

A Step-by-Step Approach to Social Online Learning and Automated Assessment

Dan Hickey, Professor

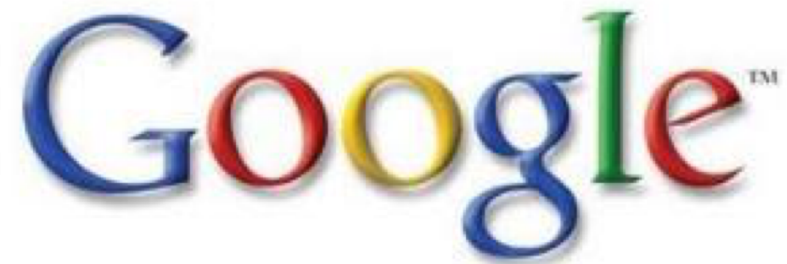
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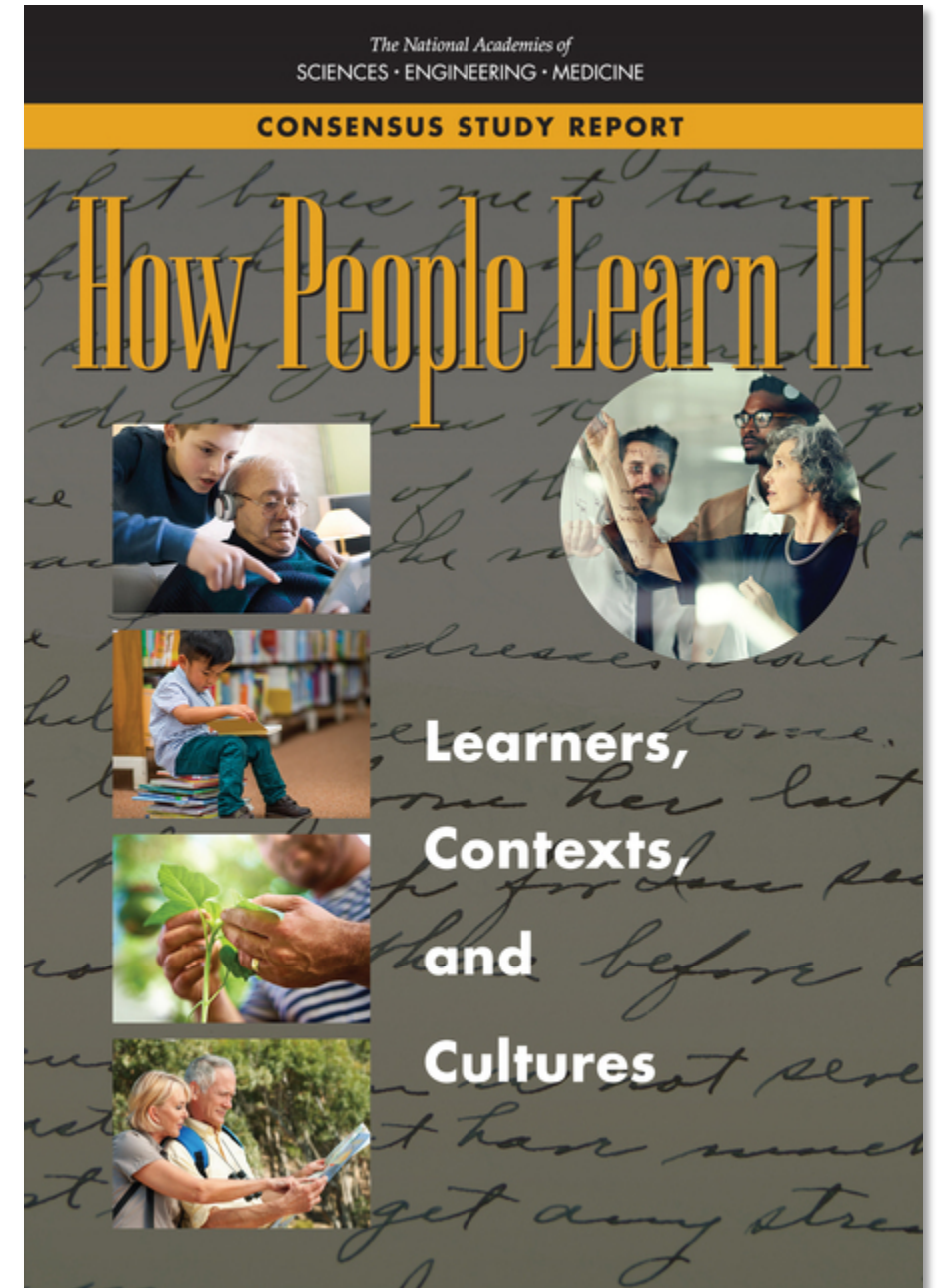


Building the Field of
Digital Media and Learning |

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Why “Social” Learning

- Social theories of learning were formalized around 1990
- Broad consensus in 2019 that learning reflects the social and cultural context in which it occurs
 - Many agree that instruction should be contextualized (i.e., framed) with examples, contexts, etc
 - Less consensus about timing and source of frames
 - This approach argues framing should come first and be provided by each learner,
- Particularly important for online learning which can easily be socially isolated.
 - Discussion forums can be dysfunctional
 - Relying on instructors leads to burnout

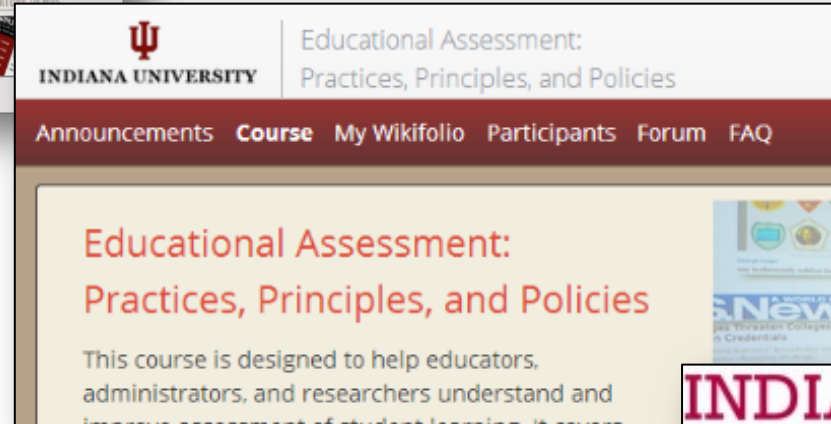


Research Context

**2009 in
*Sakai @IU***



**2012-2016 in
*CourseBuilder
Assessment BOOC***



**2013-- in *Canvas*
@ IU & IUHS**

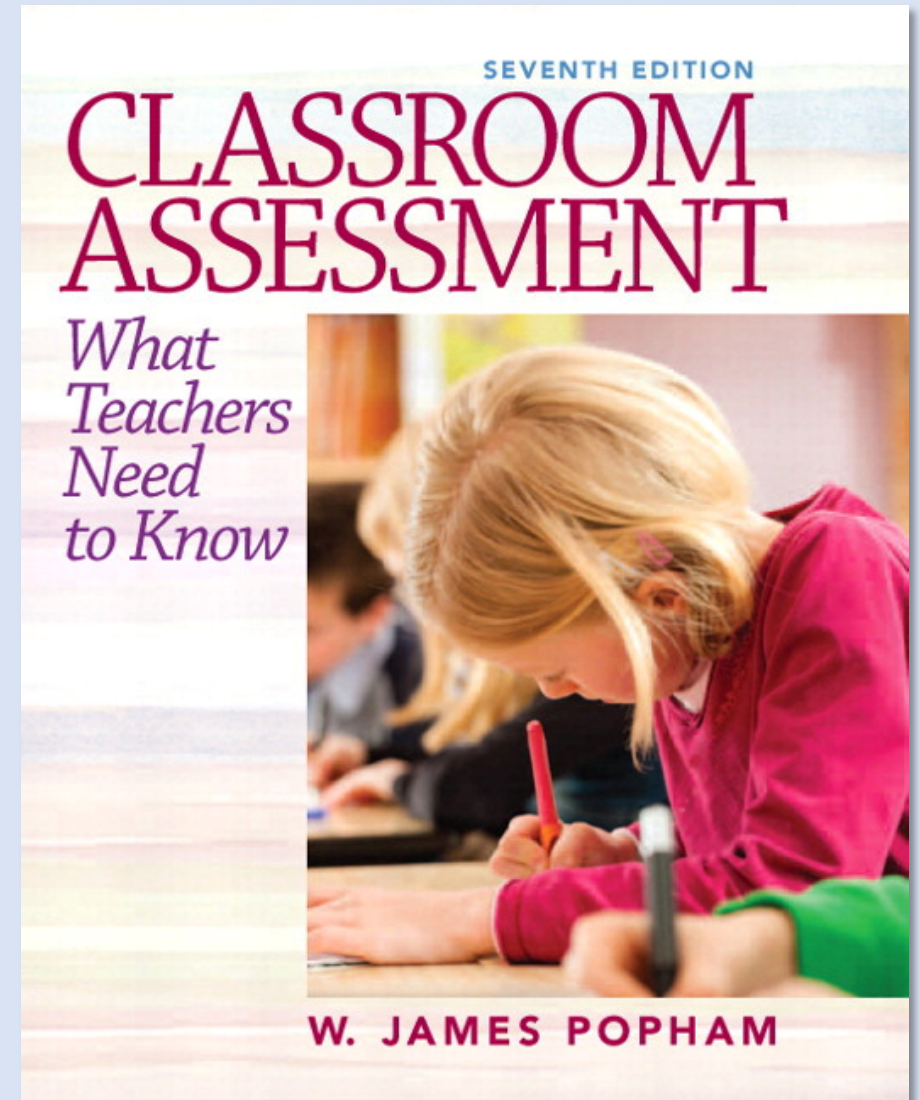


**2013-- in *Canvas* with K12
High Speed Network**



Presentation Context

- *Assessment in Schools* (P507)
 - Taught since 2005
 - Moved online in 2009
- Taught as a Big Open Online Course (BOOC) in Coursebuilder, 2013-2017
 - Refined several custom features not possible in Canvas
- Three modules
 - *Assessment Practices, Principles, and Policies*
- Instructor was very busy!
- Presentation consists of design principles derived across multiple course contexts




Wikifolios/gPortfolios

- Public (to class members) artifacts
 - Students complete their work
 - Students examine and comment on peer work via threaded comments
 - Instructor comments
- No “known answer” questions in public space of the class
- Only requires public pages that support threaded comments
 - In Canvas requires students to generate a new discussion each week
 - Can use Google *Docs*, *Coursebuilder*, or *Sites*.
- Semi-synchronous assignments
 - Class organized around weekly deadlines.
 - Strict application of modest late penalty

Published

Edit



Molly Page: Assignment 5 (Chapter 3 & 5).

Molly Page

All Sections

Jun 7 at 1:45pm

Curricular Aim

Students will determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.

In terms of Reliability and Bias, I believe that my assessment role is low-stakes and thus much less biased because of the context in which I am asking my students to perform. Bias, in terms of offensiveness and unfair penalization, is hard in relation to my aim as I am looking to gauge the comprehension of what is read. In chapter five it discusses children with disabilities and goes over each of the laws that protect said students providing them with a fair and equal education. Seeing as I am beginning my career as a language arts special education teacher, learning about and understanding fairness is so important in creating and molding assessment. Making sure to create reliable and unbiased assessments for my students supports their learning as it creates a clean environment for them to learn and be assessed.

Types of Reliability Evidence To Types of Items

Test-Retest Reliability Evidence (To get a fix on how stable an assessment's results are over time, test a student, then after a set amount of time retest using the same instrument or assessment)

Alternate-Form Reliability Evidence (Using the comparability of two (or more) test forms for assessment)

Internal Consistency Reliability Evidence (Requires only one single test administration, reflecting on the degree of which items are doing their measurement job in a consistent manner)

Selected Response Selected response is the use of multiple-choice or binary-choice items, students selecting the response from a presented list of selections. The evidence that is most relevant with a selected response is either test-retest reliability or internal consistency reliability. I feel it is most fitting with *Test-Retest Reliability* as it is a set layout of items to gauge the student's ability to perform rather than a varied selection, allowing for a simple retesting.

Constructed Response Constructed response is an item that requires a student to generate their own response from scratch, essentially- asking a student to use their learned knowledge and memory to draft an answer rather than selecting from provided responses. This can relate to *Alternate-Form Reliability* in my opinion, because it doesn't have to retest in the exact same response way when retested, but provides the space for the same information to be assessed on.

Essay Essay, like a constructed response, relies on the student's ability to generate a response, however, in an essay item it is required to be one or more paragraphs, seeking further information. An Essay item most relates to *Internal Consistency Reliability* because it's hard to retest an essay and receive the same answer since it is

Online Assessments

- Available in all modern LMSs.
 - Can also use Google *Forms*
- Need both open-ended and selected-response items
- LMS's include item analysis tools
 - Discrimination index
 - Distractor analysis

Question 8

0.5 pts

What should be the two major fairness concerns of a classroom teacher who wishes to eliminate bias in the teacher's assessment instruments?

- ☐ Unfair penalization and reliability of items in the teacher's tests
- ☐ Offensiveness and absence-of-bias in items in the teacher's tests
- ☐ Offensiveness and unfair penalization of items in the teacher's tests
- ☐ Disparate impact and offensiveness of items in the teacher's tests

Questions?
Example Application

STEP 1: Define Social Framing Context

- Each student defines a personalized framing context
 - Generally part of introductory assignments
 - Students continue refining their characterization and understanding of their own framing context by revising frame in most assignments
 - Students are encouraged to look at peer examples.
- Requires creativity and knowledge of course content
 - Relatively easy in professional courses
 - An undergraduate math pilot used student majors
 - A high school history course has students select from 11 themes.
- In P507, was done in two steps
 - Introducing self on wikifolio home page (Assignment 0)
 - Defining a curricular aim (Assignment 1)

Assignment 0: Getting Started (Chapter 1)

- In this assignment you will
 - Familiarize yourself with Canvas and the course site
 - Locate your wikifolio home page and introduce yourself to the instructor and your peers by writing a paragraph on your home page.
 - Review Chapter 1 of the textbook and indicate what you believe is the most relevant function of classroom assessment for *you* and explain *why*. If you have delays accessing the e-text, [here is a medium-quality scan of Chapter 1](#). You will need to get access to the e-text by Assignment 3.
 - "Submit" the assignment to provide feedback to the instructor and to let the instructor know you posted your wikifolio.

Assignment 0: Getting Started (Chapter 1)

- **3. Edit your home page to introduce yourself professionally.** Open up your home page again by clicking *Edit*. Please introduce yourself to your classmates and the instructor. Write at least a few sentences for each of the following. This page will give your peers some context for understanding your work.
 - **About Me.** Tell us about yourself. You are welcome to tell us where you live, what you do for a living, etc. Be sure to tell us the name you prefer to go by, and if your gender is not apparent from your name you may want mention that as well.
 - **Goal(s).** Tell us why you are participating in this course, what academic program you are in (including online vs conventional), how far along you are, and anything else that is relevant to the course.

- **About Me.** My name is M_____. I currently live in _____, working as a music therapist, but as of May 31st I will live in Salt Lake City Utah. I have just accepted a position as a special education teacher for a high school out there and couldn't be more excited. I have a dog named Blueberry. She is a dachshund/lab mix and is the cutest pup alive.
- **Goal(s).** I am in the online masters of special education program and taking this as an elective course to finish up my masters. I will hopefully be done with my capstone next spring! I want to become more knowledgeable in assessments as my current career was pretty close-minded to the types of assessments available.

Assignment 0: Getting Started (Chapter 1)

- **Role(s).** Describe your current or future role in education as it relates to assessment (for instance, Educator, Administrator, Researcher). You will use this role as your lens to the material we cover in this course. It is important that you carefully examine all of the material from the viewpoint of your chosen role - the role you choose (current or future) will shape how you learn the material in this course. When you explain your role, try to imagine how your role will influence your understanding of Educational Assessment
- **Context(s).** Describe the educational context in which you work or hope to work. Consider grade level(s), class size, institution, institution size, governmental/non-profit/ for-profit, etc. Provide enough information so that everyone can understand your setting. You may choose to include a link, or you can describe your setting generally (that is, you may keep your actual setting unknown). Try to imagine how your setting will shape your understanding of the practices, principles, and policies of educational assessment.
- Be sure to *Save* your home page after you edit it.

- **Role(s).** Taking on my new job as a high school special education teacher, relating to assessment, I will be fairly immersed in IEP's-meetings, assessments, implementations, etc. The role I will be choosing as my lens is that of a special education teacher and IEP implementer so my goal in understanding educational assessment is the importance behind good assessment, but how to use the information to create support and change.
- **Context(s).** As mentioned, I will be working in a public high school setting- ages 14 to 18. This school is pushing inclusion, co-teaching. The class size, to me is unknown, but I don't believe classrooms are very large in terms of student numbers. In terms of shaping my understanding of assessment, I want to push principles and practices to lead to inclusion and that support as that is what my school is focusing on. So looking at assessments for fostering inclusive opportunities.

Assignment 0: Getting Started (Chapter 1)

In this assignment, you will define a curricular aim that will be used to organize your engagement for the rest of the course. After completing this assignment, you should be able to:

- Productively discuss curricular aims and educational standards
- Define an assessable curricular aim
- Apply typical considerations for deciding what to assess

Review the assignment before you begin. This will introduce some new engagement routines that will be completed for every assignment. Note that there are lots of detailed instructions in this first assignment that will not be included in the next assignments. Use your time wisely and save time to discuss work with your peers.

Assignment 1: Define a Curricular Aim (Chapter 2)

CREATE A NEW WIKIFOLIO DISCUSSION PAGE (BEFORE THE DEADLINE)

- Most discussion in this course occurs directly on student generated artifacts. Canvas does not currently feature threaded discussions on student-generated pages. As a workaround to allow peer and instructor discussion of wikifolios, you will generate a new discussion forum for each weekly wikifolio and paste a link to that discussion on your wikifolio home page.
- Canvas' student-interface does not allow students to save an unpublished document. If you wish you can draft your discussion page(s) in the word processing application of your choice and then once you're ready for all of us to see what you've written, create your wikifolio page(s) and save.
- Some elements of this assignment will be new to you. Be patient. It will be second nature by the third assignment and you will follow all of the same steps each week.
- **1. Create a new wikifolio discussion page.** Go to *Discussions* on the left and click *+New Discussion*. [\(More instructions here if you need them\)](#). Insert a title for the page in the top bar starting with your full name and followed by the title of the Assignment, as in *Sam Student: Assignment 1 (Chapter 2)*.
- Note that *must* include your name in the title of the discussion page because Canvas does not allow multiple discussions or pages with the same name.
- **2. Save and publish your wikifolio discussion page.** Once you save your wikifolio , it will become public to everyone in the class. This is why there is the second step of linking the page to your home page when you are done (described below).
- Be sure to check *Allow threaded replies* and *Allow liking* (you can ignore the other settings).

Assignment 1: Define a Curricular Aim (Chapter 2)

WATCH/READ/ENGAGE CHAPTER 2 AND DRAFT A CURRICULAR AIM (BY THE DEADLINE)

- 1. Watch the [Chapter 2 Video](#).** This is a 16 minute video created for this course and assignment.
- 2. Read Chapter 2.** Read/review Chapter 2 and carefully read *The Role of Curricular Aims* and *Chapter Summary*. If you have time read the chapter straight through. If you are struggling with time or focus, skip ahead and let the assignment provide a functional context for reading the chapter.
- 3. Draft a CURRICULAR AIM on your Chapter 2 Wikifolio.** Insert a header **CURRICULAR AIM** on your wikifolio. After reading about the role of curricular aims in Chapter 2, draft a curricular aim that embodies your real or imagined professional context of educational assessment.
 - Popham describes the “curricular aim” as the desired outcomes of instruction. This is not the “educational objectives,” “instructional objectives,” or “behavioral objectives,” but rather a measurable learning goal.
 - In very simple terms, a Curricular Aim can be viewed as a skill or a body of knowledge that teachers plan for their students to acquire. You should definitely *not* provide a lesson or a project as your curricular aim.
 - Your Curricular Aim will become the basis of discussion for future Wikifolios. This is an assessable (able to be measured by an assessment) learning outcome that covers perhaps five hours of instruction. Your aim should reflect your role in education and ideally, it will be something that your peers will find interesting

Assignment 1: Define a Curricular Aim (Chapter 2)

WATCH/READ/ENGAGE CHAPTER 2 AND DRAFT A CURRICULAR AIM (BY THE DEADLINE)

1. Watch the [Chapter 2 Video](#). This is a 16 minute video created for this course and assignment.
2. **Read Chapter 2.** Read/review Chapter 2 and carefully read *The Role of Curricular Aims* and *Chapter Summary*. If you have time read the chapter straight through. If you are struggling with time or focus, skip ahead and let the assignment provide a functional context for reading the chapter.
3. **Draft a CURRICULAR AIM on your Chapter 2 Wikifolio.** Insert a header **CURRICULAR AIM** on your wikifolio. After reading about the role of curricular aims in Chapter 2, draft a curricular aim that embodies your real or imagined professional context of educational assessment.
 - Popham describes the “curricular aim” as the desired outcomes of instruction. This is not the “educational objectives,” “instructional objectives,” or “behavioral objectives,” but rather a measurable learning goal.
 - Your Curricular Aim will become the basis of discussion for future Wikifolios. This is an assessable (able to be measured by an assessment) learning outcome that covers perhaps five hours of instruction. Your aim should reflect your role in education and ideally, it will be something that your peers will find interesting
4. **Describe your Curricular Context** Provide some context for your curricular aim by describing a lesson or project that you might assign to accomplish your curricular aim, what level of mastery you expect, and how many hours it might take to learn it.

Curricular Aim. Students will determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.

Curricular Context. My idea for addressing my curricular aim is to increase comprehension skills through reading activities and writing based off said reading activities. My thought for this exact aim is to spend time working through short stories (which may take several lessons to get through to create a solid basis of understanding what is being sought in terms of comprehending the readings) and then to rewrite what is read into summaries or context assignments. This will support both readings and writing within language arts and allows for varying levels of support between students as needed.

Questions?
Example Application

STEP 2: Define Primary Engagement Routines

- Uncover ways of requiring personalized engagement with course content
 - Have students “problematize” content from their own perspective
 - Connect disciplinary knowledge to nascent disciplinary practices
- Simple ranking routine is remarkably effective
 - Summarize the relevance of curated sets of course knowledge or resources
 - Rearrange those summaries in order of personal relevance
 - Add a justification for those rankings
- Can be readily applied to most educational resources
 - Easy to use with text chapters (often have summaries or implications)
 - Can also use with carefully curated sets of OERs (like articles or videos)
- In P507 was introduced in two steps
 - Reading guidelines in Assignment 0
 - Written assignment in Assignment 1

Assignment 0: Getting Started

4. Review Chapter 1. Identify and carefully read the sections that are more relevant to your aim and context. Start by scanning the headings. Try to read the rest of the chapter as well.

- If you work in a K-12 setting that involves standardized tests you should carefully read pages 5-8
- If you are or will be an administrator or a researcher, you should carefully read page 8-9
- If you are an advanced student (e.g., headed to a PhD) or an administrator who has to make consequential decisions based on test scores you should really read the whole chapter carefully.

Read the chapter summary carefully.

Assignment 1: Define a Curricular Aim

6. Apply and summarize the WHAT TO ASSESS CONSIDERATIONS. Chapter Two details nine things that you should consider when deciding what to assess, As summarized on Page 59-60. Insert an appropriate header on your wikifolio and write a summary of each of the nine considerations in order of most relevant to least relevant, given your role and setting. Say a few things about each and how they are relevant to you.

- Add brief justifications for the What-to-Assess Consideration that you chose as **most** relevant and the one you chose as **least** relevant, keeping in mind your role and context.
- If you have not thought about these things before, this will be challenging. Understanding these considerations for your role and context is crucial to developing assessment expertise.

If you did not have time or background to read the chapter, use this assignment to make sense of the chapter. If you don't understand the considerations enough on page 59-60 to summarize them and their relevance, read that section of the chapter. **Be sure to save your wikifolio and allow threaded replies and liking.**

What to Assess Considerations

- I had a hard time with this section, so I chose the ones that I felt were most important toward my aim in an attempt to understand!
- *Advice from a colleague: If a knowledgeable colleague is available, has the educator reacted to the proposed assessment targets in a to-be-built classroom test?* My new school is very co-teacher based and supportive of observers and outside input. I am excited about this, because it not only provides outside ideas but is in a way an assessment for myself and how I will be as a teacher.
- *Number of Assessment Targets: Is the number of proposed assessment targets for a test sufficiently small so that those targets represent an instructionally manageable number?* It is important to provide a balance for students. Too many are overwhelming, too few aren't enough check-ins. I think being in communication with students and allowing self-assessments (like in this course) can support those who feel they need more while allowing those who prefer less not be overwhelmed.

Assignment 6: Validity (Chapter 4)

4. Summarize and rank sources of validity evidence. Read about the four sources of validity evidence introduced on page 101 (*test content, response processes, internal structure, and relations to other variables*). Think hard about the relevance of each to the broader assessment contexts represented by the different items you created in Module One. List them in order of relevance to your assessment context. Then use the more detailed descriptions of each starting on page 102 to explain what each means in your assessment context, ideally with examples. You may end up changing the order. **Be sure to explain why the first is most relevant and the last is least relevant in your context.** If you are struggling, you should look at peer work for guidance.

Sources of Validity Evidence

- ***Test Content*** is the extent to which an assessment procedure represents the content of the curricular aim(s). Test content is important because it relates directly to WHAT the test is assessing- is the assessment necessary and pertinent? **I find this the most important because as assessments seem to be difficult for students, giving them ones with unnecessary content or reasoning seems to not support our students.**
- ***Internal Structure*** is the extent to which the internal organization of a test confirms an accurate assessment of the construct supposedly being measured. Internal structure supports what the teacher is seeking. IF the internal structure is organized correctly, it will be geared toward the reasoning for the test, otherwise, it can be misleading to the students.
- ***Relations to Other Variables*** are the degrees to which an inferred construct appears to exist and has been accurately measured for the intended use. Inferred constructs can be misleading to students, and thus making sure that variables that may be inferred are taken into account to support our students is important.
- ***Response Processes*** are the degree to which the cognitive processes test takers employ during a test support an interpretation for specific test use. This is the process sought for when assessing students' abilities in the skills being taught. **This one is less pertinent to my aim as I feel this is for checking certain skills such as math or science.**

Questions?
Example Application

Step 3: Define Secondary Engagement Routines

- Are introduced further on into the course
- Build on the artifacts and insights generated in the primary routines
 - Can cover more abstract and complex topics
 - Build on the more concrete ideas and artifacts
 - May need to reorder typical textbooks (which often lead with principles)
- May or may not employ the ranking strategy
- In P507, used to engage students more deeply with complex topics of validity.
 - Primary routine had them select more relevant type of validity for context
 - Secondary routine had them apply concepts to assessments created in first three assignments.
 - Had to move chapter back in course so it came after item creation.

Assignment 6: Validity (Chapter 4)

5. Identify the most relevant sources of validity evidence for assessment types. For each of the assessments, you created in Module One, write a paragraph explaining which of the four sources of validity evidence is most relevant for how you would use the evidence generated by the assessment.

Put differently, you should end up with four paragraphs, one for each the four assessments you created (*selected response, constructed response, essay, and performance or portfolio assessment*). In each paragraph, you should state which type of validity evidence (*test content, response processes, internal structure, and relations to other variables*) would be most relevant for making a valid interpretation about what the scores from each assessment means.

Most Relevant Sources of Validity for Assessment Type

Selected Response (multiple choice, binary, multiple-binary) would most relate with test content since it is not a skill to select a response from presented options, but the rather selected response is testing the content of which the student knows.

Constructed Response (short answer) would relate closest with internal structure, I feel, because of the way in which questions are structured will provide the means for the student to respond correctly or otherwise.

Essay most relates to response processes as this is gauging test content, but also the ability to recall and create a response independently.

Performance or Portfolio Assessment would most relate to other variables because it is the combination of performance/assessments put together to create a visual of growth or learning.

Questions?
Example Application

Step 4: Define Social Engagement Routines

- These are intended to help students hold themselves and each other accountable to disciplinary norms of discourse
 - “Walk the walk and talk the talk” of the discipline
 - Should be designed to allow instructors to model engagement
- Want to foster productive disciplinary engagement
 - Engagement is social (not just cognitive)
 - As disciplinary as possible while still being meaningful
 - Productive means asking questions, being emotionally and personally involved
- Best fostered in public threaded comments on student work
- In P507, students were instructed (but not required) to comment on peer work

All Assignments

9. Post questions. Post at least one question at the bottom of your wikifolio **as a comment** to your classmates and the instructor that this assignment raised for you, given your role and setting. Do not ask yes/no questions. Rather ask questions that can get some discussion started.

10. "Submit" your assignment and provide feedback. After you have created your wikifolio entry and it is ready for others to see, let the instructor know you are done by submitting this assignment from the Assignments link. Do not paste your wikifolio into the submission. Rather indicate how long you spent so far and provide any suggestions and feedback for improving the assignment.

My question is, as I'm sure practice makes perfect, but learning all of the ins and outs of assessment I'm getting nervous that I won't ever really be able to create a valid, "good" assessment for my students. With variables, bias, offensiveness, etc., how do I stay on top of that, or ahead of the game keeping all of this in mind?

All Assignments

INTERACT, REFLECT, AND SELF-CHECK

(BY THE DEADLINE FOR THE *NEXT* ASSIGNMENT)

- 1. Discuss and "like" peer work** Review the wikifolios of a classmate and find ones that look interesting to you. Engage in discussion with them by posting questions or responding to their questions. The goal here is to generate discussion threads that consider how the chapter concepts and considerations take on different meanings for different students. Be sure to respond to question and "like" comments and questions that are particularly good.
- 2. Promote exemplary (!!!) peer work.** As part of reviewing and discussing, promote one (and only one) of your classmate's Wikifolios as being exemplary **from your perspective**. Add a comment that starts with three exclamation points (!!!) and indicates what was exemplary about that work from your perspective. Look for peers whose work was particularly well done and who completed the optional elements in ways that helped you understand those topics even if you did not complete those elements.

M_____, you raise a really good question. I think the best way to create valid, reliable assessments is to get a lot of feedback, both from peers and students. I know the first exam I gave, students were quick to point out any mistakes in content as well as any clerical errors. While no assessment is perfect, continual feedback can help you improve.

Last semester, two of my peers and I went together to create an assessment. It was time consuming (we probably spent at least 5 hours as a group, and countless other hours individually) to create, but the resulting assessment was one of the best I have ever administered. While I do not at this point really know how valid the assessment is, it did at least correlate with the curricular aims for that course. Hopefully over time, I will be able to better relate its validity and reliability.

(1 like)

B_____ Thank you for this! I think getting feedback, not only from my peers and co-teachers but from my students will be valuable as I am incoming teaching for the first time. I really like your statement that you don't know currently the validity, but you know that it correlates with your aim, and that's important.

(1 like)

I agree with B_____, it is important to collaborate on an assessment to ensure it is the quality you are striving for. I also think it is important to remember what Popham said about the higher the stakes the more you need to consider all of these elements. Of course every test will be looked over and checked for reliability, fairness, and validity, but the scrutiny is really on high alert when the stakes are higher. Keeping in mind how the test will be used will help keep the review manageable given all the directions a teacher is pulled in each day!

All--

Great discussion here, really getting at the role of validity in classroom assessment. Just think hard about the CLAIMS you are making. Most classroom assessment claims are modest. So validity evidence does not have to be very strong. To reiterate, reliability is a property of an assessment, but validity is not. So there is no such a thing as "a valid assessment"

Questions?
Example Application

Step 5: Create Informal Assessments of Engagement

- Do not grade content of wikifolios
 - Difficult and time consuming to make valid judgements of what students *know* based on what they *did*.
- Rather have students reflect on specific aspects of their engagement
 - Award points for completion of assignment
 - Give students full points unless they did not engage
 - Summative function for engagement but formative function for understanding
- Takes almost no time to award grades, cut and paste private feedback
 - Only place where negative feedback is provided is in the gradebook (usually when points are deducted)
- In P507, there are 11 assignments worth 7 points
 - One score is dropped for 70 points

All Assignments

4. Reflect. Reflect on your engagement Post five brief reflections. You should write a coherent reflection that demonstrates an understanding of the concepts and how they related to your curricular aims and context. Insert an appropriate header at the bottom of your wikifolio and be sure to label each of the five types of engagement.

- **Contextual engagement.** Focus on the intersection of the general ideas with your specific context. How well-suited was your learning goal for working through this assignment? Can you think of a better curricular aim or some way of changing your aim to help you learn about the topic of this chapter? Did your classmates have an aim and context better suited to engaging with these ideas?

All Assignments

- **Collaborative engagement.** Focus on the intersection of your ideas and your classmates' ideas. Whose comments and examples were particularly helpful for your completing this assignment? Be specific and name people and what they contributed that was helpful.
- **Consequential engagement.** Focus on the intersection between these ideas and your future actions and the overall consequences of these ideas more generally. What will you do differently in the future having learned the ideas in this assignment? What is the big takeaway for everybody? What are the enduring understandings that are likely to impact what we collectively should or will do?
- **Conceptual engagement.** When you completed the self-assessment, how well did you understand the concepts that you were being asked about? What did you have to look up in the text? Where there any concepts that you still did not understand or remain confused about?
- **Cultural engagement.** How did your race, ethnicity, gender, gender orientation, socioeconomic status, upbringing, (dis)ability, or other personal factors impact the way you engaged in this assignment?

- **Consequential engagement.** I think in the future, and understandings that I will really take away from this is the real definition and difference between reliability and validity. It stood out to me and helped me to really understand not only the difference but the importance of a valid assessment for our own student's well-being and proper education.
- **Contextual engagement.** I feel that all aims really related to this, as validity and reliability are universal and understanding and implementing of such impact all areas of education or assessment. I feel that I was able to understand and relate this chapter to my aim well.
- **Collaborative engagement.** I really appreciated Bev's examples that she gave about the amount of time she submerged herself in creating an assessment that correctly addressed her aim and the amount of time that her coworkers put into going over her assessment to check for reliability and validity. Even in that, she told me she still doesn't know if it's valid without the actual implementation of the assessment. This helped me to see that it isn't a one-man show and it takes support to make sure you are providing an adequate assessment.

- **Conceptual engagement.** I did not have any concepts that I had a harder time within this self-assessment this time around. What I did have to look up for verification was the sources of validity evidence. For some reason, the wording behind this made me have a hard time interpreting and being able to properly express my understanding.
- **Cultural engagement.** I do not believe any personal factors impacted my engagement with this assignment. I feel that a teacher who has good morals and the ability to stick with the creation and editing an assessment for validity and reliability will be better off, but that's really all I can think of in terms of this chapter.

Questions?
Example Application

Step 6: Create Formative Self-Assessments

- Private “known answer” open-ended (“constructed response”) items
 - Should be relatively abstract and decontextualized
 - But should not be matched directly to the exam items
- 3-6 items covering the “relevant big ideas”
- Summative function for engagement but formative function for understanding
 - Make students aware that the formative self-assessment will prep for the exam
 - Instructions should maximize formative value
- In P507, instructions were carefully worded to support formative functions

All Assignments

3. Self-Check. Take the [self-check for Chapter X](#). You should be able to write an acceptable answer to each of the questions without looking up the answers. While your answers are not graded, you are required to complete and reflect on the self-check and your understanding of chapter concepts.

All Formative Self-Assessments

This ungraded self-check is designed to let you see if you are prepared to move on to the next assignment and provide formative review of the core concepts in the chapter.

- You should be able to write an acceptable answer to each of these questions without looking up the answers. You must write something before you can see the response.
- If you can write little or nothing from memory you should search for information and write an answer before looking up information on the web or course resources.
- If you can't answer each of them from memory you likely have not engaged sufficiently with the chapter or your peers' work and will likely not recall these ideas in future courses or workplace contexts.

Self-Assessment from Assignment 6 (Validity)

Question 3

0 / 0 pts

How could a classroom test that is “face valid” lead a teacher to make inaccurate inferences about students?

Your Answer:

This relates to whether an assessment appears to match up with what we want to measure. This doesn't necessarily mean that evidence actually shows that the test produces valid interpretations. Evidence still needs to be gathered.

Because a test **appears** to measure the curricular aim it is supposed to represent, this does not necessarily mean the test actually does. For instance, a test might look like a mathematics test, but turn out to be based more on students' abilities to **read** the test's word problems than students' ability to display the mathematics skills called for in those word problems.

Questions?
Example Application

Step 7: Create Multiple Choice Module Quizzes

- Private multiple-choice items and time-limited.
 - Include “best answer” items that can’t be looked up easily.
 - Provide about two minutes per item
 - Aim for an average score of around 80% with no more than 1-2 perfect scores
- Do not teach to items and do not let them shape course design
 - Protect the validity of scores as evidence of knowledge transfer
- Protect item and quiz security
 - Make sure answers are not easily searchable
 - Randomize order of items and only show one at a time
 - Only show overall score, but don’t show answers for each item
- Use item and exam analysis to improve quizzes
- In P507, three 20-item quizzes each counted for 10%.

Items from Module 2 Quiz

Question 5

0.5 pts

Which one of the following statements *could* be technically correct?

- ☐ "The test-based inference is valid."
- ☐ "The test is definitely valid."
- ☐ "The test is face-valid."
- ☐ "The test is consequentially valid."

Question 6

0.5 pts

Classroom teachers are most apt to focus on which of the following?

- ☐ Evidence of alternate-form reliability
- ☐ Internal structure evidence of validity
- ☐ Evidence of internal-consistency reliability
- ☐ Test content evidence of validity

Questions?
Example Application

Step 7: Create Model Videos or Podcasts (Optional)

- Try to model engagement rather than presenting content
 - Best to rely on textbooks or OERs for content
 - Conversational recordings are relatively easy to make
 - Consider a student who has completed the course as well as an expert
- In P507, videos feature the instructor (Hickey) framing the concepts in the P507 course and other instruction

Step 8: Create Microcredentials (Optional)

- Public nature of social engagement is well suited from open digital badges
 - Ideal evidence of communication, collaboration, and critical thinking
- Allows discursive competencies
 - “To the extent that the earner discussed work with peers, this badge is evidence of earners ability to do so”
- All LMSs now allow schools to install an Open Badges API
 - Badgr is recommended, but many use Credly
 - It is impossible to make work inside of most LMS’s publicly viewable
- No badges in P507 currently
 - IU has still not whitelisted Badgr
 - Used badges extensively in the Assessment BOOC