Research-Based Strategies for Effective Remote Learning:

*Student Engagement*

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Quick tour of Zoom features

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

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

To view and use Chat

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.
Agenda

• Welcome and introductions
• Train-the-trainer structure
• Overview of student engagement
• Behavioral engagement
• Emotional engagement
• Mental engagement
• Wrap-up and next steps
Poll

What is your role?

• Teacher
• School Administrator
• District Administrator
• Other
Meet the team

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Applied Research

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

Regional Educational Laboratory Appalachia at SRI International

Training, Coaching, and Technical Support

Dissemination

Supporting Your Child in Developing Math Skills For Future Success

Math success opens doors to college and careers.

Families can support children in developing math skills for the future by:

1. Planning and discussing math-related activities.
2. Encouraging children to seek help with math homework when they need it.
3. Discussing and reinforcing everyday math concepts.
4. Supporting children with mealtimes, money management, and other math skills.

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For more information about our work, visit: https://ies.ed.gov/ncee/edlabs/regions/appalachia/
Train-the-Trainer Structure
Train-the-trainer structure

- The student engagement workshop is divided into three sections, each focusing on a different type of engagement:
  - Behavioral engagement
  - Emotional engagement
  - Mental engagement
- The three sections can be presented all together or separately.
- We have provided you with:
  - A slide deck you can use in your trainings
  - Handouts
  - Facilitator’s Handbook
Facilitator’s Handbook

• How to use the facilitator’s handbook
• Welcome and introductions
• Overview
• Section 1: Behavioral engagement
• Section 2: Emotional engagement
• Section 3: Mental engagement
• Wrap-up and next steps
• Best practices in facilitation
• Handouts
• Sample workshop invitation
• Alternative suggestions for creating breakout rooms and polls
Additional supports

Office hours for trainers to share ideas and problem-solve

FAQ document based on your follow-up questions

Email emma.pellerin@sri.com with any questions
Overview of Student Engagement
Focus of today’s workshop

• A great deal of research has been conducted on the topic of online learning, but not in the context of a pandemic.
  – Much research on online learning has been conducted in higher education.
  – Not all of the strategies we present today have been rigorously tested with K–12 students.

• The research on online learning highlights different factors that can improve student engagement including:
  – Features of software platforms.
  – Strategies educators can use.
  – The role of parents or online learning mentors.

• Our focus today will be on what educators can do to support student engagement.
Types of engagement

**Behavioral Engagement**
- Physical energy exerted to complete classwork requirements.
- Examples: attendance, participation, completing work, following procedures, time on task.

**Emotional Engagement**
- Emotional energy associated with feelings about the classwork.
- Examples: boredom vs. enjoyment or interest, anxiety/frustration vs. confidence, sadness vs. happiness.

**Mental Engagement**
- Mental energy exerted when involved in classwork activities.
- Examples: attention, absorption, concentration, persistence, cognitive/metacognitive strategy use.

*(Borup et al., 2014; Borup et al., 2020)*
Model of student engagement in online learning (part 1)

• The green triangle represents student engagement independent of support from others.

(Borup et al., 2020)
Model of student engagement in online learning (part 2)

- The green triangle represents student engagement independent of support from others.
- The yellow triangle outline represents the amount of student engagement necessary for academic success.

(Borup et al., 2020)
Model of student engagement in online learning (part 3)

- The green triangle represents student engagement independent of support from others.
- The yellow triangle outline represents the amount of student engagement necessary for academic success.
- The light blue triangle represents student engagement resulting from school support.
- The dark blue triangle represents student engagement resulting from personal community support.

(Borup et al., 2020)
Students’ needs for support may vary across types of engagement

(Ben-Eliyahu et al., 2018; Borup et al., 2020)
Poll

Thinking about the students you work with now and the modalities being used for teaching, which type of engagement do you think is the easiest to influence in an online environment?

• **Behavioral**: Energy exerted to complete classwork assignments.
  – Examples: attendance, participation, completing work, following procedures, time on task.

• **Emotional**: Energy associated with feelings about the classroom.
  – Examples: boredom vs. enjoyment or interest, anxiety or frustration vs. confidence, sadness vs. happiness.

• **Mental**: Energy exerted when involved in classwork activities.
  – Examples: attention, absorption, concentration, persistence, cognitive/metacognitive strategy use.

(Borup et al., 2014; Borup et al., 2020)
Behavioral Engagement
What is behavioral engagement?

**Energy** exerted to complete classwork requirements:

- Attendance
- Participation
- Completing work
- Following procedures
- Time on task

*(Borup et al., 2014; Borup et al., 2020)*
Why should we focus on behavioral engagement?

• Research on behavioral engagement in general, not just in online learning, suggests that:
  – Low behavioral engagement is associated with skipping class, suspension, grade retention, and dropping out of school.
  – Teachers’ ratings of behavioral engagement in early grades were associated with whether students later dropped out of school.
  – Teacher supportiveness is associated with behavioral engagement among K–12 students.
  – Classroom structure (such as setting clear expectations and responding consistently when students violate expectations) is associated with behavioral engagement.

(Fredericks et al., 2004)
How can educators support behavioral engagement in online learning?

• Troubleshooting and orienting.
• Organizing and managing.
• Monitoring and encouraging progress.

(Borup et al., 2020)
How to promote behavioral engagement: Troubleshooting and orienting

• Provide technology to families who need it.
  – Laptops, tablets, or hot spots.

• Provide support for accessing and navigating courses.
  – Ensure that students (and families) know how to navigate any academic resources, including:
    o Knowing how to find resources they need on whatever platform is being used, and
    o How to find feedback on their work.

(Borup et al., 2020; Quality Matters and the Virtual Learning Leadership Alliance, 2019)
How to promote behavioral engagement: Organizing and managing

• Support students to use self-regulated learning strategies, including:
  – Setting goals,
  – Identifying strategies to achieve their goals (for example, identify a peer to study with, break down large assignments into smaller chunks),
  – Monitoring progress toward goals, and
  – Reflecting on accomplishments, informed by self-observation as well as peer and teacher feedback.

• Ways to support student use of self-regulated learning strategies:
  – Individualized digital learning plans, and
  – Individual meetings with students to jointly set goals and monitor progress.

(Abrami et al., 2011; Chambers et al., 2020; Means et al., 2009; Quality Matters and the Virtual Learning Leadership Alliance, 2019)
How to promote behavioral engagement: Monitoring and encouraging progress

• Communicate frequently regarding student progress.
  – Ongoing, open, proactive, and continuous communication with parents and counselors.
  – Communicate study practices that parents can use to support students’ learning.
  – Clear feedback to students that explains how their work does or does not demonstrate mastery.

(Boru et al., 2020; Means et al., 2009; Quality Matters and the Virtual Learning Leadership Alliance, 2019)
Breakout group activity: One times three

In breakout groups, share your thoughts about behavioral engagement in remote learning:

- One thing that’s working for you.
- One thing that is still a challenge.
- One thing that you want to try next.

Would this "One times three" structure work for you and your students? What adaptations might be needed?

Any follow-up questions or further discussion points?
Check-in

Poll question 1: How well do you understand how to improve students’ behavioral engagement?

• Extremely well
• Moderately well
• Somewhat well
• Slightly well
• Not at all

Poll question 2: How successfully do you think you can adapt these strategies for a remote learning context?

• Extremely successfully
• Moderately successfully
• Somewhat successfully
• Slightly successfully
• Not at all successfully
Emotional Engagement
What is emotional engagement?

**Energy** associated with feelings about classwork:

- Boredom versus enjoyment or interest
- Anxiety or frustration versus confidence
- Sadness versus happiness

*(Borup et al., 2014; Borup et al., 2020)*
Why should we focus on emotional engagement?

• Research on mental engagement in general, not just in online learning, suggests that:
  – Students who are more emotionally engaged may see more value in learning activities.
  – Emotional engagement can include a sense of belonging to the school.
  – The extent to which students value schooling and feel more connected to the school is associated with greater student achievement.

(Borup et al., 2020; Fredericks et al., 2004)
How can educators support emotional engagement in online learning?

- Facilitate communication and develop relationships.
- Instill excitement for learning.

(Borup et al., 2020; Dixon, 2010; Murphy et al., 2008)
How to promote emotional engagement: Facilitate communication and develop relationships

• Cultivate social presence.
• Develop relationships with students and families by communicating with them outside of class.
• Add synchronous elements when the class is primarily asynchronous.
• Engage in deliberate rapport building.
• Develop ways for students to engage with each other.
• Develop relationships.

(Abrami et al., 2011; Banna et al., 2015; Bernard et al., 2009; Borup et al., 2020; Dixon, 2010; Kerhrwald, 2008; Murphy & Rodriguez-Manzanares, 2008; Quality Matters and the Virtual Learning Leadership Alliance, 2019)
How to promote emotional engagement: Instill excitement for learning

• Provide opportunities for social interaction through fun activities.
• Daily motivational videos.
• Communicate with students about their interests and provide instruction aligned with those interests.

(Abrami et al., 2011; Banna et al., 2015; Bernard et al., 2009; Borup et al., 2020; Dixon, 2010; Kerhrwald, 2008; Murphy & Rodriguez-Manzanares, 2008; Quality Matters and the Virtual Learning Leadership Alliance, 2019)
Breakout group activity: *Five Whys* of emotional engagement

To promote emotional engagement with my students, I _____
Why? Because_____
  Why? Because_____
    Why? Because_____
      Why? Because_____
        Why? Because_____

Would this *Five Whys* structure work for you and your students? What adaptations might be needed?
Check-in

In the chat:
What would you tell a new teacher about how to improve their students’ emotional engagement?

Q: Any questions/issues so far?
Mental Engagement
What is mental engagement?

**Energy** exerted when involved in classwork activities:

- Attention
- Absorption
- Concentration
- Persistence
- Use of cognitive/metacognitive strategies

*(Borup et al., 2014; Borup et al., 2020)*
Why should we focus on mental engagement?

• Research on mental engagement in general, not just in online learning, suggests that:
  – Students who exhibit more mental engagement develop a deeper understanding of academic content.
  – Use of metacognitive strategies has been shown to be associated with greater student achievement.
  – Students’ mental engagement is higher when teachers both present challenging work and create a socially supportive classroom environment.

(Fredericks et al., 2004)
How can educators support mental engagement in online learning?

• Instructing
• Collaborating

(Borup et al., 2020)
How to promote mental engagement: Instruction

• Provide office hours for feedback and extra help.
• Provide feedback using various formats (such as written or verbal feedback).
• Provide clear, accurate feedback about students’ developing competencies, expertise and skills.
• Engage students in active learning.
• Incorporate multimedia learning principles.
• Provide opportunities to both challenge students and for them to be successful.
• Provide relevant tasks and instructional materials to help students identify with the school and content to be learned.

(Abrami et al., 2011; Borup et al., 2020; Dixon, 2010; Quality Matters and the Virtual Learning Leadership Alliance, 2019)
How to promote mental engagement: Collaboration

• Support discourse that focuses on importance and utility of content and activities.
• Include opportunities for structured group work and cooperative learning.
• Provide clear guidelines about the content for online discussions.
• Model good interaction in online discussion groups.

(Abrami et al., 2011; Chambers et al., 2020; Lou et al., 2001)
Breakout group activity: 15 percent solution

• What is your 15 percent?

• Where do you have discretion and freedom to act? What can you do without more resources or authority?

• Would this “15 percent solution” structure work for you and your students? What adaptations might be needed?
Check-in

In the chat:
Relating to mental engagement, I believe that ____ because ____.

Q: Any questions/issues so far?
Wrap-up and Next Steps
Summary

Three types of engagement:
• Behavioral
• Emotional
• Mental

Different strategies are used to support different types of engagement.
Poll

Thinking about the behavioral, emotional and mental energy you exerted during today's workshop, how engaged were you?

- Extremely engaged
- Moderately engaged
- Somewhat engaged
- Slightly engaged
- Not at all engaged
Next steps

What could you do during your training to model engaging strategies teachers can use with their students in remote learning contexts?
Additional supports

Office hours for trainers to share ideas and problem-solve

FAQ document based on your follow-up questions

Email emma.pellerin@sri.com with any questions
Upcoming workshops

• January 2021: Monitoring academic progress and providing feedback to students.
• March 2021: Designing effective instruction for a hybrid model.
For our growth...

Please complete the stakeholder feedback survey (linked here and provided in the chat):

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

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