Checking for Understanding
Formative Assessment Techniques for Your Classroom
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Understanding By Design
Group Project
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Effective apparatuses for designing formative assessments that can be used to address common educational initiatives of standards based lessons, precise instruction, achievement gap intervention, differentiation, and teacher decision making AND Methods aligned with Understanding by Design through assessments that focus on student understanding and instruction that is driven by ongoing inquiry and rethinking

(See p.4, Fig.1.1 Formative v. Summative Assessment)
Why Check for Understanding?

- Using common prompts are ineffective:
  “Everyone understand?” “Did you all get that?” “Does that make sense?”
Few students respond, other are confused or too embarrassed to say “no,” and the summative assessment proves many did not “get it.”

- Students aren’t self regulated learners
They don’t know what they do and do not understand.
Chapter 2 Using Oral Language to Check for Understanding

- About 50,000 years of Oral Language History
  Possibly 10,000 spoken
  Around 106 produced literature

- Of 3,000 spoken today
  Only 78 have literature
What is Oral Language?

- **Speaking** - uniquely human act or process of sharing information, ideas, and emotions using oral language

- In daily interactions, or formal settings, communicators:
  - organize coherent messages
  - deliver them clearly
  - adapt them to their listeners
- **Listening** - process of receiving, constructing meaning from, and responding to spoken and/or nonverbal messages

- People use different listening skills to:
  - comprehend information
  - critique and evaluate a messages
  - show empathy for other’s feelings
  - appreciate a performance

**Together, these are oral language and form the basis for thinking.**
Variations in language by use that involve consideration of:

- Situation or context of use
- Purpose
- Subject matter
- Content of the message
- Relationship between participants
**Language Registers**

**Types:**

A. Fixed or frozen
B. Formal
C. Consultative
D. Casual
E. Intimate

**Activity:** Think and match A-E with the correct 1-5. Turn to partner and share your answers. Share your thoughts with the whole group.

**Examples:**

1. Speech of shared history, knowledge, and experience
2. Speech of complete sentences and specific word usage
3. Speech depends on nonverbal assists, background knowledge, shared information
4. Speech is fixed, reserved for traditions, and language is constant
5. Speech is formal conversation, but less appropriate for writing
Misuses Of Oral Language

- Poverty, ESL, Disabled, or Otherwise At-Risk students:
  - students talk less, and teachers talk more
  - focus is on basic skills, not critical/creative thinking
  - asks easier, or no questions

- Gender:
  - girls participation decreases with age
  - boys are questioned more often with higher thinking questions, and given more wait time and feedback

- *Initiate-Response-Evaluate Model:
  - teacher asks a question
  - students are called upon to respond
  - teachers evaluate the response
Two Classroom Discourse Questions to Ask Yourself

1. How do patterns of talk affect the quality of student’s educational opportunities and outcome?

2. How is discourse used as a support for deeper student learning?
Accountable Talk

• Stay on Topic

• Use Accurate & Appropriate Information

• Really Think about What Your Partner Says
Describe the student’s attitudes/feelings in this scene?
B. Noticing Nonverbal Clues

Describe the student’s attitudes/feelings in this scene?
Noticing Nonverbal Clues

Facial expressions, eye movements, eye contact, posture, nodding...etc

Indicate Either:

- puzzled, harried, bored

OR

- developing understanding, agreeing, engaged
Students:

- Evaluate a statement and form an opinion
- Make a Single Lineup according to their degree of agreement or disagreement

The line is folded in half so that they are face to face

- Discuss their reasons for their position/opinion
- Listen to the perspective of their partner
Retelling a new account or adaptations of a text that allow students to consider information and then summarize, orally what they understand about the information

**Variations:**
- Oral to Oral - Listen and retell orally
- Oral to Written (summary) - Listen and retell in writing
- Oral to Video - Listen and create a video or movie of it

**Use the same variations with reading text and viewing videos/films.**
Retelling/Summaries Procedure

T=Teacher          S=Student(s)

**T:** Set Purpose: Re-create the text in your own words
- **S:** discuss favorite movies, CD, TV shows

**T & S:** Make Connection between talk about favorites and talking about a piece of text

**T:** Read & Model a retelling from a familiar short text for students
- **S:** discuss the similarities and differences between the original and the retelling/summary
- select another text and read it aloud
- create a retelling as a group
<table>
<thead>
<tr>
<th>FICTIONAL TEXT</th>
<th>INFORMATIONAL TEXT</th>
</tr>
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<tbody>
<tr>
<td>Character</td>
<td>Key Ideas</td>
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<tr>
<td>Setting</td>
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<td>Problems</td>
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<td>Solutions</td>
<td>Conclusion</td>
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<td>Delivery</td>
<td>Delivery</td>
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Think:
T: engages students’ thinking with a question, prompt, reading, visual, or observation
S: think a few minutes about the cue alone

Pair w/ a designated partner:
S: discuss their thinking
identify their best, most intriguing, most convincing or most unique responses a few moments

Share by invitation:
S: pairs share their thinking with the class
Usually first identified by the teacher or another student’s questioning a response during discussion.
Requires students to discuss in small groups and discover answers to misunderstandings through further inquiry on a topic.

**Misconceptions are:**
- Preconceived notions
- Nonscientific beliefs
- Naïve theories
- Mixed conceptions
- Conceptual misunderstandings
Chapter 3  Using Questions to Check for Understanding

- Since the art of questioning is central to the practice of teaching

Chapter 3 explores:
- Using questioning to check for understanding
- Effective questioning techniques
- Instructional practices that promote effective questioning
  AND
- Ways to reply to incorrect responses to determine the next step in instruction
Misuses of Questioning

- Initiate-Respond-Evaluate-devolve into interrogation of “guess what’s in the teacher’s head”

- Traditional teacher-generated questioning-problematic in gender differences and have a negative impact on girls vocal minority of students dominate conversations and questioning

- Why to use effective questioning techniques? effective questioning elicits richer evidence of understanding coupled with instructional approaches, they maximize participation in classroom discourse
Effective Questioning Techniques

- **QUILT Framework**
- Questioning and Understanding to Improve Learning & Thinking

Stage 1: Prepare the Question - Identify instructional purpose

Stage 2: Present the Question - Indicate response format

Stage 3: Prompt Student Response - Pause after asking question

Stage 4: Process Student Response - Provide appropriate feedback

Stage 5: Reflect on Questioning Practices - Analyze questions
Techniques for Incorrect Responses

- **Cues**-symbols, word, or phrases
- **Clues**-overt reminders
- **Probes**-ask for clarity of incorrect responses
- **Rephrase**-pose same questions in different words
- **Redirect**-pose same question to different student
- **Hold Accountable Later**-check back with students who respond incorrectly for a correct answer
Developing Authentic Questions

- Use questions to engage students in deeper thinking and not merely prompt them to recall information that they have read or been told.

- Plan open-ended questions with organizational structures, such as Bloom’s Taxonomy, that classify information for a range of knowledge and require thinking responses.

- Use Nonverbal Supports—eye contact, facial expressions, body posture, physical distance, silence, verbal acknowledgments, subsummaries along with strategies that promote participation.
Instructional Practices that Promote Participation

- **Response Cards** - index card, dry-erase boards, signs, magnetic boards for simultaneous hands up response
- **Hand Signals** - thumbs up, thumbs down, thumbs sideways
- **Audience Response Systems** - handheld devices that allow students to respond individually
- **ReQuest, or reciprocal questioning** - a cycle of teachers and students reading segments silently, then asking one another questions alternately after each segment
- **Socratic Seminar** - disciplined conversation, or dialectic which is the art or practice of examining opinions or ideas logically, often by the method of question and answer, so as to determine their validity (For Guidelines see page 55, Fig. 3.5)
Writing clarifies thinking and writing is thinking. Analyzing students' writing is a great tool for a teacher to determine what their students know.
High Stakes Writing (essays and essay exams) — if we don’t ask students to demonstrate their learning in essays and essay exams, we are likely to grade unfairly because of being misled about how much they have learn in our course.

Low Stakes Writing (writing for learning) --- less commonly used and valued so teachers need to make sure that students understand you write to learn. (Figure 4.1 page 59) To write what you know, but not to be graded on mechanics, but rather the content. Teacher leaves comments for an informal grade.
Why use Writing as an Assessment Tool?

- Narrative Writing — retelling a story.
- Informative writing — informing the reader
- Persuasive Writing — persuading the reader
The most common way that teachers misuse writing in the classroom is for classroom management. For example, when a teacher assigns a student to write one hundred sentences because they have made a “poor choice”. But a way to improve this management tool is to have the student explain why they did not turn in their homework, why they were misbehaving, and why did they make a poor choice.
Writing Strategies to Check for Understanding

Language Arts—writing can be used to determine the next steps for instruction in topics such as grammar, spelling, and comprehension.

Content Area—what students know, what they still need to know, and what they are confused about.
Read-Write-Pair-Share — read the material, write in response to the information, engage in a partner conversation about why they have read and written, and then share their ideas with the whole class. Along the way, the teacher can check for understanding.

Summary Writing — is a valuable tool for checking for understanding because it provides the teacher with insight into how learners condense information.
Common form of Summary Writing—Précis- a short piece that contains the major ideas or concepts of a topic. At the end of each lab, students write a précis describing what they did and what was observed.

RAFT (role, audience, format, topic)—writing prompts that were designed to help students take different perspectives in their writing and thus their thinking.
Interactive Writing — allowing the students to share the pen with the teacher. Making sure that the students know exactly what the teacher is asking from them before they share the pen.
Chapter 5 Using Projects and Performances to Check for Understanding
Projects and Performances are events and opportunities to check for understanding and not just task completion, teachers can gain insight into the extent to which our students have transferred their learning to new situations.

By using projects and performances students are using their oral language, questioning techniques, and writing.
When a teacher assigns the project or performance it is likely that the “doing” part took precedence over the “understanding” part.

Parents feel a need to help or they just do their child’s work and when a teacher questions the student during a presentation the student does not have an idea of the understanding of the project.
Design Principles for Projects and Performances

- **Learning Appropriate Goals** — essential question should be presented to the student. Why are they doing this project?

- **Scaffolds for Student and Teacher Learning** — scaffolding the students understanding before sending them on their way to do the project. Model!

- **Frequent Opportunities for Formative Assessment and Revision** — checking for understanding as the project is being completed rather than when the project is turned in.

- **Social Organizations That Promote Participation and a Sense of Agency** --- how are students going to be graded on their performance as group or as an individual?
Two different kinds of Learning Projects (Problem and Project) — both are designed to integrate skills and content across disciplines.

- Problem Based Learning — normally done in the medical field. When a problem arises how will you solve the problem?

- Project Based Learning — common in elementary and secondary classrooms
Effective Techniques Using Projects and Performances

- Readers’ Theatre
- Multimedia Presentations
- Electronic and Paper Portfolios
- Visual Displays of Information
  - Graphic Organizers
  - Foldables
  - Dioramas
Chapter 6 Using Tests to Check for Understanding

Test, Test, Test

Students understanding is measured by tests that we give as educators.
Why Do We Use Tests?

- Diagnosing individual student needs
- Informing instruction
- Evaluating Programs
- Providing accountability information
Narrowing the curriculum by excluding subject matter not tested,

Excluding topics either not tested or not likely to appear on the test even within tested subjects.

Reducing learning to the memorization of easily recalled facts for multiple choice testing.

Devoting too much classroom time to test preparation rather than learning.
Using Test to Check for Understanding

Checking for understanding using test is dependent in part on the design and development of good test items. However, checking for understanding using tests is equally dependent on the analysis of student responds.
Variety of Tests

- Multiple Choice — they provide the teacher with an opportunity to gauge students’ understanding in a fairly quick and efficient manner. Easy to analyze incorrect responses students most commonly selected.

- Short Answer — short answer and completion items are both forms of “supply” items in which students have to provide the response, rather than selecting one from a teacher generated list. Short answer test items are those that can be answered by word, phrase, number or symbol.

- True or false — can be called an alternative response items or binary choice items.

- Essay — consolidate their understanding of a topic, organize student thinking and present it.
http://www.youtube.com/watch?v=2C10oV0k3r