What Teachers Really Need to Know About Formative Assessment Laura Greenstein

Chapter 3: Formative Assessment Prior to Instruction

Pre-assessment is the means we use to chart the initial course for instruction.

Clarification of Prior Knowledge and Skills:

- Formal or informal measures to determine breadth and/or depth of understanding.
- Can also be used to measure or identify predispositions, values and beliefs.
- Identifying prior learning sources.
- Pre-assessment can provide a common guide for pursuing and reaching goals.
- Cognitively, pre-assessments have several advantages. Activation of prior knowledge promotes
 the brain's ability to make connections to new learning and improve comprehension. It can also
 encourage reflection, which supports the organization of thinking and extension of
 understanding.
- Emerging research on memory shows that information is best remembered when it is actively or emotionally processed. Good pre-assessment can prepare student's brains for learning.

Strategies and Tools for Assessing Prior to Instruction:

Early formative assessment activities are most effective when they are ungraded, brief, non-threatening, connected to content and standards, and targeted toward instructional improvement.

Entrance Slips: An entrance slip is a student's response to a question a teacher poses related to the upcoming instruction.

- Should only take a few minutes at the beginning of a lesson.
- Teacher can ask students to sign the slips or submit them anonymously.
- Can be used to gather information about students' belief systems.
- Can also be used to assist with differentiation of instruction and assignments, based on student responses.

Corners: Gives the teacher a quick visual way to preview what their students may know or believe before instruction begins. The teacher selects a question that reflects the content of the upcoming instruction and labels corners in the room with possible answers. Students move to a corner that they believe best reflects their answer to that question.

- Students can be asked to work together to support their corner choice.
- Prompts reflection and evaluation on part of the students (higher order thinking).

Gallery: Also gives the teacher a visual picture of student knowledge and skills or viewpoints. Teacher makes a gallery or display of student responses to a teacher-generated question.

- Can be posted anonymously, with a name, or with a code of some kind to help the teacher identify the author.
- Can provide data for subsequent student grouping.

Sticky Notes: Support a variety of assessment techniques involving signaling, sorting, and analysis. Students can use these notes to communicate their starting knowledge and understanding.

- Also a good tool for uncovering students' analytical abilities.
- Often involves movement, which is good for kinesthetic learners.

4 strategic ways to use sticky notes:

- Signaling putting a green and red sticky note back to back, when introducing a new concept, students can communicate whether or not they know something about the topic or not. Can also be used by students to signal the teacher when they are having difficulty with a concept, or are doing fine on their own.
- Sorting Students can be asked to write things they know about an upcoming topic on notes and post them on a larger display in ways that group or organize the information.
- Analysis Sticky notes can be used to elicit evidence of students' analytical abilities.
 Information can be broken down into parts, classified by attribute, prioritized, or compared and contrasted using multi-color slips.
- Engagement Can be used to ensure that every student makes a contribution to the preassessment activity. An example would be a teacher eliciting input from all students on their priorities for a particular unit of study. The teacher can then use this information to inform planning and instruction.

Responding Instructionally:

It is essential to organize and analyze data gathered from pre-assessments so that you have the most accurate picture of what the class already knows, doesn't know, and needs to work on.

What Information Do I have? What Does It Mean?

Organizing information into a chart or table is a good way to gain an overview of students' knowledge or skill levels.

What Do The Students Need to Know and Do at This Point?

- What level of understanding, proficiency, or mastery must each student have in order to move forward with the planned instruction?
- How many (and which) students have the requisite skills and entry knowledge to proceed with instruction?

How Do I Use the Data?

- How can I decide which data are most educationally significant and defensible?
- What steps can I take to respond to the pre-assessment data?
- How do I adjust my teaching so that all students can be successful?
- Flexibility is key in making adjustments to instruction.
- As formative assessment is an ongoing process, you will receive more information about how effective your responses are in improving learning. These can be fine-tuned further by:
 - Changing a particular lesson plan in the unit.
 - Selecting different or additional resources.

- Using different instructional strategies.
- Identifying specific students in need of remediation.
- Customizing rubrics to personalize the weight of the mastery of selected standards.
- Grouping students homogeneously for differentiation or in heterogeneous groups for collaborative learning.
- Changing the planned summative assessments.