&A document based on your follow-up questions

Email emma.pellerin@sri.com with any questions

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# Check-in

- What has been most challenging for educators in implementing the practices we introduced in the first two workshops?

- How have you and the teachers in your districts used the materials from the first two workshops?

# Overview of Hybrid Learning

# Hybrid learning during COVID pandemic

# Check-in

- Poll: Which model is being used in your school or district? Alternating hybrid, synchronous hybrid, both or something else?

- Chat: What is one thing that teachers in your school or district find challenging about the model they are using?

# Hybrid learning research before COVID

- Blended learning – students engaged in self-paced online activities at school with support from the teacher.

- Synchronous hybrid learning in universities – some students attend in person while others attend the class remotely.

*(Cleveland-Innes & Wilton, 2018; Larbi-Siaw & Owusu-Agyeman, 2017; Raes et al., 2020)*

# Characteristics of effective hybrid learning

**High expectations**

**Commitment to achieving equitable outcomes**

**Competency-based**

**Valuing all learners**

*(Green & Harrington, 2020; Kennedy & Ferdig, 2018; Peterson & Arnold, 2016; Powell et al., 2014)*

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# Prioritizing instructional needs

Whichever model you are using, the key is to determine the best use of in-person time and to structure independent learning time well.

1. What essential knowledge and skills do you want students to acquire?
2. What experiences do they need to acquire that knowledge and those skills?
3. How can those experiences be provided in a hybrid learning model?
4. How will you assess student learning?

*(Cleveland-Innes & Wilton, 2018; Green & Harrington, 2020)*

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# Activity: Prioritizing instructional needs

SSP.06: Develop a geographic awareness by: Analyzing interaction between humans and the physical environment.

*1. What are the essential knowledge and skills you want to students to have?*
- Describe how geography shapes how people live in a place.
- Discuss the costs and benefits to altering the geography of a place.

*2. What experiences do students need to acquire that knowledge and those skills?*
- Look at examples of how geography shapes lives in our town and other places.
- Engage in cost/benefit analysis discussion.

*3. How can those experiences be provided in a hybrid learning model?*
- Use Google Sheets to capture and share ideas.
- Design matching game as interim assessment.

*4. How will I assess student learning?*
- Assess students' papers on a cost/benefit analysis of a controversial example.

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# Alternating Hybrid Learning

M     T     W     R     F

# How to structure in-person time

Prioritize more interaction during in-person time, including:

- Peer-to-peer interactions, such as small group activities.

- Direct teacher-student interaction and feedback.

*(Gallagher & Cottingham, 2020; Means et al., 2013)*

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# Flipped classroom
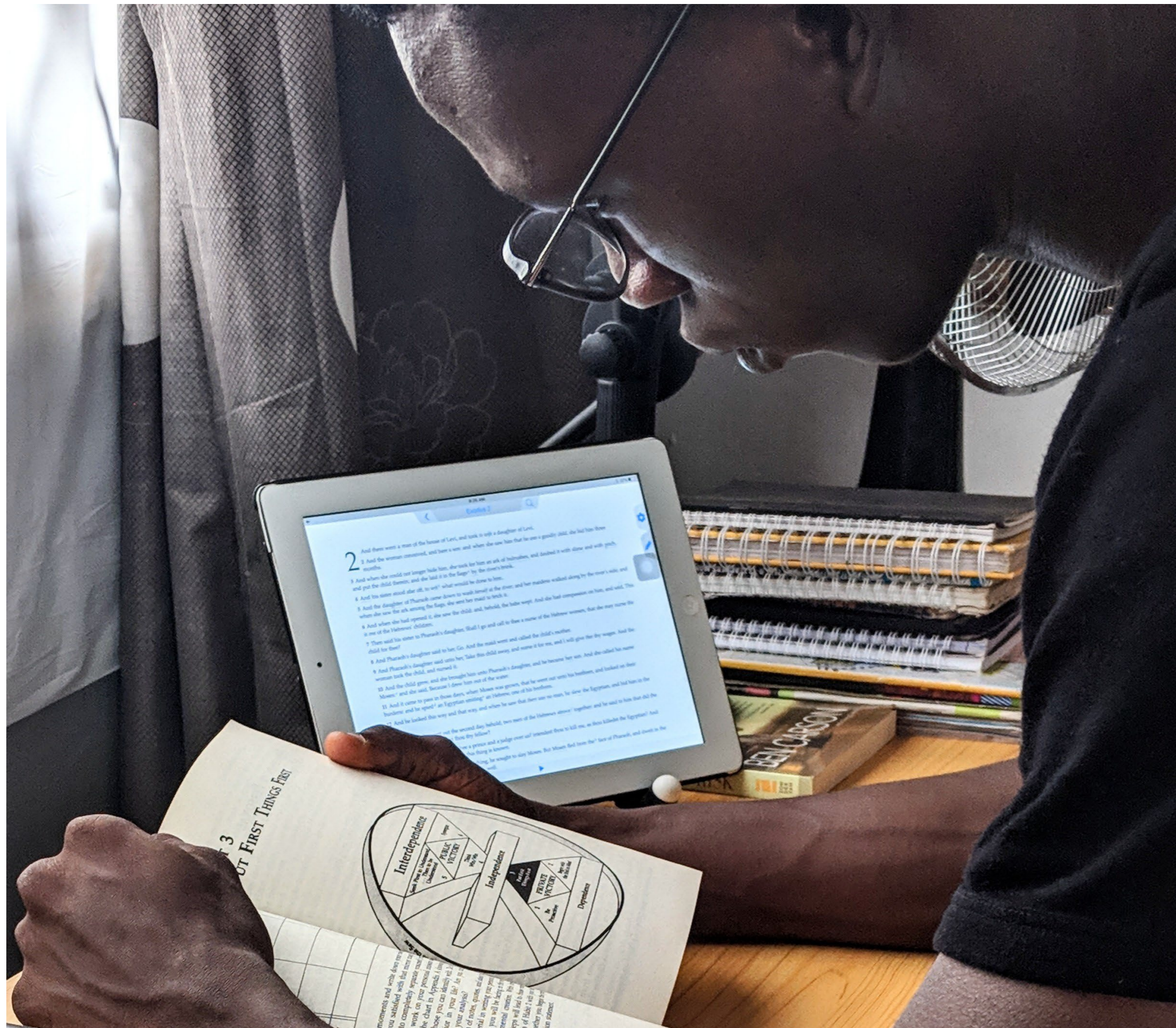


- Students engage with instructional material before class.
- The time in class is used to apply what they have learned and engage creatively with the subject matter.

*(King, 1993; Gallagher & Cottingham, 2020; van Alten et al., 2019)*

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# Implementing flipped classrooms

- Researchers found a lot of variability in how flipped classrooms were implemented. For example:
  - Adding quizzes to the in-person classes to assess student understanding of the material provided before class was found to increase the effectiveness of the flipped classroom model.
  - Small group assignments might increase effectiveness, but the research is inconsistent.

- **Chat**: How might this concept work for you with your students? Are there things that students can do on their own so that when they meet with you, they are prepared to apply knowledge they gained independently?

*(van Alten et al., 2019)*

# How to structure asynchronous learning time

Research provides a variety of suggestions for how to structure asynchronous time. During this time, students can:

- Collect data/evidence.

- Complete additional reading.

- Complete written reflection.

- Work virtually with a small group to complete a task.

- Prepare to present their ideas, findings, solutions, conjectures, or conclusions when they return to the full class setting (online or in-person).

- Engage with interactive materials, such as virtual field trips, virtual science labs or videos that they can pause, or re-watch.

*(Conley et al., 2020; Darling-Hammond et al., 2020)*

# Activity: Breakout group discussion

- What do you think is the best way to use in-person time in an alternating hybrid model?
- What methods can be used to effectively structure students' independent work time?
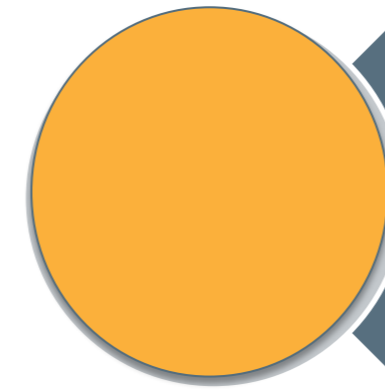
**High expectations**
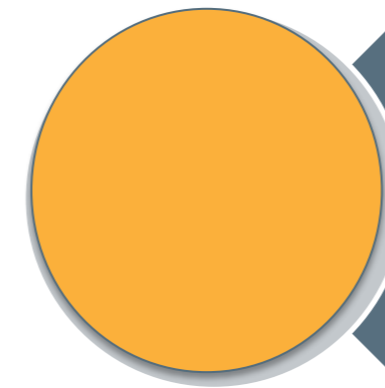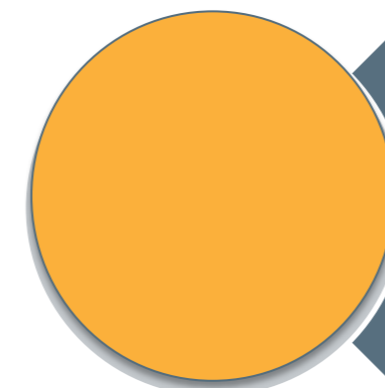
**Commitment to achieving equitable outcomes**

**Competency-based**

**Valuing all learners**

*(Green & Harrington, 2020; Kennedy & Ferdig, 2018; Peterson & Arnold, 2016; Powell et al., 2014)*
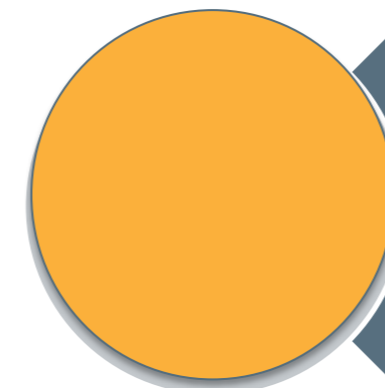
# Check-in

- What do you think is the best way to use in-person time in an alternating hybrid model?

- What methods can be used to effectively structure students' independent work time?

# Synchronous Hybrid Learning

M     T     W     R     F

# Connectedness and communication

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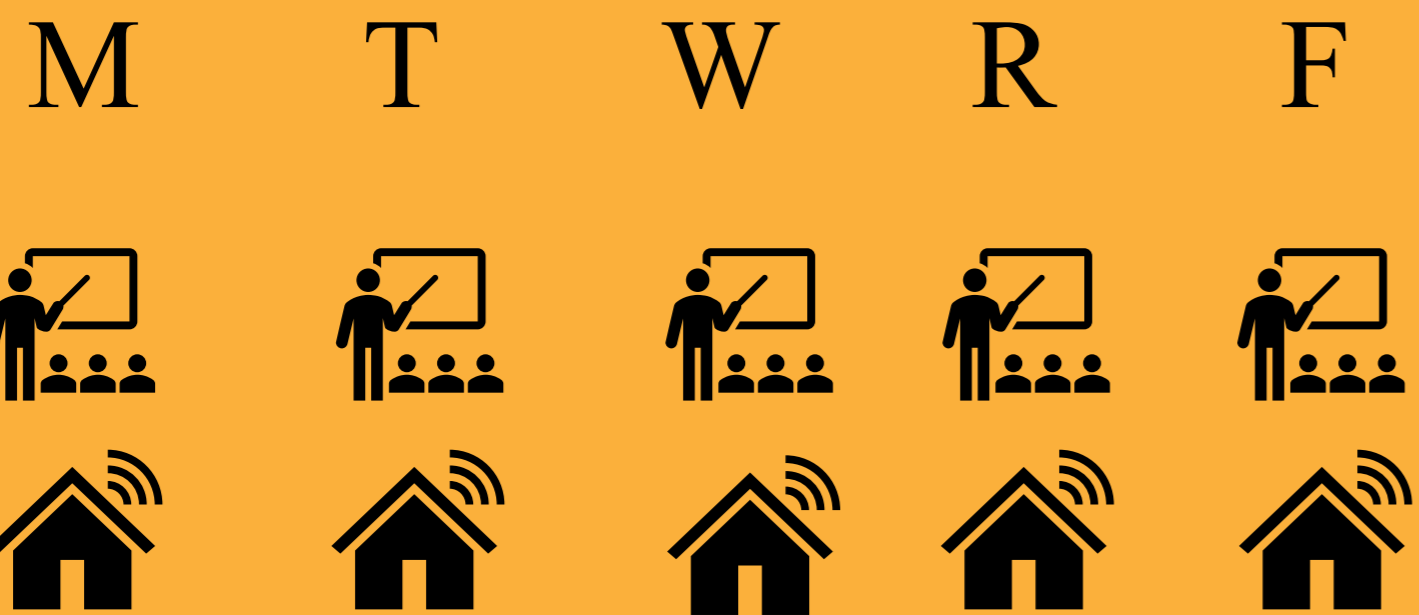
# Strategies to establish connectedness

• Small groups – group students in-person together and online together.

• Technology – use carefully selected and tested technology.

• Inclusive language – avoid "here-there" language.

*(Angelone et al., 2020; Peterson & Arnold, 2016)*

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# Strategies to ensure smooth communication

- Balance attention between in-person and online groups.

- Ensure audio quality is good.

- Tailor activities to ensure all instruction is visible to online students.

- Consider pairing each online student with an in-person student.

*(Wang et al., 2018)*

# Activity: Breakout group discussion

- How might teachers establish connectedness and communication with and between all students in a synchronous hybrid setting?

- How can teachers effectively manage group work in a synchronous hybrid setting?

- What strategies can promote engagement during teacher-led activities?

# Check-in

Respond to one:

- What is one way to establish connectedness and communication with and between all students in a synchronous hybrid setting?

- What is one way to manage group work in a synchronous hybrid setting?

- What is one technique that can promote engagement during teacher-led activities?

# Wrap-up and Next Steps

# Next steps

Consider how you might incorporate strategies from this workshop into your presentations with your colleagues.

- Include characteristics of effective hybrid learning.
- Prioritize instructional needs.
- Use a flipped classroom model.
- Establish connectedness.
- Ensure smooth communication.

# Additional supports

Office hours for trainers to share ideas and problem-solve

Q&A document based on your follow-up questions

Email emma.pellerin@sri.com with any questions

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# For our growth…

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

# Thank you!

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