Assessment 101:

Assessment Made Easy for First-Year Teachers

By
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May 10, 2010

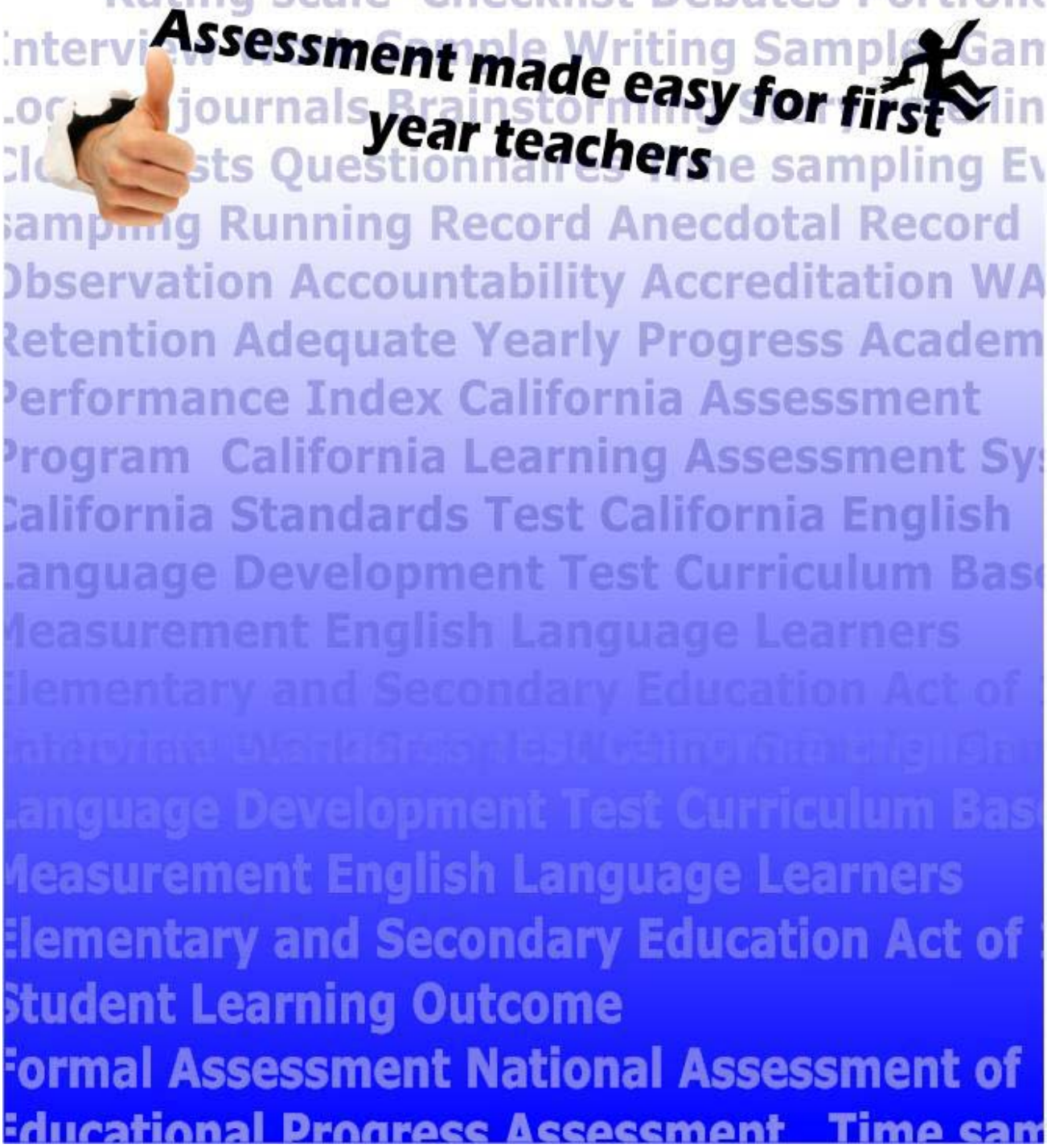
Abstract

This handbook is designed as a quick reference for first-year teachers who find themselves in an assessment driven environment with little experience to help make sense of the language, underlying philosophy, or organizational structure of the assessment system. The handbook begins with advice on developing and evaluating effective learnng goals/outcomes, provides a range of assessment techniques that include informal, formative and summative approaches, and offers teachers a reference for understanding the current K-12 assessment system from the national to school level structures.

Key words:

Assessment
Public School
Teacher
Testing

Assessment 101



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This handbook is the product of the 2010 Assessment class (EDUC 660).

Contents

PREFACE

Hi! Congratulations on becoming a credentialed teacher in the great state of California. If you are reading this you have just endured one of the most fantastically challenging years of your life. Good job, you made it! Now, if you are like most newly-credentialed teachers you are going to be walking into your own classroom in the very near future. This new situation will bring all sorts of novel and exciting experiences, ranging from concerned parents to intestinal bugs, and other obstacles that are not as closely related. All of these challenges will be met by you, the new teacher: a uniquely inspired, idealistic, moral, and altruistic breed of professional. In addition to writing lesson plans, decorating your classroom with Grateful Dead teddy bears, integrating subject matter and attending titillating staff meetings, you will be primarily responsible for assessing all of your students in the subject(s) that you teach. This assessment can take many forms. It is the purpose of this handbook to address some of the more common concerns and must-know facts about assessment and its connection to educating the young people of the next generation.

Assessment is critical to teachers in a variety of ways. Primarily, teachers need to understand the concept of assessment informing instruction. This idea is

easy to understand; it is intuitive that in order to teach an individual something new, you need to know what knowledge they already possess. One thing that is not always obvious: there are effective ways to conduct quick and efficient assessments that will give you this information. Beyond this quick type of assessment is the longer, more formal written assessment that is based on a question and answer format. Writing these tests in a fair and balanced way can be a challenge for someone who has never written test questions before. Issues of validity, reliability, and fairness must all be addressed and dealt with appropriately. After all, this type of assessment is what will most heavily influence your students' grades; it is vital that you are measuring what you think you are measuring, and what you want to measure. Additionally, each spring your students will be assessed on the state-mandated Standardized Testing and Reporting (STAR) test. Although the prospect of high stakes testing can cause anxiety in both the student and the teacher, with this handbook we hope to mitigate any stress and the over-consumption of caffeinated beverages.

All of these things can feel like daunting tasks, but will soon become second nature with the help of this handbook. The authors, all of whom are in the Master's of Education program at Humboldt State University, have tried to provide you with a quick reference manual on many of the issues that surround classroom assessment.

It was not our purpose to write the definitive text on assessment; rather our goal was to provide an introductory crash-course to the beginning teacher with limited temporal resources. In reading this handbook you will find subjects

arranged by subject matter in a neat and easy-to-understand format. We tried to avoid using words like “phenomenological” and “sesquipedalian”, preferring much smaller ones like “learn” and “test.” The result, we hope, will be a useful, gritty, and effective companion that will allow you to build a successful assessment regime into the function of your classroom. We are utterly confident in your ability to do this unassisted, but like other red-blooded Americans, we also believe in a running head start.

The format of this handbook was designed with ease of use in mind. It was designed primarily as a reference text, rather than something that you would read cover to cover. Interesting little icons have been included to highlight key features, main points and suggestions. The Icons used in this book and their accompanying meanings are:

10 Guidelines for Assessing As If Learning Matters Most
T. A. Angelo(1999)

If learning really matters most, then our assessment practices should help students develop the skills, dispositions, and knowledge needed to:

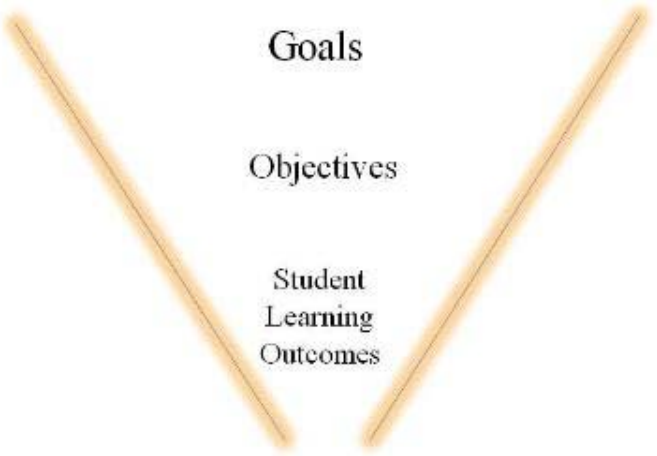
- Engage actively — intellectually and emotionally — in their academic work.
- Set and maintain realistically high, personally meaningful expectations and goals.
- Provide, receive, and make use of regular, timely, specific feedback.
- Become explicitly aware of their values, beliefs, preconceptions, and prior learning, and be willing to unlearn when necessary.

- Work in ways that recognize (and stretch) their present learning styles or preferences and levels of development.
- Seek and find connections to and real-world applications of what they're learning.
- Understand and value the criteria, standards, and methods by which they are assessed and evaluated.
- Work regularly and productively with academic staff.
- Work regularly and productively with other students.
- Invest as much engaged time and high-quality effort as possible in academic work.

Let's get started.

WRITING CLEAR GOALS, OBJECTIVES AND LEARNING OUTCOMES

What are Goals, Objectives, and Learning Outcomes?



Within your existing class framework, you should use your goals to clearly define your learning targets. The objectives will reflect exactly what you feel is worth teaching. Finally, your student learning outcomes will identify the performance that will demonstrate the students' mastery of your objectives.

Instructional Tool	Tips for Use	Example
Goal: The overarching theme of a unit.	Create the fundamental target you are aiming for. Don't be specific right away! Your learning outcomes will come into play there. Don't put how you plan on getting to your goals! That step is for the objectives. Keep your goals simple and clear; they will be your map, or more directly, the star on your map where all roads lead.	An example of a goal is "Increased student self esteem," or "Exemplary preparation for a high-school algebra class."
Objective: Usually specific, addressing a content area, but not the content itself.	Describe the important outcomes intended to be accomplished by that instruction. Use terminology and content-specific outcomes, and state where the students should be by the end of the teaching segment.	"Given a sentence written in the past or present tense, the student will be able to re-write the sentence in future tense with no errors in tense or tense contradiction."
Student Learning Outcome: The most specific tools for lesson planning that explicitly state what a student should know and be able to demonstrate.	The specified action by the learners should be observable and measurable, and the learners must do the specified action. When writing learning outcomes, make sure to include a verb.	"The student will be able to select the triangle, square and rectangle as required."

Goals, objectives, and learning outcomes are the foundation of any curriculum. Nested together (see graphic above), these concepts organize instruction into a seamless flow so that you can keep the teaching goal(s) in mind while planning the necessary instructional steps. Instead of shooting an arrow and defining where it lands as your target, aim towards where you want to go—you're more likely to get there!

Designing Clear Goals, Objectives and Student Learning Outcomes

Content Standards can provide guidance for a variety of academic goals, objectives and learning outcomes. The best way to learn the standards for your grade level and subject is to have them easily accessible at all times. You can find them at the following website: http://www.cde.ca.gov/be/st/ss/. These standards are organized by subject area and are internally sorted by grade level and topic. They are downloadable in PDF format and are searchable. Once you are familiar with the standards you will be able to plan quite creatively.

One suggestion: Seek out connections *between* standards to allow more flexible approaches that are unique to your teaching situation.

You should also check out, http://www.cde.ca.gov/ta/tg/sr/blueprints.asp, before lesson planning in order to identify the Blueprint Standards or 'power standards'. Interestingly, only 70% of the content standards are covered on the STAR tests. Don't be alarmed—this website lays out the California Content Standards with specific information about how many STAR test questions fall within each concept. This resource can help guide your lessons and allow you to present some concepts more comprehensively than others.

Expand your thinking about outcomes! Students learn and can demonstrate knowledge in cognitive (e.g. mapping), psychomotor (e.g. dancing), or affective (e.g. appreciating) domains. For goals, objectives and learning outcomes beyond

the Content Standards, consider utilizing alternative learning outcomes (see the table below).

Where Do I Begin?

Working backwards from learning outcomes to design effective instruction

Be aware of the assessments and learning outcomes that you want your students to understand from the beginning. Start with the larger concepts of the curriculum and the little, more specific concepts will fall into place as you go along. By planning for assessment before planning instruction, you can ensure that the instruction supports the original learning outcome, standard or objective. Ask yourself reflective questions along each step of the process will also help unpack and identify the explicit learning outcomes of your curriculum. "Does this activity directly support my intended learning outcome?" "How will this prepare my students for the assessment?" Questions like these will strengthen the foundation of your course and your student's subject matter competency by identifying the points where the lesson's concepts and skills are clear, or need help. (For help in identifying your learner's strength and weaknesses, see the sections on "Informal" and "Formative" assessment.)

The A.B.C.D. Method

The A.B.C.D. Method is an excellent starting point for writing objectives (Heinich, et al., 1996). In this system, "A" is for audience, "B" is for behavior, "C" for conditions and "D" for degree of mastery needed.

1. **Audience** – Who are your learners?
2. **Behavior** – What do you expect them to be able to do? This should be an overt, observable behavior, even if the desired learning isn't directly observable (e.g.: knowledge of history). If students do not have a way to demonstrate their knowledge with something you can see, hear, touch, or taste, you can't be sure they learned it.
3. **Condition** – Under what circumstances or context will the learning occur? What will the student be given or already be expected to know to accomplish the learning?
4. **Degree** – What are your expectations in terms of the level of performance? Do you want total mastery (100%), do you want them to respond correctly 80% of the time, etc.?

The table below shows some example objectives.

Learning Modality	Audience	Behavior	Condition	Degree of Mastery
(Read across the columns A,B,C,D as a sentence to see the whole learning outcome.)				
Psychomotor	The student	will be able to walk the length of the balance beam	given a standard balance beam raised to a standard height	steadily, without falling off, and within a six second time span.
Cognitive	The student	will be able to accurately identify the constructivist examples and explain why each example is or isn't a constructivist activity	given examples and non-examples of constructivist activities in a college classroom	clearly, and in 20 words or less.
Cognitive ; application level	The student	will be able to rewrite the sentence in future tense	given a sentence written in past or present tense	with no errors in tense or tense contradiction.
Cognitive: problem solving /synthesis level	The student	will be able to list five major personality traits of each of the two characters	given two cartoon characters of the student's choice	that illustrates three of the major personality traits of the character.
Affective	The student	will demonstrate a positive increase in attitude towards non-discrimination of race	given the opportunity to work in a team with several people of different races	as measured by a checklist completed by observers.

Even though you might feel charted-out at this point, it is really important to address learning beyond a knowledge level, as described by Bloom's Taxonomy. Bloom's Taxonomy is a hierarchy of thinking domains categorized as knowledge, comprehension, application, analysis, synthesis and evaluation. As a student moves

further up the hierarchy, their level of cognitive engagement with the material increases.

The table below details Bloom's Taxonomy and terms you can use to write learning outcomes.

KNOWLEDGE

The knowledge domain is the foundation of understanding. Students have memorized the names of state capitals, the parts of the cell, and so on. Beyond that, students may not have made connections between those individual facts. Information in the knowledge domain is concrete and distinct, so many tests erroneously focus on this first level of understanding.

This column contains: **Selected Knowledge VERBS**		This column contains: **Selected Knowledge ACTIONS**	
Select	label	events	radio
list	identify	people	text readings
name	locate	recordings	films
define	recite	videos	newspapers
describe	state	plays	magazines
memorize	recognize	manuscripts	television

COMPREHENSION

This domain requires a student go beyond having just name recognition of something. This domain requires the learner to have ability to explain something in their own words. Examples of work in this domain are students who can explain the steps of writing a haiku or turn an equation in to a spreadsheet.

VERBS		ACTIONS	
match	defend	recording	model
restate	distinguish	drama	conclusion
paraphrase	summarize	cartoon	implication from idea
rewrite	interrelate	story	causal relations
give examples	interpret	speech	analogy
express	extend	photograph	outline
illustrate	explain	diagram	compare

APPLICATION

People have reached the application level when they are able to take concepts and ideas that they have learned in the past and apply them to novel situations. An example of the application domain is a student who has not only learned the quadratic formula, and can also apply it to different problems. People who can apply what they know to different scenarios have reached a level of understanding that has bridged the gap between the abstract and the concrete.

VERBS		ACTIONS	
Organize	apply	list	question
generalize	solve	drama	follow an outline
dramatize	draw	painting	map
prepare	show	sculpture	project

produce choose	paint sketch	jewelry illustration	forecast diagram

ANALYSIS

This domain is concerned with a person's ability to sort through information and make inferences about it. An example of the analysis domain is to be able to apply multiple ways of solving a problem and then being able to decide which way would be more efficient for that given situation.

VERBS		ACTIONS	
compare	subdivide	survey	propaganda
analyze	infer	graph	statement
classify	survey	syllogism	word defined
point out	select	breakdown	identified
distinguish	prioritize	report	conclusion
categorize		questionnaire	checked
differentiate		argument	

SYNTHESIS

At this cognitive level people are essentially building knowledge. To take the mathematics example even further, a student in the synthesis domain would be able to draw on prior knowledge and experience to come up with their own effective way to solve the same problem.

VERBS		ACTIONS	
compose	produce	play	game
originate	plan	experiment	song
hypothesize	create	alternative action	machine
develop	invent	hypothesis	article
design	organize	formulation	invention
combine		book	report
construct		set of standards	set of rules

EVALUATION

Applying a value system to a set of phenomena. The process of writer's workshop, where students are writing their own original material, sharing it, and giving creative feedback to their peers fits in to the highest niche of Bloom's Taxonomy.

VERBS		ACTIONS	
judge	recommend	conclusion	survey
relate	summarize	self-evaluation	standard compared
weight	appraise	recommendation	standard established
support	compare	valuing	discussion
evaluate	criticize	court trial	assessment
consider			
critique			

Write outcomes as observable behaviors that can represent what students should know and are able to do after the unit.

Informal Assessment

Definition:

Formal and *informal* are not technical assessment terms; here informal is used to mean techniques that can be seamlessly incorporated into classroom routines and learning activities in order to inform your teaching and make you a better person…hell, you'll be a superhero!

Why do we assess informally?

Assessing your students informally, on an ongoing basis, can provide you with invaluable information concerning your students' progression of understanding and mastery of concepts. Making informal assessment a habit can give you instant feedback in order to make minute-to-minute adjustments in your instruction. Additionally, used over a longer period of time, informal assessment can aid you in identifying trends in student learning, giving you an idea of what needs to be re-taught and what doesn't. For example: if, over a series of seven quick writes, Saladin does not demonstrate an understanding of the importance of giant dill pickles in the US economy, then it is clear that he needs more instruction in this area. Getting this kind of information about your students' progress in an ongoing and timely manner can help you increase your students' achievement.

How do you use informal assessment?

Informal assessment is most effective when it is minimally disruptive to instruction. As its purpose is to inform instruction, informal assessment should be brief, concise and informative. In addition, student learning is always evolving, so you should check their progress often to stay informed of any changes. It does you no good to teach Jerome how to solve quadratic equations six times if he fully understood it the third time. An effective informal assessment program should catch these changes in student learning in order to maximize effective use of instructional time.

Assessment techniques: Structured vs. Unstructured

Methods for informal assessment can be divided into two main types: unstructured (e.g., student work samples, journals) and structured (e.g., checklists, observations). The unstructured methods are frequently more difficult to score and evaluate, but can provide a great deal of valuable information about the skills of the children, particularly in the areas of language proficiency. The scoring of structured assessments is easier because they are definitively "right" and "wrong," "completed" or "not completed".

The table below lists some examples of structured and unstructured assessment techniques

Structured Assessment Techniques		
Method	***Purpose***	***Guidelines***
Open Outline Create an open outline with just the major headings. Students fill in as much as they can under each heading.	Helps identify those areas students understand, mis-associations, and errors of knowledge/understanding	This can be a quick activity with students given five minutes to fill in as much as they can, or it can be a longer assignment that is useful near the end of a unit.
Running Record Focuses on a sequence of events that occurs over time	Helps obtain a more detailed insight into behavior over a period of time	Maintain objectivity and try to include as much detail as possible.
Event sampling Focuses on a particular behavior during a particular event (e.g., behavior at lunchtime, behavior in a reading group)	Helps identify behaviors during a particular event over time	Identify a target behavior to be observed during particular times (e.g., fighting during transition activities).
Time sampling Record particular events or behaviors at specific time intervals (e.g., five minutes, ten minutes)	Helps identify when a particular child demonstrates a particular behavior; helps answer the question, "Does the child do something all the time or just at certain times and events?"	Observe only during the time period specified.
Rating scale Contains a list of descriptors for a set of behaviors	Enables teachers to record data when they are observed	Make sure that key descriptor and the rating scale are appropriate for what is being observed.
Questionnaires - A self-report assessment device	Students can provide information about areas of interest to the teacher.	Questionnaire items can be written in a variety of formats and may be multiple choice or open-ended
Checklist A list of behaviors identifying children's skills and knowledge	Enables teachers to observe and easily check off what children know and are able to do	Make sure that the checklist includes behaviors that are important for the program and for learning (e.g., counts from 1 to 10, hops on one foot).

Cloze Tests - Cloze tests are composed of text from which words have been deleted randomly	Students fill in the blanks based on their comprehension of the context of the passage.	The procedure is intended to provide a measure of reading comprehension.

Miscue Analysis - An informal assessment of strategies	Used by students when reading aloud or retelling a story.	Each time an error occurs, the judge circles the word or phrase.
Work Sample Collection of student's work that demonstrates what they know and are able to do	Provides a concrete example of learning; can show growth and achievement over time.	Make sure that the work sample demonstrates what children know and are able to do. Let children help select the items they want to use as examples of their learning.
Unstructured Assessment Techniques		
Method	***Purpose***	***Guidelines***
Muddiest Point A one minute writing exercise to identify areas students are still struggling with.	Provides a quick opportunity to identify and address student confusion about a topic.	Can be done in the last minute of class having students hand in their card as an exit pass to leave the classroom.
Story retelling – Can be used in either oral or written formats.	It provides information on a wide range of language-based abilities. Teachers can use it to determine whether children understood the point of the story and what problems children have in organizing the elements of the story into a coherent whole.	Looking at the accuracy of recall is part of retelling, but can also be used to share cultural heritage when children are asked to retell a story in class that is part of their family heritage.
Interview Engaging children in discussion through questions	Allows children to explain behavior, work samples, or particular answers	Ask questions at all levels of Bloom's taxonomy in order to gain insight into children's learning
Writing Sample Any written work students do alone, either in class or at home	Provides evidence of student thought processes and grasp of key concepts	Use to evaluate student thought processes and grasp of key concepts.
Games – Subject-specific game results	Provide students with a challenging method for increasing their skills in various areas	Games need structure to be effective. Give clear expectations about the goals you intend to achieve with your game
Logs or journals - An individual method of writing.	Allows student opportunity to write informally about their learning processes.	Review on a daily, weekly, or quarterly basis to determine how students are perceiving their learning processes as well as shaping their ideas and strengths for more formal writing which occurs in other activities.
Brainstorming – Free form	Helps teacher determine what	Students should feel free to

discussion of what is known about a topic.	may already be known about a particular topic.	participate with no risk of no criticism or judgment.

Collecting assessment results

Keeping track of how students perform as a result of your lessons can be both rewarding and enlightening. We suggest that you dedicate a section of your gradebook, or grading software, to informal assessment. Recording this data should be simple, and take relatively little time. You are not grading tests, figuring out percentages, and recording each score meticulously. Rather, view your results intuitively, jotting down any immediate impressions. This record keeping will allow you to track student performance to notice when little Saddam doesn't seem to understand the laws of energy conservation for the third week in a row. Knowing this allows you to assist Saddam with his specific needs before any type of summative assessment of the material. Having access to this type of data can greatly aid you in helping your students succeed both in the classroom and on high stakes tests, like the STAR test.

FORMATIVE ASSESSMENT

In the previous chapter, we looked at informal assessment methods that provide quick data to inform instruction. Informal assessment is a tool that you can use to alter lessons as the results are interpreted. Students can benefit from being shown the results of formative assessment and they can also gain from lessons that are carefully tailored to their specific needs and interests.

Formative assessment is more of a two-way street than informal assessment. As opposed to only gathering data on a one-time basis formative assessment is iterative, meaning you are conducting more of a dialogue with the student. Through your feedback and their self-assessment you are developing shared responsibility for improving the outcome. Using formative techniques, the learning process is measured before and during instruction to provide feedback on successes and failures for both teacher and students. Giving specific feedback to students allows them to determine learning progress, correct any learning errors, and reinforce what has been taught by confirming that they do or do not understand the material. You as the teacher can also use the feedback from

formative assessment to modify your instruction based upon the results of the assessment. Remember though--because formative assessment is directed toward improving learning and instruction, the results are typically not used for assigning final grades. This allows a more collaborative focus in which the student is enlisted as a partner in mastering the material.

Formative assessments allow you to determine what students need, but for your assessments to be accurate, you need multiple measures of student understanding. The most important thing to keep in mind is that students differ in how they can show what they know, so they need multiple opportunities to demonstrate their learning.

You need evidence gathered over time in *different ways* to evaluate how effective the teaching and learning process has been. For example, if you have diagnosed Osama as having difficulty with run-on sentences by only assessing his speaking style, you may be missing something important. In order for this diagnosis to be valid you need assessment data from differing perspectives. By varying the type of assessment you use over the course of the learning segment, you can get a more accurate picture of what students know and understand, thereby compiling a sort of photo album of their knowledge, rather than just a snapshot. Once you have made your conclusions based on multiple measures, you can differentiate instruction with a more accurate evaluation of your students' learning needs. Use the table below to help you determine which formative techniques are right for your classroom.

What constitutes formative assessment?

The table below lists some examples of formative assessment tools and techniques.

Type of Tool	Examples/ Technique for Using
Assignments	• Can be a very useful method, especially in conjunction with homework, although it may be difficult to manage and assess. • Example: individual research assignments for a group project.
Homework exercises	• Vary in purpose, design and complexity. • Most effective if students feel they are useful, serving for example, to prepare material for a class discussion, to see how a piece of writing ends, or to develop a skill.
Question & Answer (Also informal assessment)	• The most commonly used method—almost instinctive for teachers. • Gives instant feedback, and can be used to develop motivation, but it is largely ephemeral – that is to say, it is momentary and difficult to record.
Observation of Problem Solving	• Good problems require students to explain their thinking to each other in more than one way. Examples of this might include diagramming, or explaining how someone with a different perspective might answer the question • Prompt students to explain their thinking to each other with questions like: "Why," "How are you deciding to..," or "What were you thinking about when you did that?"
Criteria and Goal Setting	• Using student work, classroom tests, or exemplars of what is expected helps students understand where they are, where they need to be, and how they can get there. • Establish together what quality work looks like by collaborating with students to determine the criteria for success.
Self- and Peer-Assessment	• Helps students see each other as resources for understanding and checking for quality work against previously established criteria students to see where they started and the progress they are making.
Practice Quizzes	• A good way to take the pressure off of students provided they know that a quiz will not affect their overall grade. • Can allow you to get a quick glimpse of students' level of understanding toward a certain topic. • Be sure to give quick feedback so students will know how they did and where they need to improve.
Conferencing	• Involves sitting down with learners and reviewing their progress. • Can use it to introduce care, involvement and motivation into the teacher-learner relationship. • This approach can be time consuming • Ensure that those not involved have something useful to work on.

	• Make notes on student performance immediately after the review, not during it.

How Do I Know What to Assess In Formative Assessment?

As with all assessment, one of the most important things to figure out is what objective(s) you are going to measure, and how you are going to measure them. Your choice of assessment content should reflect the full range of what you have taught your students. The purpose of assessment is to discover how well students have mastered new ideas, rather than their ability to B.S. If you are not measuring students' knowledge of what you taught them, you're not being fair, and you won't receive accurate feedback on which to base future instruction and grades.

A valid assessment makes thinking visible, and provides an opportunity for the student to demonstrate what they know. Therefore your test must actually be measuring the learning objective. If, on a science test, you threw in a few questions involving Victorian Literature and then a few more on the bedroom habits of Joseph Stalin, you would not be measuring your students' understanding of science. Thus, the test would be invalid and you would ascertain little about what your students actually learned.

When Should Formative Assessment Take Place?

Pre-Assessment

Theoretically, the first formative assessment takes place before a new unit even begins. This test should be designed to measure students' prior knowledge, and should take place during your planning phase in order to give you adequate time to modify your plans based on findings from the pretest. Obviously, if you discover that if every student knows a particular concept, it would be an inefficient use of everyone's time to re-teach it. A less obvious reason to use pre-assessment is to give you an idea of any misconceptions students have; you may need to spend time during the unit addressing them. Misconceptions can be very strongly rooted in students' minds because they are based on past experience. They can be difficult to dislodge. With formative assessment, you can decide, before starting a unit, which method may provide the best means of addressing misconceptions, such as:

- Examples that point out why the misconceptions are not reasonable
- Using visual models that give students an alternative way of understanding
- Active learning strategies that engage students in thinking (rather than in passively receiving)

During Instruction

Although pre-assessment is valuable for the reasons mentioned above, the bulk of formative assessment takes place during instruction. Formative assessment is generally iterative, meaning that it happens again and again (e.g., multiple drafts of a paper). It is also specific, focusing on a single unit of instruction. Test results should allow you to adapt instruction for those learning objectives that are yet to be achieved. For example, a group review may be applicable if most students demonstrate a lack of understanding in a distinct area. If a small number of students perform poorly in a formative assessment, individual prescriptions for remediation could be applied. Tailoring a learning activity in these ways can prevent wasted time, enable more customized instruction, and provide for the most effective instructional methods.

Below you will find a chart that can assist in modifying your instruction. It can give you ideas about how to apply the results of your formative assessment to the class as a whole, or just those who need it.

Addressing Student Needs at Different Levels of Readiness	
Scaffolding Struggling Learners	
Strategy	**Method**

• Offer teacher direction (re-teaching with a *different* method • Allow students to work with a reading partner or study buddy • Allow students to use class notes, textbooks, and/or other classroom resource to complete the task • Provided a model or exemplar • Furnish step-by-step directions; break down the task • Provide hints or tips • Color-code different elements • Provide sentence strips, sticky labels, with terms, or manipulatives	• Provide a partially completed graphic organizer or outline • Provide out-of-sequence steps for students to reorganize • Provide a cloze paragraph for students whose language is extremely limited • Give a framed paragraph or essay (with sentence starters to help organize the writing) • Provide guided questions • Supply a word bank and definitions • Support with visuals, diagrams, or pictures • Provide words on labels for students to simply pull off and place appropriately • Allow additional time

Challenging Advanced Learners	
Strategy	**Method**
• Design activities that are more complex, abstract, independent, and/or multistep • Pose a challenge question or task that requires them to think beyond the concrete and obvious response to more abstract ideas and new use of the information • Require more complex expression of ideas: different types of sentences, synonyms, more than one adjective or verb to describe what's happening • Require that metaphors and similes, idiomatic expressions, or specific literary elements be included in their writing • Ask students to make text-to-text and text-to-world connections • Require students to note relationships and point out connections among ideas: compare and contrast; cause and effect; problem and solution; sequence steps; or change over time; advantages and disadvantages; benefits; etc.	• Ask students to tell the story from a different point of view • Ask students to place themselves into the story line or time period and write from the first-person point of view • Ask students to consider "What if?" scenarios • Provide multistep math problems • Include distracters • Do not use a visual prompt • Ask students to suggest tips or hints that would help others who struggle to make sense of the information • Provide a problem or model that does not work; have students problem solve • Have students create their own pattern, graph, experiment, word problem, scenario, story, poem, etc. • Have students use the information in a completely new way (*Design an awareness campaign about...; Create a flier to inform...;Write/give a speech to convince...;Write and article to educate...; Write and ad to warn others about...)*

Post-instructional Assessment

At the end of a learning segment, you will need to determine the extent to which the learning objectives have been met by each student. Although achievement tests are normally used for summative (grade-assigning) purposes, it

is possible to use them in formative ways as well. You can use end-of-unit tests for feedback to students, to provide encouragement to undertake more challenging advanced work, to assign remedial work if needed, and to evaluate instructional effectiveness. In courses like Algebra, where units are sequenced, these post-instructional assessments can serve both formative and summative purposes. They can give you and your students information on areas of strength and weaknesses, as well as information about how/when to proceed to the next unit. A simple comparison of writing from different points during the unit will convey important information about student successes and failures leading up to the point of summative assessment.

Why is Feedback Important?

Descriptive feedback is a critical component of formative assessment; as students receive information about how they are doing (see below) they can decide if their current method of study is sufficient or if something needs to change. Descriptive feedback is not a grade, a sticker, or "good job!" Such limited feedback does not lead to improved student learning. Feedback should provide a person with information on how to improve. Effective feedback should be:

- Clear- Easily understood and legible
- Accurate- In both the student's behavior and the teacher's conclusions
- Precise- Based on specifics, not on generalizations
- Selective- Including important observations, especially patterns of behavior
- Timely- Given as soon as possible

Formative assessment can help to mitigate a feeling of helplessness on the part of learners who experience academic failures—as it allows them to closely follow their own progress in learning and achievement. Thus, feedback from formative assessments can be especially powerful in helping lower achieving students, as it helps them realize that they can improve as a result of effort, rather than be doomed to being low-achieving forever: "…A person's own perceptions or attributions for success or failure determine the amount of effort the person will expend on that activity in the future" (J. Bempechat, 1999).

Types of Summative Assessments

Summative classroom assessment can take many forms. Some examples of summative assessment might be a formal test, a homework assignment, an in-class activity, or a formal report. This type of assessment is used to assess achievement at the end of a course (or unit) of instruction. The main purpose of summative assessment is grading or the certification of student achievement. Summative assessment also provides directions for the instructor (or teacher) in terms of assessing course objectives and effectiveness. Like formative assessment, teachers and students receive feedback about their learning and their teaching. Unlike formative assessment though, student grades are normally assigned from summative assessment results and this typically represents the end of class attention to that part of the unit. Tests are the most common form of summative assessment in schools.

A basic principle in test item selection and assessment task choice is to select the item type that provides the most direct measure of the intended learning

outcome. For example, if the intended learning outcome is the proper use of laboratory equipment, then an actual laboratory experiment would give more valid results than a quiz. If the intended learning outcome is that students can supply a correct single answer from a list of incorrect answers, then a selection-type format would suffice. Example formats follow.

Types of questions- what are they good for? What problems need to be overcome?

Multiple Choice:

Generally recognized as the most widely applicable and useful type of objective test item to measure basic factual information or more complex knowledge, understanding, and application or understand cause and effect relationships. Asking students to select the right answer generally requires a lower level thinking than selecting the best answer. Many questions lend themselves to a value judgment For example:

What is the most important purpose of city zoning laws?

1. Attract industry
2. Encourage building of apartments
3. Protect property values
4. Provide school safety zones

The stem should be meaningful by itself unlike the following example:

South America

1. Is a flat arid country
2. Imports coffee from the United states
3. Has a larger population than the United States
4. Was settled mainly by colonists from Spain

Avoid irrelevant material in the stem and only use a negative stem when the item requires it. For example change: “Which of the following states is not located north of the Mason-Dixon line?” to “Which of the following states is located south of the Mason-Dixon line?” In addition, be sure that all of the distracters are plausible. If no one picks a distracter...it is not helping to distinguish between levels of knowledge.

Avoid grammatical hints such as the following where the word “an” gives the answer away:

An _____ is a fruit.

1. Milk
2. Carrot
3. Apple

To create effective multiple choice test items use the following checklist.

CHECKLIST

Reviewing Multiple Choice Items

1. Is this the most appropriate type of item to use?
2. Does each item stem present a meaningful problem?
3. Are the item stems free of irrelevant material?
4. Are the item stems stated in positive terms (if possible)?
5. If used, has negative wording been given special emphasis?
6. Are the alternatives grammatically consistent with the item stem?
7. Are the alternative answers brief and free of unnecessary words?
8. Are the alternatives similar in length and form?
9. Is there only one correct answer or clearly based answer?
10. Are the distracters plausible to low achievers?
11. Are numerical alternatives in numerical order?
12. Have *none of the above* and *all of the above* been avoided?

Matching:

Good matching tests should be made to minimize the opportunity for successful guessing. Matching items are good for measuring factual information on the basis of basic associations. Use parallel forms/ homogenous material for matching items. Use more or fewer matching items or the last match is a no brainer. By structuring the test item so that one can use any one item more than once or not at all, you can reduce guessing effects even more.

Matching tests should be formatted according to the following chart.

CHECKLIST
Reviewing Matching Items

1. Is this the most appropriate type of item to use?
2. Is the material in the two lists homogeneous?
3. Is the list of responses longer or shorter than the list of premises?
4. Are the responses brief and on the right-hand side?
5. Have the responses been placed in alphabetical or numerical order?
6. Do the directions indicate the basis for matching?
7. Do the directions indicate that each response may be used more than once?
8. Is all of each matching item on the same page?
9. If revised, are the items still relevant to the intended learning outcomes?
10. Have the items been set aside for a time before reviewing them?

True/False

The following information is appropriate for any dichotomous decision, true/false, fact/opinion, etc. To write good T/F items use simple declarative sentences to measure the ability to recognize the correctness of definitions, facts, and principles. Be sure to randomize the pattern of T/F questions. Avoid complex wording, double negatives, double barreled statements, and be certain that the right answer is a question of fact not opinion. Knowing something is false is not the same as knowing what is true. To address this, instruct the students to provide the correct answer if the statement is false.

For example:

> T (F) Particles of negatively charged electricity are called <u>neutrons.</u>
> If false, what would make this answer true _____

One of the challenges in writing good T/F questions is that broad unequivically true statements are generally trivial. Most true statements are qualified with "generally," "usually,"etc. Most unequivical statements are false.

For example:

> T F The president of the United States is elected to that office. (this is not true as there are other ways a person can become president)
>
> T F The president of the United States is usually elected to that office.

CHECKLIST

Reviewing True-False Items

1. Is this the most appropriate type of item to use?
2. Can each statement be clearly judged true or false?
3. Have specific determiners (e.g. usually, always) been avoided?
4. Have trivial statements been avoided?
5. Have negative statements (especially double negatives) been avoided?
6. Have the items been stated in simple, clear language?
7. Are the opinion statements attributed to the source?
8. Are the true and false items approximately equal in length?
9. Is there approximately equal number of true and false items?
10. Has detectable pattern of answers been avoided?
11. If revised, are the items still relevant to the intended learning outcomes?
12. Have the items been set aside for a time before reviewing them?

Short Answer

The short answer item (or completion item) is a supply-type test item that can be answered by a word, phrase, number, or symbol. The short answer item uses a direct question. Short answer/ fill-in the blank are used to assess knowledge of terminology, specific facts, principles, or procedures – (e.g., simple math problems). Common problems with supply type questions include ambiguous stems and too many blanks as illustrated below

Ambiguity- be explicit in what you want to know.

Bad: John Glenn made his first orbital flight around the earth in _____ (a space ship, a couple of days, etc.)

BEST: In what year did John Glenn make his first orbital flight around the earth? _____

Use a small number of blanks

Bad: _____animals that are born _____and _____their young are called _____.

BEST: Warm-blooded animals that are born alive and suckle their young are called (mammals).

CHECKLIST

Reviewing Short-Answer Items

1. Is this the most appropriate type of item to use for the intended learning outcomes?
2. Can the items be answered with a number, symbol, words, or brief phrase?
3. Has textbook language been avoided?
4. Have the items been stated so that only one response is correct?
5. Are the answer blanks equal in length?
6. Are the answer blanks at the end of the items?
7. Are the items free of clues (such as *a* or *an*)?
8. Has the degree of precision been indicated for numerical answers?
9. Have the units been indicated when numerical answers are expressed in units?
10. Have the items been phrased so as to minimize spelling errors?
11. If revised, are the items still relevant to the intended learning outcomes?
12. Have the items been set aside for a time before reviewing them?

Essay questions

The freedom provided by an extended response enables students to display such important skills as problem solving, planning, organization, integration, and creativity. On the other hand, essays can be time-consuming and difficult to score. Extended written responses are more practical for assessing higher-order skills that require more elaboration. There are two types of essay questions: restricted and extended essays. Restricted essays are carefully defined tasks that require students to provide specific information. For example: Briefly name and define the three aspects of validity related to measurement in assessment.

Extended essays are useful for the ability to recall, organize, synthesize, and express one's understanding in a unique way. However, these are inefficient tools for measuring factual knowledge. For example: Write a short essay on the correct mechanics of shooting a basketball.

CHECKLIST

Reviewing Essay Questions

1. Is this the most appropriate type of task to use?
2. Are the questions designed to measure higher level learning outcomes?
3. Does each question clearly indicate the response expected?
4. Are students told the basis on which their answers will be evaluated?
5. Are generous time limits provided for responding to the questions?

6. Are students told the time limits and/ or point values for each question?
7. Are all students required to respond to the same questions?
8. Have questions been set aside for a time before reviewing them?

Seven Keys to excellent exams

1. I

   nclude items that reflect the range and emphasis of instruction.

2. W

   rite in ways that clearly communicate what is required of the students.

3. E

   liminate unnecessary wordiness.

4. A

   void giving hints that introduce construct irrelevant performance- the only difference between those who get it right and wrong should be what they know and are able to do.

5. U

   se the most efficient type of question to assess particular types of knowledge or performance.

6. H

   ave students put their name on the back of the exam.

7. D

   evelop a basic scoring guide for extended essays.

Performance assessment

Performance assessment requires the student to perform a task rather than select an answer. For example: a student may be asked to explain historical events, generate scientific hypotheses, solve math problems, converse in a foreign language, or conduct research on an assigned topic. Raters judge the quality of the student's work based on an agreed-upon set of criteria. Students develop individual approaches to the task under defined conditions, knowing that their work will be evaluated according to agreed-upon standards. Performance assessment can provide opportunities for improving instruction, and increasing students' understanding of what they need to know and be able to do. The best performance tasks are inherently instructional, actively engaging students in worthwhile learning activities.

Following are some methods that have been used successfully for performance assessment:

Open-ended or extended response exercises are questions or other prompts that require students to explore a topic orally or in writing; for example, what would Abraham Lincoln argue about the causes of the Civil War?

Extended tasks are assignments that require sustained attention in a single work area and are carried out over several hours or longer.

Portfolios are selected collections of a variety of performance-based work. Portfolios can be summative consisting of "best pieces" that require

students’ reflection of the strengths and weaknesses of several pieces, or "works in progress" used to track progress across time.

All of these performance tasks require rubrics that allow the teacher and the student to know how the work it be judged, what the criteria are, and standardize to the extent possible the grading process.

For more information on Portfolio assessment please see Appendix B.

The following is adapted from Mertler, Craig A. (2001). Designing scoring rubrics for your classroom. *Practical Assessment, Research & Evaluation*, 7(25).

Designing Scoring Rubrics for Your Classroom

There are two basic types of rubrics holistic and analytic. A **holistic rubric** requires the teacher to score the overall process or product as a whole, without judging the component parts separately. With an **analytic rubric**, the teacher scores separate, individual parts of the product or performance first, then sums the individual scores to obtain a total score

- **Holistic rubrics** are customarily utilized when errors in some part of the process can be tolerated provided the overall quality is high.
- Use holistic rubrics where there is no definitive correct answer.
- Use to rate overall quality, proficiency, or understanding of the specific content.
- Provides a quicker scoring process than use of analytic rubrics.
- Typically, though not exclusively, used in summative assessment.
- Only limited feedback is provided to the student as a result of scoring performance tasks in this manner.

Template for Holistic Rubrics	
Score	Description
5	Demonstrates complete understanding of the problem. All requirements of task are included in response.
4	Demonstrates considerable understanding of the problem. All requirements of task are included.
3	Demonstrates partial understanding of the problem. Most requirements of task are included.
2	Demonstrates little understanding of the problem. Many requirements of task are missing.
1	Demonstrates no understanding of the problem.
0	No response/task not attempted.

Analytic rubrics

- Analytic rubrics result initially in several scores, followed by a summed total score.
- These can be substantially slower to construct and grade because the teacher examines the product several times.
- The advantage to the use of analytic rubrics is that feedback to students and teachers is significantly more valuable allowing users to create a "profile" of specific student strengths and weaknesses.

Template for analytic rubrics					
	Beginning 1	**Developing 2**	**Accomplished 3**	**Exemplary 4**	**Score**
Criteria #1	Description reflecting beginning level of performance	Description reflecting movement toward mastery level of performance	Description reflecting achievement of mastery level of performance	Description reflecting highest level of performance	
Criteria #2	Description reflecting beginning level of performance	Description reflecting movement toward mastery level of performance	Description reflecting achievement of mastery level of performance	Description reflecting highest level of performance	
Criteria #3	Description reflecting beginning level of performance	Description reflecting movement toward mastery level of performance	Description reflecting achievement of mastery level of performance	Description reflecting highest level of performance	
Criteria #4	Description reflecting beginning level of performance	Description reflecting movement toward mastery level of performance	Description reflecting achievement of mastery level of performance	Description reflecting highest level of performance	

One potentially frustrating aspect of scoring student work with rubrics is the issue of somehow converting them to "grades."

- Generally it is not a good idea to think of rubrics in terms of percentages.

- For example, if a rubric has six levels (or "points"), a score of 3 should not be equated to 50%.

- The process of converting rubric scores to grades or categories is more a process of logic than it is a mathematical one.
- Find a system of conversion that works for you and fits comfortably into your individual system of reporting student performance.

Grading

- Grades should reflect levels of achievement of learning goals and communicate this to students and parents.
- Grades should be based on solid valid evidence and be a reliable measure of student achievement.
- Non-achievement factors such as effort and attitude will affect achievement but should not be directly included in grades. These are best communicated verbally throughout the school year.
- Teacher's beliefs about learning, teaching, and students will affect grading decisions. You should reflect on your grading policies to uncover assumptions and clearly communicate those to students and parents.

Types of grading include: Percentage correct or points earned, letter grading using norm referenced or standards based scales, mastery grading using a Cr/NC system, or narrative grading which eliminates letter grades and provides detailed comments about levels of student achievement.

Validity

The validity of a test is determined by the extent to which the test assesses what it is you are trying to assess. The test is a proxy for you, the teacher, being telepathic and browsing through the brains of your students. Since Parent Teacher Organization (PTO) groups do not look too kindly on you reading the minds of students, it is important that you write a valid test. Here is a little quiz to see if you can recognize validity issues.

In the following three scenarios, can recognize validity issues? The answers are included after the scenarios.

Scenario 1

I am the teacher of an algebra class. I want to assess my students' ability to solve quadratic equations. I write the test in Albanian, using Cyrillic script. I also throw some word problems about perimeter.

Scenario 2

I am a teacher who wants to assess my students understanding of budgerigar mating rituals, as well as their general habitat. When I get the responses back I read through them, scoring on the basis of their understanding of these concepts, but also deduct points for spelling, grammar and punctuation errors.

Scenario 3

I am interested in assessing mathematical reasoning ability in my students. I search the many resources at my disposal for an existing instrument that has some body of literature supporting it. I make sure that the assessment questions are measuring what I am trying to assess, by checking them against my learning goals and objectives. I also insure that the math test is at the right reading level or I might be measuring the wrong thing. I would also correlate this score with other mathematical test grades to check criterion-related evidence, and will show any inconsistencies in my students' performance that might be related to something other than mathematical reasoning ability.

Answers to Scenarios to 1, 2 and 3

Scenario 1- invalid

This test is an unfair assessment of students' ability to read Cyrillic script, as well as to understand Albanian. The word problems related to perimeter are unrelated to the goal of the assessment, which is to assess student competence with quadratic equations. There is too much getting in the way of the students being able to demonstrate their knowledge.

Scenario 2- invalid

When you are assessing for concept mastery, deducting points for grammar, spelling and punctuation renders the interpretation of the results invalid, since these skills have little to do with the learning objectives being measured.

Scenario 3- valid

While this is an extreme example of validating a classroom test it identifies a number of techniques you can use to ensure that you are measuring what you think you are measuring. This test would allow valid interpretation of the results.

Three things that make a test valid:

1. The content of the test matches the content/emphasis of the instruction
2. The questions distinguish between varying levels of knowledge without being distorted by irrelevant factors.
3. The results of the tests roughly correlate with other indications of what the student knows and is able to do.

For more on how to ensure you have a valid way of assessing your students' knowledge and abilities see appendix A.

Undermining Validity ...a what not to do guide

1. Unclear directions: directions do not clearly indicate to the student how to respond to the questions.
2. Reading vocabulary and sentence structure too difficult: vocabulary and sentence structure too complicated for student to answer.
3. Ambiguity: question could mean more than one thing.
4. Inadequate time limits: time limit does not allow student to answer questions thoughtfully.
5. Overemphasis of easy-to-assess aspects of domain at the expense of important but difficult-to-assess aspects (construct underrepresentation.)
6. Poorly constructed test items: test items unintentionally provided clues to the answer tend to measure the students' alertness in detecting clues as well as mastery of clues.
7. Test too short: validity will suffer if the test is too short to mitigate the guessing effect.
8. Improper arrangement of items: arrange the questions from easiest to hardest. Placing harder questions first may discourage students or result in poor time management.
9. Identifiable pattern of answers: placing correct answers in a systematic pattern enables the student to guess at answers.

Reliability

Reliability is a necessary but not sufficient condition for validity**.** However, reliability can exist without validity. An example of reliability is my ability to hit a teacher in the back of the head with a spit-wad from ten meters. I can do this nine out of ten times. I would say that I am a reliable shot with spit-wads. When you design your assessment, you want it to be reliable, in that you want it to produce the same results every time, assuming everything else is equal. If I use the same assessment procedure on two different occasions with two different graders with the same student and achieve similar results I can say that my assessment is highly reliable.

ACCOUNTABILITY

Why do I need to know about accountability?

As a teacher in a public school, you have a responsibility to the community. Your students are part of that community, as are their parents, and all taxpayers! You can think of your community as a neighborhood, a school, a town, a borough, a county, or even a state. Any way you look at it though, you are educating the citizens of the future, and you are answerable for what you do. This is clearly a challenging task to take on, but it's important not to become overwhelmed. You have gone through extensive training to get here and are qualified to do your job.

What does Accountability Look Like?

Teacher accountability takes many forms. Here are a few:

- Legal accountability: you are subject to the laws and policies of state governing agencies.
- Bureaucratic accountability: schools are required to meet accreditation standards.

- Professional accountability: you may be required to take special course work, pass exams, or participate in other activities (like Beginning Teacher Support and Assessment, or BTSA) that will qualify you for licensure.
- Market accountability: the individual needs of students and their parents that cause them to choose to attend particular programs or schools.
- Political accountability: elected officials in the education system have to stand for re-election at regular intervals.

How is My School Held Accountable?

Your school is evaluated by the state through its Academic Performance Index (API), and its Adequate Yearly Progress (AYP). It is also responsible for maintaining its accreditation through Western Association of Schools and Colleges (WASC). Accreditation is detailed below. For more information on API and AYP, see the next section, titled "Government Testing."

School Accreditation:

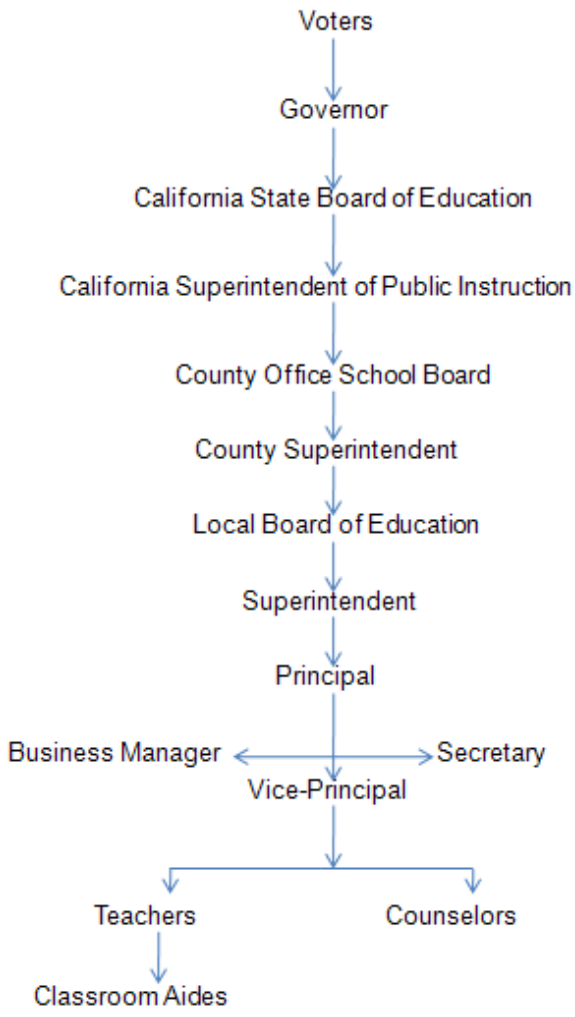
WASC is an association that accredits many types of schools in the United States. While not a government organization, WASC works with the government. Its funding comes from fees paid by schools maintaining accreditation.

Accreditation is a process that schools undergo to demonstrate that they are capable of providing high-quality learning opportunities. Schools must also show that they are continually working to improve themselves, a process in which assessment plays a major role.. WASC ensures that schools are aware of what

they should be doing, and that they have a vision for how to make themselves better.

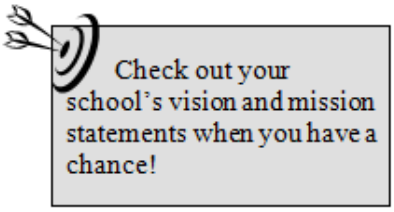
What is My Place in School Accountability?

Here is an organizational chart that will give you an idea of where you fit in the larger scheme of things in our state's system of education:



Administration

Your school's administrators are the authorities you will most often encounter in your work. Ideally, their first priority is to create a safe and fair learning environment for all students. Once that is established, they can turn their attention to how well teachers are doing their jobs. Their goal in working with you is to maximize your teaching potential and create an effective learning environment. Expect performance reviews regularly, especially in your first few years of teaching.



Teachers

You are held accountable for teaching students the state grade-level content standards, which are assessed in California with STAR testing. A STAR test is a standardized exam based around grade level content standards. These standards define what the State of California deems students should know at a particular grade level.

Don't think that you don't have to know about STAR tests because you teach music or art (or another area not assessed by the STAR)—even teachers who do not administer STAR tests in their content area can be impacted by things like schedule changes and the high pressure atmosphere evoked by such testing.

Colleagues

As a teacher, you are part of a large community of other educators who are working together to help educate our country's youth! You can network with

your colleagues through joining (or establishing) a professional community of learners. This type of group usually involves teachers and administrators in a school or group of schools who get together to share their learning and act on what they learn. Their goal is to benefit students through enhancing their own effectiveness as professionals.

A Brief History of Legislation Concerning Educational Accountability

The Elementary and Secondary Education Act of 1965 (ESEA)
• Mandated achievement as a primary mechanism for monitoring and evaluating Title 1 • Title 1 is funding to schools or districts with students from low-income families • Most schools receive Title 1, and must meet federal education legislation requirements
The National Assessment of Educational Progress (NAEP)
• Established in the 60's as an ongoing program of testing to monitor our nation's youth
Minimum Competency Testing (MCT)
• This movement gained popularity in the 70's, and was intended to spur improvement through high-stakes testing • Measures students' according to a base level, rather than in relation to the scores of others • With MCT, students only have to meet the bar, not go beyond it • This can cause problems since teachers may focus their time on getting the majority of students to the required level • Little energy may be spent pushing students to go above the minimum level(s)
No Child Left Behind (NCLB)
• Passed in 2002, it re-authorized the ESEA, setting achievement goals nationwide • Stated goal is to provide accountability, close the achievement gap, and adhere to standards-based education • The Act uses funding allocation as a means to accomplish its goals, for example, if schools fall below good standing in the eyes of NCLB, a variety of

consequences can be enacted – from loss of control over curriculum and pedagogy, to a complete government takeover. (These are detailed further in the following chapter.)

In 2010, President Barack Obama's administration initiated a funding competition for state education departments, "Race to the Top." This program encourages states to establish more challenging standards, utilize more effective forms of assessment, develop and evaluate principals and teachers, and begin using data tracking systems to track students' progress. As of publication, it is too early to know for sure what “Race to the Top” will mean for schools on a local level.

One thing to keep in mind is that each new administration, either nationally or on a state level, is likely to propose (and possibly pass) new educational legislation that will likely affect you and your responsibilities. Stay tuned!

Ask your colleagues to see if there is a professional community of learners available to join in your area! For those in more remote areas web-based listserves are a great way to connect to other professionals in your field.

GOVERNMENT TESTING

HISTORY

For thirty years California students took the same statewide test, known as the California Assessment Program (CAP). Many districts required additional tests, such as the California Test of Basic Skills (CTBS). In the early 1990s CAP was replaced by California Learning Assessment System (CLAS) which was discontinued in 1995 because of controversy over portions of the test. In 1998 the program we all know and love, Standardized Testing and Reporting (STAR), became California's official standardized test. This is the testing regime to which you as a teacher of math, English, science and social studies will be accountable. Students in grades 2-11 are all required to take this test, unless excused by their parents or their Individual Education Plan (IEP).

The STAR test is designed to measure your students' mastery of the California State Content Standards, which are specific to each grade level and subject. The STAR test pulls questions directly out of these standards. Although 'teaching to the test' is not recommended, preparing a standards-based curriculum

will help your students perform well on the STAR test.

STAR tests administered by grade level and frequency:	
MATHEMATICS	• Yearly grade level test in grades 2-7 • In 8th -11th grades students take a test that applies to the math course they took that year
ENGLISH/LANGUAGE ARTS	• Yearly beginning in second grade • A writing test is given in grades four and seven
SCIENCE	• Grades five and eight, then… • Yearly, beginning in grade nine for each year of science taken
HISTORY/SOCIAL SCIENCE	• Administered to grades eight, ten, and eleven

INTERPRETING TEST SCORES

After your students take the STAR tests, your administrator will receive a score report detailing their performance. To view previous STAR test scores, you just need to request them from the school administrator. Students can score at five different levels for each subject test: advanced, proficient, basic, below basic, far below basic; the target goal is to get each of your students at proficient to advanced level. There are two measures of school performance that you should be familiar with:

- *Academic Performance Index (API).* This is a number score assigned to each school that averages all STAR test scores into one big score that is

representative of the entire schools performance. The minimum target score is 800 even though few schools score that high; a perfect score is 1000.

- *Annual Yearly Progress (AYP).* This is a yes or no question that the State of California answers about each school. The state designs goals for schools to meet in the coming year. Your school will either meet this goal with an AYP of "yes" of fail to meet it with an AYP of "no."

If a school does not meet goals put forward by the No Child Left Behind Act, then there are consequences that the federal and/or state government(s) can bring against that school. A chart detailing some of these actions follows.

Program Improvement Option and Services

Categories of Federal Title I Schools	NCLB Options and Services for Students and Parents/Guardians
Receives Title I funds, Not in Program Improvement (PI)	• School provides support programs to eligible Title I students.
Year 1 in PI	• Parents or guardians are eligible to send their children to a non-PI school and to receive transportation at school district expense. • School must revise its school plan within three months.
Year 2 in PI	• Same services as Year 1 PI school are offered. • Supplemental services, such as tutoring, are available for all eligible

	students.

Year 3 in PI	• Same services as Year 2 PI school are offered. • School district provides corrective action to improve the school
Year 4 in PI	• Same services as Year 3 PI school are offered. • School must develop new alternative governance plan.
Year 5 in PI	• Same services as Year 4 PI school are offered. • School must implement its alternative governance plan (government takes over the school)

Conclusion

Welcome to the end! We hope that you feel more comfortable now with assessment and that you're fired up to establish a valid, reliable and effective assessment system in your classroom. Remember PACT—although it was a difficult process and caused some real anxiety for many of you, it is a good example of a valid and reliable form of performance assessment. The experience you had with PACT, the training you got in your student teaching placement, the tests you had to take to earn your credential, the project you did in your credential classes, and the knowledge you got from this guide—all these things have provided you with a thorough acquaintance with assessment from several different angles. Go forth into the teaching world now—and teach well! Make us proud!

Glossary

Accountability: a teacher's primary objective is to ensure safety and that students are learning the California state-adopted curriculum

Accreditation: the process for evaluating and assuring the quality of education used by the American higher education community. Accreditation is a quality assurance process through which institutions collectively set standards for good practice, conduct peer-based evaluations of institutions on a regular basis, confer accredited status on institutions, and make the results of accreditation review of institutions known to the public. Through accreditation, the higher education community shoulders the responsibility for monitoring the quality of the programs and services of member institutions. Agencies that develop and apply standards are often called accrediting commissions. Accrediting commissions were created by the collective group of institutions that wished to engage in the quality review and assurance process, and those institutions were and are referred to as the member institutions of a commission.

WASC: Western Association of Schools and Colleges—is an association that accredits schools of all types in the United States. While not a government organization, WASC works with the government. Its funding comes from fees paid by schools maintaining accreditation.

Retention (K-12): the process of a student being held back to repeat a grade level

Retention (College level): Student is retained in the course to end of term. A, B, C, D, CR, I grade notations

Adequate Yearly Progress (AYP): As a provision of NCLB, all states are required to report school's progress through indicating their AYP. Components of the AYP are:

- States must have a certain percentage of students show proficiency in English/Language Arts and Mathematics (through STAR tests) and thereby reach their Annual Measurable Objectives (AMOs).
- Schools in California must also demonstrate AYP through:
  - showing yearly improvement in their API scores.
  - maintaining graduation rate of at least 83.1% (in high schools).

If a school in California receives Title 1 funding (most schools do) and fails to make AYP for two consecutive years, it is placed in Program Improvement, which means that a number of serious interventions take place to ensure students

are receiving adequate instruction and that the school's plan is appropriately revised.

Academic Performance Index (API): The API is calculated by the California Department of Education for each school based on results from STAR tests and the California High School Exit Exam (CAHSEE). The API can range from 200 to 1,000, with 800 as the state goal. (According to California's Public Schools Accountability Act (PSAA), the API should incorporate more than just these test scores, but the state has not yet done this.)

As a component of your school's API, your students' scores on the STAR test in your subject area can be analyzed by your administrators. They are considered a direct consequence of your teaching, so be familiar with relevant standards, and cognizant of your students' performance

California Assessment Program (CAP): Program that ran from 1965 to 1992 that was eventually replaced by CLAS and STAR; it was the original standardized test given to students in California

California Learning Assessment System (CLAS): This program replaced the CAP as the new standardized test for public schools in California; this program was replaced by the STAR program in 1998 because of controversies over certain portions of the test

California Standards Test (CST): CST is a common acronym in California for the "California Standards Test" or "STAR test."

California English Language Development Test (CELDT): test that English Language Learners (ELL's) take yearly until they are proficient in English and not classified as ELL's

Curriculum Based Measurement (CBM): informal method teachers use to assess students progress with immediate results

English Language Learners (ELL's): students who are not proficient in the English language whose primary language is not English

Minimum Competency Testing (MCT): this movement gained popularity in the 70's, and was intended to spur improvement through high-stakes testing

No Child Left Behind (NCLB): Stated goal is to provide accountability, close the achievement gap, and adhere to standards-based education

National Assessment of Educational Progress (NAEP): established in the 60's as an ongoing program of testing to monitor our nation's youth

Elementary and Secondary Education Act of 1965: mandated achievement as a primary mechanism for monitoring and evaluating Title 1; Title 1 is funding to schools or districts with students from low-income families; most schools receive Title 1, and must meet federal education legislation requirement

Student Learning Outcome: accumulated knowledge, skills, and attitudes that students develop during the course of study

Informal Assessment: method to immediately assess students through non-standard ways; informal assessments are typically not used for final grades; two common examples are verbal responses and journal writing

Assessment techniques:

- **Time sampling:** Record particular events or behaviors at specific time intervals (e.g., five minutes, ten minutes)
- **Event sampling**: focuses on a particular behavior during a particular event (e.g., behavior at lunchtime, behavior in a reading group)
- **Running Record**: focuses on a sequence of events that occurs over time
- **Anecdotal Record:** gives a brief written description of student behavior at one time
- **Observation:** child watching- looking at children in a systematic way
- **Rating scale**: contains a list of descriptors for a set of behaviors
- **Checklist**: a list of behaviors identifying children's skills and knowledge
- **Debates**: prepared oral presentations on a relevant topic
- **Portfolio**: collection of children's work samples and other products
- **Interview**: engaging children in discussion through questions
- **Work Sample**: collection of children's work that demonstrates what they know and are able to do
- **Writing Sample**: any written work students do alone, either in class or at home
- **Games:** subject-specific game results
- **Logs or journals**: an individual method of writing
- **Brainstorming**: free form discussion of what is known about a topic
- **Story retelling –**can be used in either oral or written formats
- **Cloze Tests:** cloze tests are composed of text from which words have been deleted randomly
- **Questionnaires** - A self-report assessment device
- **Miscue Analysis** - An informal assessment of strategies

Standardized Testing and Reporting: current system of tests California public schools use based on California adopted curriculum standards

Summative Assessment: to assess student achievement at the end of a course or unit

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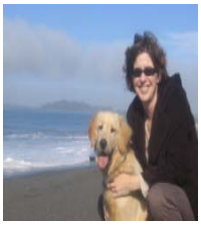
Biographies

Rex Rigney: Rex Rigney is a graduate student at Humboldt State University earning a master's degree in education. He is also a math teacher and the athletic director for the Ferndale Unified School District. Much of his free time is spent refereeing, coaching, supervising, or playing basketball.



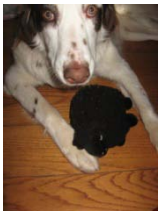
Anna Thaler

Anna is the world famous PACT Student Assistant. She is also a second year graduate student in Education, studying the effect of character education on bullying among girls. In her free time she enjoys playing with her golden retriever puppy, camping, hiking, bird watching, and writing her thesis.

Ken Weiderman was born on the muddy banks of the Mississippi, and after wiping him off, his parents quickly whisked him away to Arizona, where he learned about cactus, sheep, and dirt-clod wars. He eventually settled into a comfortable life in Eureka, California, enjoying the various wonders the North Coast has to offer as he grew into a delightful young man. Humboldt State University launched him into his professional life, and allowed him ample time to get lost again in the muddy corners of the ceramics lab. Education is his passion, life, and study, with ceramics coming in close second, tied with his wife. He currently leads his field teaching Fine Arts to young minds in McKinleyville.

Jennifer Bailey is a local high school graduate from Fortuna. Jennifer received her undergraduate degree in Journalism from Humboldt State University. She currently serves as the Director of Academic Advising and the NorthCoast CalSOAP Consortium at College of the Redwoods. Jennifer will be graduating this spring with her master's degree in Education. She lives in Fortuna with her husband Brandon and two cats, Leo and Vinni.

Ben York has been a student at Humboldt State University for six years. After finishing his undergraduate work in geography he went on to earn a Multiple Subjects Teaching Credential and is currently working on his masters degree in education. The focus of his thesis project is experiential science curriculum for middle school students. He works as a substitute teacher in Arcata and Trinidad. In his spare time Ben enjoys whitewater kayaking and climbing. He is currently living in his truck, Turtle, with 6 kayaks, a computer and a Nikon D200.



Chelsea Little has been living behind the beautiful Redwood Curtain on and off since 2002. Her wanderlust led her away for a few years where she earned her bachelor's degree in Women's Studies from UCLA. In 2008 she returned to Arcata to get a Single Subject Teaching Credential in Social Science. Currently she is working on her Master's Degree in Education with an emphasis in Teaching American History. During her down time she enjoys road trips to sunny places with her beloved dog/child in tow.

Appendix A

Construct Validity

A construct can be defined as a theoretical trait that we assume exists but cannot be directly observed. Examples include knowledge of math and black holes. Constructs are measured through a performance which is thought to be related to the construct. An example of a construct valid assessment would be to test Mohandas on his **knowledge of social dynamics** (the construct) through his performance in organizing mass protests. Below you will find some helpful examples of constructs:

- Reading Comprehension
- Sociability
- Mathematical Reasoning
- Anxiety
- Critical Thinking
- Honesty

Establishing construct validity is the process of determining the extent to which performance on an assessment can be interpreted in terms of one or more constructs. In order to validate constructs, two questions must be asked:

1) Does the assessment adequately represent the intended construct?

2) Is performance influenced by factors that are not relevant to the intended construct?

There are two threats to construct validity:

1) Construct irrelevance: tasks measure something other than the intended construct.

EXAMPLE: English language learners take a mathematical exam in English. It is unfair to assume that the students do not comprehend the mathematical concepts when the assessment is given in English, rather than their native tongue.

2) Construct underrepresented: refers to the imperfectness of tests in accessing all features of the construct. Whenever we embark on developing a test, we glean some features of the construct according to our definition of the construct (which itself might be faulty and poorly defined) which we plan to measure.

EXAMPLE: A student takes an English placement exam at a local community college. The assessment tool only assesses for reading comprehension not sentence structure. It is unfair to assume that the student needs a developmental course covering all aspects of English based on the sole concept of reading comprehension.

Appendix B

Enhancing Academic Excellence In Social Studies Through Authentic Assessment And Portfolio Assessment

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WHAT IS PORTFOLIO ASSESSMENT?

- Portfolio assessment has become widely used in educational settings as a way to examine and measure progress, by documenting the process of learning or change as it occurs.
- Portfolios extend beyond test scores to include substantive descriptions or examples of what the student is doing and experiencing.
- In "authentic assessment", information or data is **collected from various sources**, through **multiple methods**, and over **multiple points in time** (Shaklee, Barbour, Ambrose, & Hansford, 1997).
- Contents of portfolios (sometimes called "artifacts" or "evidence") can include drawings, photos, video or audio tapes, writing or other work samples, computer disks, and copies of standardized or program-specific tests.

Tier 2 - Accountability

- Critical to any form of assessment is accountability.
- Teachers are accountable to themselves, their students, and the families, the schools and society.
- The portfolio is an assessment practice that can inform all of these constituents.

Tier 4 - Progress Toward Outcomes

- Items are selected for inclusion in the portfolio because they provide "evidence" of progress toward selected outcomes.

ADVANTAGES OF USING PORTFOLIO ASSESSMENT

- *Allows the evaluators to see the student, group, or community as individual, each unique with its own characteristics, needs, and strengths.
- *Serves as a cross-section lens, providing a basis for future analysis and planning.
- Identify areas of strengths and weaknesses, and barriers to success.

- *Serves as a concrete vehicle for communication, providing ongoing communication or exchanges of information among those involved.
- *Portfolio assessment offers the possibility of addressing shortcomings of traditional assessment. It offers the possibility of assessing the more complex and important aspects of learning

DISADVANTAGES OF USING PORTFOLIO ASSESSMENT

- *May be seen as less reliable or fair than more quantitative evaluations such as test scores.
- *Can be very time consuming for teachers to organize and evaluate the contents, especially if portfolios have to be done in addition to traditional testing and grading.
- *Having to develop your own individualized criteria can be difficult or unfamiliar at first.
- *If goals and criteria are not clear, the portfolio can be just a miscellaneous collection of artifacts that don't show patterns of growth or achievement.
- *Like any other form of qualitative data, data from portfolio assessments can be difficult to analyze or aggregate to show change.

HOW TO USE PORTFOLIO ASSESSMENT

Design and Development

Three main factors guide the design and development of a portfolio: **1) purpose, 2) assessment criteria, and 3) evidence** (Barton & Collins, 1997).

1) Purpose

The primary concern in getting started is knowing **the purpose that the portfolio will serve**.

- For example, is the goal to use the portfolio as data to inform program development? To report progress? To identify special needs? For program accountability? For all of these?

2) Assessment Criteria

- Once the purpose or goal of the portfolio is clear, decisions are made about **what will be considered success (criteria or standards)**, and what strategies are necessary to meet the goals. Items are then selected to include in the portfolio because they **provide evidence of meeting criteria, or making progress toward goals**.

3) Evidence

- What sources of evidence should be used?
- How much evidence do we need to make good decisions and determinations?
- How often should we collect evidence?
- How can we make sense of the evidence that is collected