

Handout 1

Agenda

- Look at research on student engagement
- What engagement “looks like and sounds like”
- Analyzing student behaviors
- Look at research on rigor
- Analyze two student activities
- Analyze student behaviors
- Develop coaching plan

Handout 2

Accountability Strategies Page 1

Accountability Strategy	Process	Impact	Reflection

Handout 2

Accountability Strategies Page 2

Accountability Strategy	Process	Impact	Reflection

Handout 3

Student Engagement

Socio-emotional Engagement

By design, schools are social places for engaging students in learning. Socio-emotional engagement refers to students' affective reactions in and to schooling. It may be registered as interest, boredom, anxiety, happiness, etc, but is generally thought to be a measure of the identification or sense of belonging the student associates with schooling.

Behavioral Engagement

Behavioral engagement focuses on participation. It is evidenced by the student's following of school rules, in class participation (e.g., academic and social), and extracurricular participation. That participation often involves such behaviors as effort, persistence, and concentration.

Cognitive Engagement

Cognitive engagement has been described as an investment of effort and self-regulation by the individual focused on deep, intellectual learning of the academics and intellectual development, as evidenced by motivation, attitude, commitment, and self-regulation. It can be summed up as "thoughtfulness and willingness to exert the effort necessary to comprehend complex ideas and master difficult skills," (Fredricks et. al., 2004). Students are cognitively engaged when they give sustained, engaged attention to a task requiring mental effort.

STOP

Record definitions on Handout 4

Characteristics of Student Engagement

Socio-emotional Engagement

For students to be socio-emotionally engaged, the teacher must establish intellectually safe learning cultures that foster positive teacher-student and student-to-student relationships. Opportunities for students to work collaboratively are provided. The teacher considers students' interests and experiences when planning lesson in order to motivate students to be involved in the learning process. Consequently, students feel a connection to what they doing in school and their lives outside of school. Teachers who understand their students' backgrounds, prior knowledge, interests, and motivations are much more likely to make the connections that adolescents crave. Students learn best from activities that are interesting and comprehensible to them; in other words, activities that are satisfying.

Behavioral Engagement

When students are behaviorally engaged, they are attentive, they ask and answer questions, and contribute in class. Students follow directions and complete tasks according to the teacher's expectations which have been clearly communicated. The teacher and students have purposefully discussed and set common standards for school-related behaviors. There are minimal disruptions and procedures and routines are in place and adhered to by students and teacher.

Cognitive Engagement

A learner's cognitive engagement and her or his motivation are inextricably linked together. The amount of cognitive effort expended by the learner is an appropriate measure of her or his motivation as it relies on the learner focusing on mastering the learning task and maintaining a high sense of personal efficacy (Shunk, 1989).

The highest form of cognitive engagement is self-regulated learning (Corno & Mandinach, 1983), where learners plan and manage their own learning and have a high degree of personal control and autonomy. Self-regulated learning is critical to beginning and ongoing motivation as students engage in specific cognitive activities that are derived from a learning environment that allows students to investigate different perspectives that relate back to their own world views.

Meta-cognition is crucial to effective thinking and problem solving and is one of the hallmarks of expertise in specific areas of knowledge and skills. (Pellegrino, Chudowsky, & Glaser, 2001). But teachers cannot assume that students are meta-cognitive just because they are strong students or they easily comprehend content. Meta-cognition can be taught (Pellegrino, Chudowsky, & Glaser, 2001). Perkins *Reflective* thinking occurs when one combines knowledge, understanding, and strategic ability for the purpose of making sense of what one is learning or experiencing. Perkins suggests that reflective intelligence is increased through instruction that nurtures meta-cognition and develops strategies and attitudes that result in thoughtful thinking. But because thinking occurs in one's head, the teacher must employ techniques to make thinking visible. Although direct instruction is a necessary strategy, instruction must also include class discussions, peer interactions, and coaching, with the goal of students becoming self-regulated and independent (Bransford et al., 2000). Research has demonstrated that meta-cognitive activities must be integrated into a variety of subject matter to increase the degree to which students will transfer their new learning to other settings (White & Frederickson, 1998).

To support student cognitive engagement, the teacher may encourage students to set learning goals specific to the areas of study/content. Students are provided feedback as to the level and quality of effort expended in making progress toward the learning goals, not on their ability levels or the speed with which they completed the work, but on the quality and accurateness of the work as it relates to the learning goal or their personal goals. .

Handout 4

**What is Engagement?
What does it “look like and sound like”?**

Socio-emotional Engagement	Behavioral Engagement	Cognitive Engagement
Definition:	Definition:	Definition:
“Looks like and sounds like”	“Looks like and sounds like”	“Looks like and sounds like”

Handout 5

What Does It Look Like and Sound Like?

Scenario	Type (s) of Student Engagement	Explanation
<p>Scenario 1: 5th graders compare and contrast two versions of the story of Pocahontas and John Smith by reading the fictionalized account <i>The Double Life of Pocahontas</i> (Fritz, 1987) and watching the Disney movie <i>Pocahontas</i>. Students work in groups to take notes about the characters, setting, plot, and events depicted in the movie and to extract details from the text.</p> <p>Student groups are directed to draw conclusions about the accuracy of historical events after they identify significant patterns in the similarities and differences of the two sources. As each group shares its conclusions, the teacher reinforces the skill of valuing others' viewpoints by reminding all students to paraphrase, clarify, or question what their peers in other groups report, so that they can better understand each group's conclusions rather than judging them. Following the discussion, students reflect in their journals about skills to keep in mind when striving for accuracy and searching for truth; the value of listening to and empathizing with a speaker; how well they think they listened and empathized in this activity; and situations in school, home, and life that require them to strive for accuracy and listen with understanding and empathy.</p>		
<p>Scenario 2: The teacher tells students that in Hyperbolic Geometry the sum of the angles of a triangle is less than 180. She shows examples. She then states to the students that in Hyperbolic Geometry, all the axioms for neutral geometry hold, but the <i>parallel postulate</i> is restated as follow: Through any point P not on a line <i>l</i>, more than one line can be drawn through P parallel to <i>l</i>. She tells students what the main differences between Euclidean and Hyperbolic Geometry is. The main differences between them are the properties of "straight" lines in each geometry. She then tells students to copy examples from the board into their notebook.</p>		
<p>Scenario 3: Students are learning about the Jazz music style, and musicians associated with Harlem. They learn how music unified the community and impacted the culture of Harlem. Students listen to samples of music, and analyze elements of jazz and its musicians. Working in collaborative groups, they create a group dance, or interpretative movement, of a specific song. As a cross-discipline project, students create an original artwork incorporating color, line, and shape, that represents the emotions found in jazz.</p>		

Handout 6

Analyzing Student Behaviors

Video 1 Student Behaviors	Video 1 <i>The teacher did . . . or did not . . .</i>	Video 2 Student Behaviors	Video 1 <i>The teacher did . . . or did not . . .</i>

Handout 7
What is Rigor?

Rigor is the *goal* of helping students develop the capacity to understand content that is complex, **ambiguous, provocative**, and personally or emotionally challenging.

Ambiguous: content that has multiple meanings or interpretations and/or perspectives that must be examined. There is not one correct answer.

Provocative: content that challenges our way of thinking – We must reflect on our feelings and opinions in order to understand content or concepts and apply them to different situations. Our thinking is stimulated.

What is Rigor? Record a definition that is meaningful to you.

Why should students be engaged in rigorous tasks?

The teaching goal behind cognitive engagement or student thinking is the equipping of students to be able to transfer. “Being able to think” means students can apply the knowledge and skill they developed during their learning to new contexts. “New” means applications that the student has not thought of within the context before, not necessarily something universally new. Higher-order thinking is conceived as being able to transfer one’s learning to other situations beyond those they were taught to associate with the learning. *Transfer* of learning occurs when individuals remember what they have learned, are able to make sense of it and are able to use it in new situations. (Anderson & Krathwohl, 2001, p. 63) When these elements are in place, deep learning can occur. *Deep learning* is the critical analysis of new ideas, linking those ideas to already known principles, and leads to understanding and long-term retention of concepts so that they can be used for problem solving in unfamiliar contexts.

List 3 reasons students should be engaged in rigorous tasks.

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How Do Teachers Implement Rigorous Tasks?

- Teachers model their thinking and transference – “I remember learning this or have used this in this situation, this situation is similar, I wonder if this will work for this problem, etc.”
- Make connections for students across multiple situations or contexts.
- Make what students are learning relevant to their own experiences
- Design tasks or assessments that require students to demonstrate their thinking
- Develop questions that require students to explain their thinking

What Must Teachers Plan?

- Teachers’ instruction and assessment must match the intended learning objective or goal in both content (what the student learns) and cognitive complexity (what the student is able to do with the learning).
- Teachers’ must be able to articulate to themselves and to the students what mastery looks like and sounds like
 - What do I need to hear students say?
 - What do I need to see students do?
 - What vocabulary do I need to hear and see students to use?

List three key things teachers must do to engage students in rigorous tasks. List the three you view as most critical.

1)

2)

3)

Handout 8

Analyzing Student Behaviors

Video 1 Student Behaviors	Video 1 <i>The teacher did . . . or did not . . .</i>	Video 2 Student Behaviors	Video 1 <i>The teacher did . . . or did not . . .</i>