Choosing the Right Assessment Method

Nicole Dimich Vagle
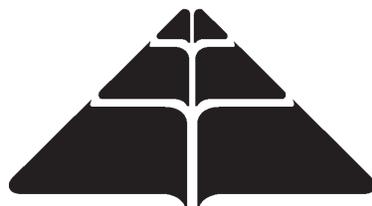
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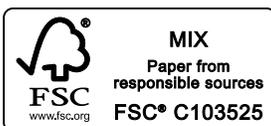
Choosing the Right Assessment Method

Come to this session to consider and learn the strengths and challenges of different methods of assessments (selected response, performance assessment, Socratic seminars, constructed response) and how to choose the type of method, or student work, that will effectively gather information on students' proficiency on the targeted standards.

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Design in Five: Phases of the Protocol
Adapted from Design in 5: Essential Phases to Create Engaging Assessment Practice, N. Vagle, 2014, Solution Tree Press

Phase 1. Choose Standards and Plan Engagement.
   a. Choose the standards to be assessed.
   b. Determine the big idea, relevant connection or essential question.

Phase 2. Sketch out the Learning Goals
   a. Analyze the standards.
   b. Write out learning goals.
   c. Put learning goals in cognitive order.

Phase 3. Craft an Assessment Plan
   a. Identify learning goals for the assessment.
   b. Choose the method to best assess proficiency of each learning goal.
   c. Determine the percentage of importance and/or number of items for each learning goal.

Phase 4. Create or Revise the Assessment
   a. Create or revise (if using an assessment from the past) items and tasks for each learning goal.
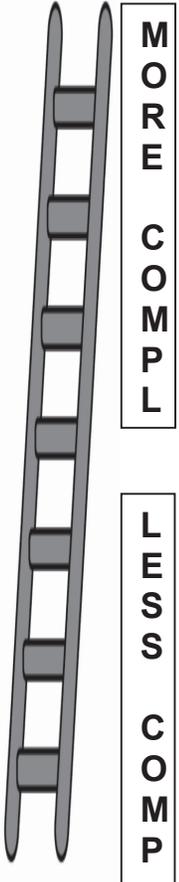   b. Develop the student documents and gather necessary materials.

Phase 5. Determine the Student Investment & Reporting Method
   a. Create a scoring scheme that reflects the learning.
   b. Choose strategies to ensure student investment.

Phase 3. Craft an Assessment Plan

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1. Name the learning goals in the first column. Be sure they represent the simple and more complex learning goals you intended students to learn, that you taught, and that students have mastered.

2. Determine the type of method or item to measure this learning goal (multiple choice, matching, essay, etc.)

3. Identify the number of items for each learning goal (or the percentage of importance). (4-6 is recommended for classroom assessment per learning target on simple and medium complexity targets.)

M O R E C O M P L

L E S S C O M P

Learning Goals (I can statements…)	Method	Total # of items or percentage importance

Phase 3. (step 2) Choosing an Effective & Efficient Method

Adapted from Design in 5: Essential Phases to Create Engaging Assessment Practice, N. Vagle, 2014, Solution Tree Press

Methods	PROS	CONS	Possible Learning Goals
Selected Response: • Multiple choice • Matching • Short answer • True/false • Graphic Organizer			
Essay/Constructed Response: • Construct a solution, justify a problem solving method • Respond to a prompt • Complete and/or create a graphic organizer			
Performance Assessment: • Produce a podcast or iMovie • Write an essay, letter to an author or scientist, paper, editorial, blog • Participate in a Socratic seminar, fishbowl, or debate • Create and present or perform speech/presentation, role play, investigation to an authentic audience			

Strengths and Challenges of Various Assessment Methods

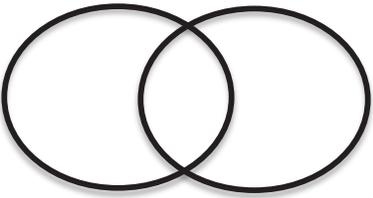| Methods	Strengths	Challenges
Selected Response: Multiple choice, true/false, matching, short answer	Selected response potentially offers some sense of why students do not understand when they mark an incorrect answer. Distracters or choices may be useful in determining something about student understanding or misunderstanding. Selected response can be used to efficiently get data on simple and some medium learning goals.	Selected response requires students to take time to write well or choose well (if finding items from another source). Students can guess easily.
Essay / Constructed Response: Construct a solution, justify a problem-solving method, or respond to a prompt or scenario	This type of assessment allows for a deeper insight into how students are constructing meaning or gaining understanding. With a scoring guide, the expectations of these items are clear.	Students must be able to write well enough to communicate ideas, so this must be built into instruction so the summative assessment is not the first time learners independently write like this. Scoring takes more time. Sometimes the first few essays scored are looked at differently than the last few because teachers get clearer about a quality response after reading a few.
Performance Assessment: Produce, present, or perform—for instance, writing a paper, writing and responding to a blog, preparing or presenting a speech/presentation, participating in dialogue, producing a video or audio clip	Performance assessment provides deep insight into how students are constructing meaning and are able to use it in authentic situations. These are often engaging tasks that, when written well, are naturally intriguing. There is often a specified audience that raises the level of concern and creates a more authentic situation.	Carefully written performance assessments take time to construct and time for students to create. Building in ample time is essential. Any work done at home may have the influence of those who have more support and can muddy the waters of what students are actually producing.

Matching Learning Goals to Possible Methods

LEARNING Goals	POSSIBLE METHODS TO USE TO ASSESS IT
ELEMENTARY	
CCSS.ELA-LITERACY.RI.K.8 With prompting and support, identify the reasons an author gives to support points in a text.	
CCSS.ELA-LITERACY.RI.K.9 With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).	
CCSS. MATH. 3.G.A.2 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. *For example, partition a shape into 4 parts with equal area, and describe the area of each part as 1/4 of the area of the shape*	
CCSS.ELA-LITERACY.RI.1.4 Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.	
CCSS.ELA-LITERACY.RI.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.	
I can make inferences from text. This means I can take what I know and what the author says to draw conclusions.	
CCSS.ELA-LITERACY.RI.4.9 Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.	

LEARNING Goals	POSSIBLE METHODS TO USE TO ASSESS IT
MIDDLE	
CCSS.ELA-LITERACY.RST.6-8.7 Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).	
CCSS.ELA-LITERACY.RH.6-8.8 Distinguish among fact, opinion, and reasoned judgment in a text.	
CCSS.ELA-LITERACY.RH.6-8.9 Analyze the relationship between a primary and secondary source on the same topic.	
CCSS.MATH.CONTENT.6.RP.A.2 Understand the concept of a unit rate a/b associated with a ratio a:b with b ≠ 0, and use rate language in the context of a ratio relationship. *For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is 3/4 cup of flour for each cup of sugar." "We paid $75 for 15 hamburgers, which is a rate of $5 per hamburger."*[1]	
HIGH	
CCSS.ELA-LITERACY.RL.9-10.5 Analyze how an author's choices concerning how to structure a text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing, flashbacks) create such effects as mystery, tension, or surprise.	
CCSS.ELA-LITERACY.RI.11-12.8 Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., *The Federalist*, presidential addresses).	
(Understand and evaluate random processes underlying statistical experiments) CCSS.MATH.CONTENT.HSS.IC.A.1 Understand statistics as a process for making inferences about population parameters based on a random sample from that population.	
CCSS.MATH.CONTENT.HSS.IC.A.2 Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation. *For example, a model says a spinning coin falls heads up with probability 0.5. Would a result of 5 tails in a row cause you to question the model*?	

Phase 4. Create or Revise the Assessment

4th Grade Common Core: I can compare and contrast a first-hand and second-hand account. (DRAFT IDEAS FROM NICOLE)

	Rubric	**Sample Item:** Read the first (Elizabeth's memoir) and second hand account (Newspaper article) of Hurricane Andrew.
4	I can **evaluate** the effectiveness of a first or second hand account. This means I can explain how the viewpoint being used enhances or distracts from the message of the text. I can create a first or second account of a situation.	For you as the reader, which account best described the situation and gave you a deeper understanding of the situation? Use evidence from the text to explain why you think so. Find a newspaper article that describes an event students might have heard about or experienced. Ask them to write a narrative describing their experience. Write a time you went to the store and bought something you were so excited about. Write about a time your were really scared or really excited. This will require a bit of asking students about their interests and what they are passionate about. Write about a time when you were doing something and you just couldn't stop? (game? etc.) Find an article that describes the impact of games or new applications.
3	I can **compare and contrast** a first-hand and second-hand account. This means I can analyze how a text is different when told from different perspectives and explain why that is important.	How are the accounts similar and different? Use the venn diagram below to frame your response (or have them write about it). *Memoir* *Newspaper Article*
2	I can **describe** the perspective told in first and secondhand accounts.	Both accounts discuss the destruction of schools. From reading both texts, we learn that many students had to attend schools in churches or with students from other districts. ✓ What do we learn from Elizabeth about what it was like to go to school after the hurricane? ✓ What words or phrases in the memoir made you think this? ✓ What do we learn from the newspaper article about what it was like to go to school after the hurricane? ✓ What words or phrases in the newspaper article made you think this?
1	I can **identify** whether a text is a first or second account. I can **explain** what makes an account first or second hand.	Which account is a first-hand account? Explain why. Which account is a second-hand account? Explain why.

Writing Quality Items

N. Vagle, 2011

Cognitive Level	Methods	Sample Items, Tasks, and Prompts
Evaluation: appraise, argue, assess, attach, choose compare, defend estimate, judge, predict, rate, core, select, support, value, evaluate.	Presentation Project Scenarios	
Synthesis: arrange, assemble, collect, compose, construct, create, design, develop, formulate, manage, organize, plan, prepare, propose, set up, write.	Presentation Projects Scenarios Products Plans	
Analysis: analyze, appraise, calculate, categorize, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test.	Graphs Essays Projects Scenarios	
Application: apply, choose, demonstrate, dramatize, employ, illustrate, interpret, operate, practice, schedule, sketch, solve, use, write.	Essay Some multiple choice Develop a plan Story boards	
Comprehension: classify, describe, discuss, explain, express, identify, indicate, locate, recognize, report, restate, review, select, translate,	Short answer Short responses Essay Multiple choice Short answer	
Knowledge: arrange, define, duplicate, label, list, memorize, name, order, recognize, relate, recall, repeat, reproduce state.	Multiple choice Short answer Matching	

Kindergarten Math

In this example, students all have white boards. The teacher puts a slide up that asks students to solve addition problems. As students are solving a series of 10-12 problems, the teacher is using the checklist to make notes about the extent to which students can do add fluently. Here are a few samples of the slides:

$$2 + 2 =$$

☺ ☹

Solve the problem by writing the **number**.

$$1 + 4 =$$

☺ ☹

Solve the problem by writing the **number**.

Three children are having a picnic. Two more children join them. How many children are at the picnic?

☺ ☹

SOLVE THE PROBLEM

"THE FISHBOWL"
CLASS DISCUSSION TECHNIQUE

1. Eight seats are placed, in a circle, in the center of the room.

2. All other seats a pushed to form an outer circle for seating for non-participants.

3. The eight students in the circle, the fishbowl, are the only ones allowed to speak in the room. There is to be no conversation outside of the circle. The teacher chooses the first students in the circle, at random.

4. The students engage in debate on an issue presented, as an open-ended question, by the teacher.

5. All participants must abide by the rules of civic discussion. These rules are provided in the discussion rubric.

6. The participants must also operate under the standards of common courtesy. (No yelling, no interrupting, no name-calling, etc.)

7. Once a student in the circle has spoken, a student from outside the circle may come and tap that student. The student in the circle must then give the one who tapped them their seat and return to the outside observation seats. The new entrant may not be tapped until he or she has spoken at least once.

8. Students, once removed from the circle, may return at any time. (They may not be tapped until they have spoken again) The teacher may grant preferential seating to students who have not yet participated in the debate.

9. The teacher does not participate in the discussion except to provide a new question or to terminate an irrelevant, or inappropriate, line of discussion.

Discussion Rubric

Discussion Rubric	4	3	2	1
Substantive				
States and identifies issues.	Accurately states and identifies issues.	Accurately states an issue.	States a relevant factual, ethical, or definitional issue as a question.	Does not state any issues.
Uses foundational knowledge.	Accurately and expresses completely relevant foundational knowledge pertaining to the issues raised during the discussion.	Accurately expresses mostly relevant foundational knowledge pertaining to issues raised during the discussion.	Accurately expresses somewhat relevant foundational knowledge pertaining to an issue raised by someone else.	Does not express any relevant foundational knowledge.
Elaborates statements with explanations, reasons, or evidence.	Pursues an issue with more than one elaborated statements.	Pursues an issue with one elaborated statement.	Elaborates a statement with an explanation, reasons, or evidence.	Does not elaborate any issues.
Procedural				
Invites contributions from, and acknowledges statements of, others.	Engages others in the discussion by inviting their contributions and acknowledging their contributions.	Invites comments from others and does not acknowledge their statements.	Does not invite comments from others but allows others to speak. Does not acknowledge contributions from others.	Does not invite comments from others nor acknowledge their statements.
Challenges the accuracy, logic, relevance, or clarity of statements.	Constructively challenges the accuracy, clarity, relevance, or logic of statements made.	Responds in a civil manner to a statement made by someone else by challenging its accuracy, clarity, relevance, or logic.	Responds in a civil manner but does not challenge the accuracy, clarity, relevance, or logic of statements.	Does not respond in a civil manner in all conversations. Does not challenge the accuracy, clarity, relevance, or logic of statements.

Adapted from Harris, David E. "Assessing Discussion of Public Issues: A Scoring Guide." In *Handbook on Teaching Social Issues*, edited by Ronald W. Evans and David Warren Saxe. Washington, D.C.: National Council for the Social Studies, 1996.

Fishbowl Rubric

Fish _____(Inside) Observer_____ (Outside)

Evaluate your "fish" in all of these categories using the following rubric:

     3 = Much evidence of action; significant and compelling responses
     2 = Some evidence of action; satisfactory, but not significant or compelling
     1 = Little or no evidence of action; or, unfamiliar with book/articles, questions, or   assignment

Grades: (18-17= A)   (16-15 = B)   (14-13= C)   (12-11 = D)   (10 & Below = F)

Strategy	Use rubric number to indicate evidence of each strategy. <u>You must write a comprehensive description of evidence for your "fish" to receive credit for Strategy #5</u>
1. Response to discussion questions exhibits <u>analysis and comprehension</u> (2x).	
2. Uses a variety of resources and/or research to support ideas throughout the discussion (2x).	
3. <u>Intellectually</u> challenges and/or poses a question (related to topic)for the group.	
4. <u>Actively</u> participates, but does not dominate discussion.	
5. Effectively acted in role of observer during seminar. Noted questions raised or responses made by "fish."	
6. <u>Actively</u> listens when not in the fish bowl, takes notes, does not disrupt/talk when not in the fish bowl.	

Your Grade _____

Comments:

FISH BOWL CHECKLIST AND IDEAS

1. Is the *format* one that is convincing and effective? Would some other organization be more effective?
2. Does the writer have a clear and well-defined *problem* in mind?
3. Is the *style* appealing? Is the argument well written and coherent?
4. Do the *claims* made in the article seem reasonable and convincing?
5. Are the claims backed up by reasonable *evidence*?

Giving Support for Your Reasons
Support consists of evidence. The four kinds of evidence:
• Example: from your own experience or from what you heard or read.
• Common Sense: things that you believe everybody knows.
• Expert Opinion: the opinions of experts -- this comes from research.
• Statistics: numbers -- this also comes from research.

SAMPLE PROMPT--- Smoking should be banned in all public places.

Example: For example / for instance / let me give an example
Whenever I go to a restaurant or bar and there are people smoking near me, I feel that I am breathing their smoke. This makes me a smoker even though I don't want to be.

Common Sense: Everyone knows / if...then / it's common knowledge that
Secondhand smoke is very unhealthy for nonsmokers.

Statistics:
Secondhand smoke causes about 250,000 respiratory infections in infants and children every year, resulting in about 15,000 hospitalizations each year.

Expert Opinion: According to.../ to quote.../ the book _____ says...
According to the Environmental Protection Agency, "secondhand smoke causes approximately 3,000 lung cancer deaths in nonsmokers each year."

Opinions, Preferences: I think..., In my opinion..., I'd like to..., I'd rather..., I'd prefer..., The way I see it..., As far as I'm concerned..., If it were up to me..., I suppose..., I suspect that..., I'm pretty sure that..., It is fairly certain that..., I'm convinced that..., I honestly feel that, I strongly believe that..., Without a doubt,...,

Disagreeing: I don't think that..., Don't you think it would be better..., I don't agree, I'd prefer..., Shouldn't we consider..., But what about..., I'm afraid I don't agree..., Frankly, I doubt if..., Let's face it, The truth of the matter is..., The problem with your point of view is that...

Giving Reasons and offering explanations: To start with, The reason why..., That's why..., For this reason..., That's the reason why..., Many people think...., Considering..., Allowing for the fact that..., When you consider that...