Leading The Way

to Making Classroom Assessment Work

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Foreword by Jay McTighe

Evidence of Learning

Chapter 6

> *"Only if we expand and reformulate our view of what counts as human intellect will we be able to devise more appropriate ways of assessing it and more effective ways of educating it."*
>
> *Howard Gardner*

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Once teachers have described what students need to learn and have developed a sense of what success might look like for their students, it is time for them to consider what kinds of evidence of learning they will need to collect, in order to plan ongoing instruction and ensure validity and reliability. That way, when teachers evaluate at the end of the learning period, they and others can have confidence that they will be able to make high quality professional judgments and base their teaching on evidence of student learning needs.

Different teachers collect different kinds of evidence, even though the description of what their students need to learn may be the same. This is because the learning experiences that teachers design for different groups of learners may vary. Also, since students learn in different ways and at different times, collections of evidence may vary slightly in terms of how students choose to represent their learning. When making lists of the evidence to collect, teachers need to make sure they plan to gather evidence from a variety of sources, and that they gather evidence over time.

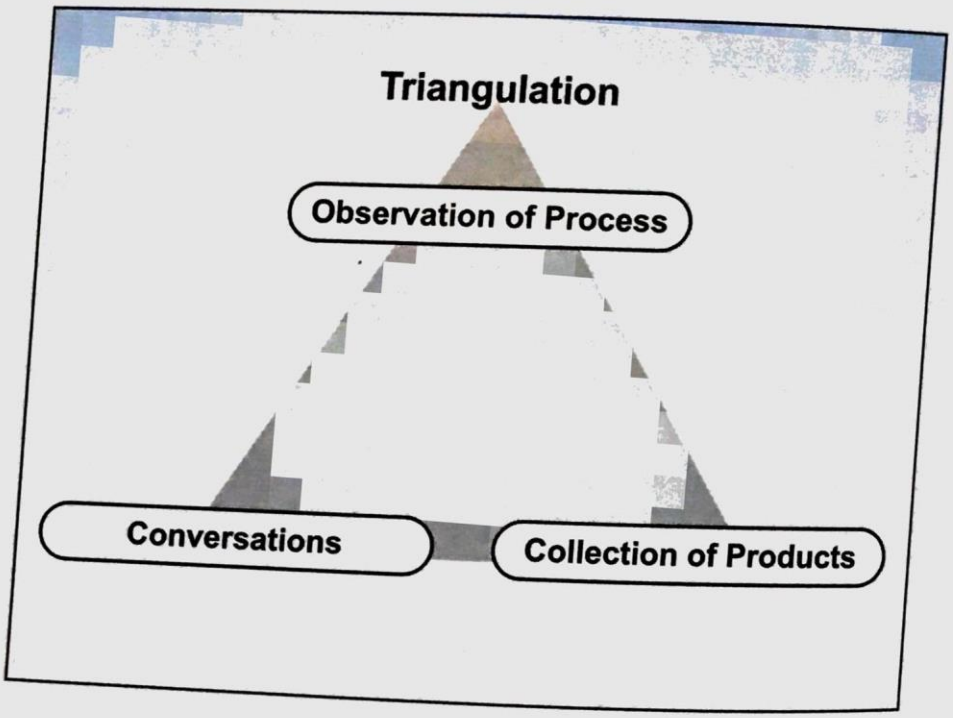
Sources of Evidence

There are three general sources of assessment evidence gathered in classrooms: *observations* of learning, *products* students create, and

conversations – discussing learning with students (Primary Program 1990, 2000). When evidence is collected from three different sources over time, trends and patterns become apparent, and the reliability and validity of our classroom assessment is increased. This process is called *triangulation* (Lincoln and Guba 1984).

Reliability: think 'repeatability' – reliability refers to students producing the same kind of result at different times.

Validity: think 'valid' – the extent to which the evidence from multiple sources matches the quality levels expected in light of the standards or learning outcomes.

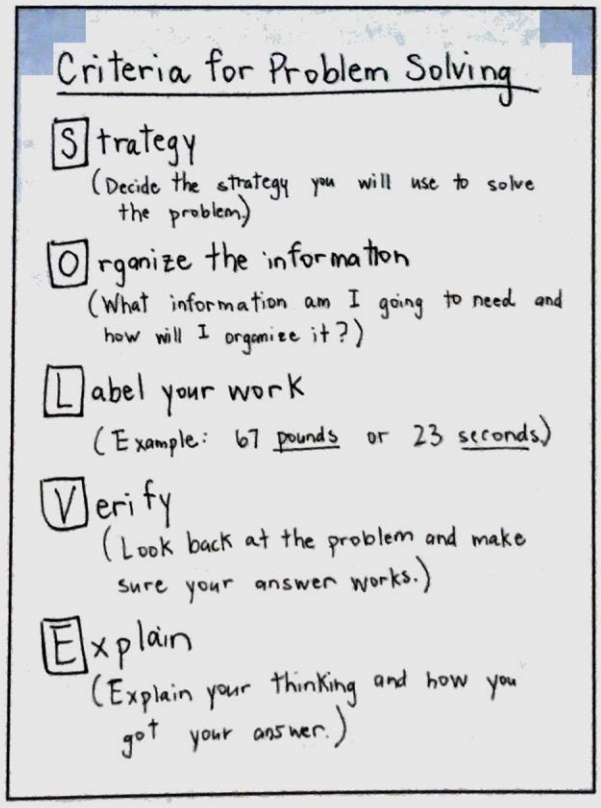


Observing the Learning

The list of evidence teachers plan to collect needs to include the observations they will make while students are learning. The record of observations becomes evidence.

Teachers might observe . . . formal and informal presentations, drama presentations, scientific method being applied, music-related activities, reading aloud, group or partner activities, talking about one's own work, planning and designing a Web page, persuading, giving opinions, following instructions, listening to others, arguing, predicting, measuring objects, charades, dances, communicating ideas to others in a small group setting, conflict resolution, discussions, giving and receiving descriptive feedback, working with partners or in teams, identifying sounds, rhythm games, cartooning, playing instruments, jigsaws, demonstrations, any skills development, movement exercises, keyboarding, gestures, pantomimes, re-enactments, gymnastic routines, sign language, graphic design, simulations, debating, answering questions, presenting own work, giving instructions, singing, telling stories, verbalizing abstract reasoning, sculpture, choral readings, conversations, dialogues, dramatic readings, oral descriptions, oral reports, plays, puppet shows, Readers' Theatre, storytelling, demonstrating symbolic thinking, teaching a lesson, creating a slide show, role plays, verbal explanations, and verbal instructions. This list could include anything a teacher might observe students doing or might ask them to do.

Observations are essential if classroom assessment and evaluation are to be reliable and valid. In addition to being necessary for triangulating your evidence, some learning can only be observed. For example, some students are better able to show what they know by doing it. These 'in action' kinds of learners and younger children, who are able to record little in writing, need some of their learning assessed through observation. Also, products 'under construction' can provide teachers with opportunities to observe students' learning. Without enough observational evidence, our evaluations at report card time risk being invalid.


Criteria for Problem Solving

S trategy
(Decide the strategy you will use to solve the problem.)

O rganize the information
(What information am I going to need and how will I organize it?)

L abel your work
(Example: 67 pounds or 23 seconds)

V erify
(Look back at the problem and make sure your answer works.)

E xplain
(Explain your thinking and how you got your answer.)

Spelling Focus

- journal writing
- observing prefixes and suffixes

✓ observed
— not observed
D needs help

Date
Oct. 14
Nov. 10

Anna	Bob	Concordia	Carl	Chin	Don	Elaine	Elvin
✓ dis, un	✓ un, ing	es, dis	dis, re	—	✓ es	—	—
✓	✓	✓	✓	✓ dis, re, es, ed	✓	✓ ing, ed, es	✓ ing, dis, es
Kara	**Kevin**	**Luis**	**Nona**	**Matt J.**	**Matt M.**	**Parma**	**Robert**
—	✓ ing, un	—	—	✓ ed	D ed es consonant doubling	D ed es c.d.?	✓ ex, un
✓ un, dis	✓	✓	✓	✓ es, re	✓ ed, ing, es? needs work	✓ ed, es, dis, on	✓ dis, ed
Ryland	**Stefan**	**Sidura**	**Thang**	**Val**	**Zoe**		
✓ dis	✓ ing, re	✓ ed, dis, ing	✓ un, ing	—	✓ ing, es, ed, un		
✓ ed, ing	✓ dis, es, ed	✓ es, ed	✓ es, ed	✓ re, es, dis, ed	✓ re, dis		

From Smith and Davies, *Wordsmithing*, 85

Teachers have different ways of recording their observations. The key is that observations need to be focused to ensure that the information you are recording is related to the description of what students are to learn. It is usually not enough to observe that a student completed his math work. Rather, they would observe what skill was practiced, what level of skill the student was observed as demonstrating, and perhaps some possible next steps for instruction. For example, if students are practicing two-digit addition, teachers might choose to observe and record the level of difficulty of the questions that students choose to practice: e.g., addition without regrouping, addition with regrouping. These observations may be used to form their teaching groups the next day, or to determine the subject of their math mini-lesson and the next day's practice activities. The same observations will later form part of the evidence that teachers will examine when they evaluate the students' progress in mathematics.

Math Problem Solving

Teacher _____ Grade _____

NAMES	/	/	/	/	/	/	/
RAHIM	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE
OSA	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE
ALEXI	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE
ISAAC	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE
JADE	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE
TANIKA	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE
KAYLA	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE
HOLLY	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE
DAKOTA	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE	SOLVE

The focus of the observations depends on the purpose of the activity. If teachers can answer the following questions, then they are on their way to designing focused observations that will be useful in planning subsequent learning activities and will form a part of their evaluation later in the term:

- What is the purpose of the learning activity? What are students to learn?
- What particular focus will I choose for this observation?
- How will I record and organize my observations so they are useful?

Collecting Products

Teachers collect various kinds of evidence to show what students can do. These include projects, assignments, notebooks, and tests. As teachers become more knowledgeable about the implications of different theories of intelligence (Gardner 1984; Levine 1993; Sternberg 1996), they are expanding the ways students show or represent what they know. For example, when students are asked to represent what they know only in writing, some will be unable, due to their lack of skill as writers. However, when asked to demonstrate the process in action or to give an oral presentation, their knowledge and skill may rapidly become apparent.

More and more teachers are introducing an element of choice into the form that products may take. Some teachers create a list of ideas with their students. Over time, the list grows as students learn more about different ways of representing.

Different ways to show what we know...

- draw a diagram
- make a time line
- make a poster
- write a story
- do an oral presentation
- write a poem
- build a model
- design a Web page
- create a puzzle
- make a video
- create an iMovie
- make a podcast
- make a recording
- design a T-shirt
- do a report
- write a song
- create a collage
- build a diorama
- write a play
- do a journal entry
- perform a puppet show
- input e-journal entry

Conversations About Learning

Teachers listen to learners during class meetings, at individual or group conferences, or when they read students' self-assessments about their work. Teachers also have opportunities to listen when students assess their work in relation to criteria, analyze their work samples for their portfolios, or prepare to report to parents about their learning.

When teachers listen to students in these ways, they are inviting them to think about their learning. As students think and explain, teachers can gather evidence about what they know and understand. We can find out about what students did or created – such as, their best efforts, what was difficult or easy, what they might do differently next time, and what risks they take as learners. Students learn more when we take the time to involve them in self-assessment (Black and Wiliam 1998; Young 2000). The ability to articulate their learning processes – as part of a reader's response, a mathematics response or in some other way – has become an increasingly important aspect of classroom and external assessment.

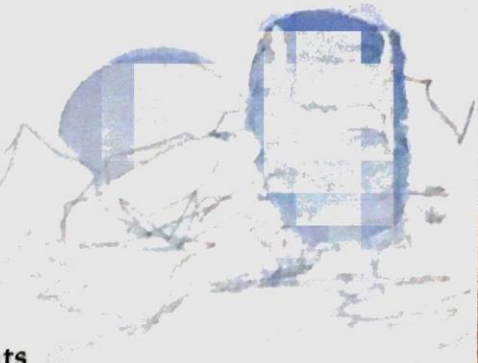
Conversations about learning involve listening to what students have to say about their learning, or reading what they record about their learning. The 'conversation' may be face-to-face or in writing.

> *"I can't say enough about how impressed I am by how specific and articulate my students have become as a result of setting criteria, doing reflections and keeping learning goals portfolios."*
>
> *Holly Tornrose,*
> *High School English Teacher*

Creating a Plan

It takes some planning for teachers to make sure they have enough evidence, the right kind of evidence, and evidence that is reliable and valid. They have a better chance of collecting reliable and valid evidence of learning when they ensure they have proof of learning from multiple sources collected over time. Teachers also plan to collect a range of evidence – both qualitative and quantitative data – matching it to the curriculum standards for which they are responsible. They look at the learning destination and match it to the evidence asking: Are there any gaps? Are there any overlaps? Am I collecting evidence from multiple sources?

How much evidence is enough?



There is no one right answer to this question. The amount of ongoing evidence needed to effectively plan daily instruction varies from teacher to teacher, depending on the subject, the teacher, the students, and the community in which they learn. Each teacher needs to determine the amount of evidence that works in his or her situation, given what students are learning.

One guideline to keep in mind is that teachers must have enough evidence to be able to identify patterns and trends in student learning. To do this, teachers need student work (evidence) that accounts for the full range of what needs to be learned. The evidence needs to show learning over time.

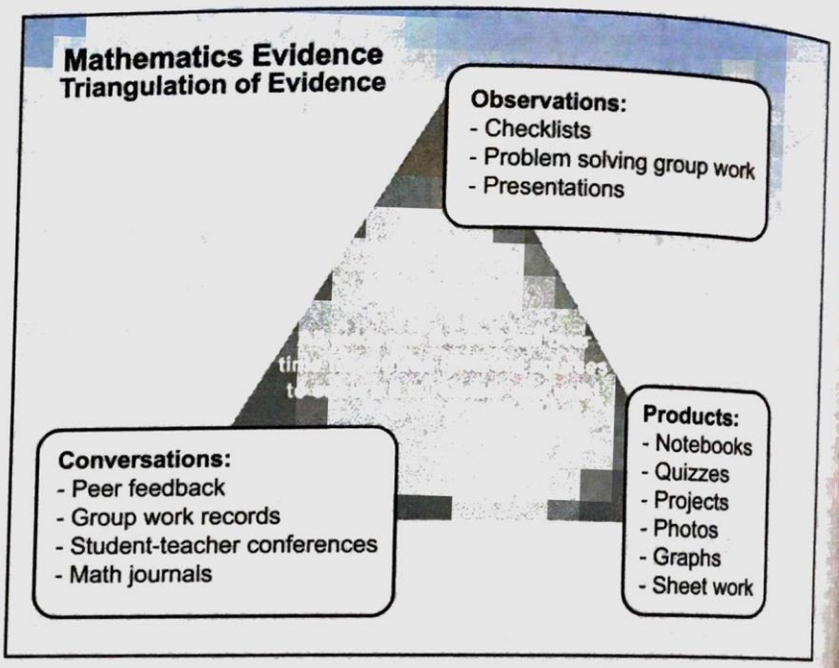
Taking care...

Be aware of the important difference between *large-scale assessment* and *classroom assessment*. The purpose of *large-scale assessments* is two-fold: to help the system be accountable (Are we making the best use of our resources?) and to identify trends (Are students learning? What are they learning? How well?). To do this, large-scale assessments need only to collect a small amount of information from a large number of students. These assessments are designed to determine what students know, can do and can articulate in relation to what is to be learned. They do not collect enough information to give a valid and complete picture of everything students know and are able to do at any point in time, in relation to all the standards or learning outcomes they are to learn. Large-scale assessments can only provide a *snapshot* of *some* of the learning. They are better designed to describe what groups of students are able to do.

Classroom assessment is quite different. Teachers and students collect a large amount of evidence over time from multiple sources. It is designed to account for all that is to be learned by individuals – student by student. When done well, classroom assessment is better able to give a more valid and reliable accounting of a student's learning.

How do teachers know they have the right kinds of evidence?

Evidence of learning may include observations, products, and conversations. The kinds of assessment evidence collected from students need to be appropriate to the type of learning. For example, paper-and-pencil is a great way to assess knowledge of basic facts, but would be unsuitable for assessing oral presentation skills. Sorting out what kinds of evidence is needed to show different kinds of learning is a necessary step for teachers in planning what to collect. If evidence is triangulated, then they are likely using a range of techniques to gather proof of learning over time. This is key to having the right kind and balance of evidence. Either individually or collaboratively with their colleagues, they can determine whether or not it satisfactorily addresses the range of what needs to be learned. Professional judgment improves as teachers develop clear achievement criteria for reporting purposes (for an example, see page 39).

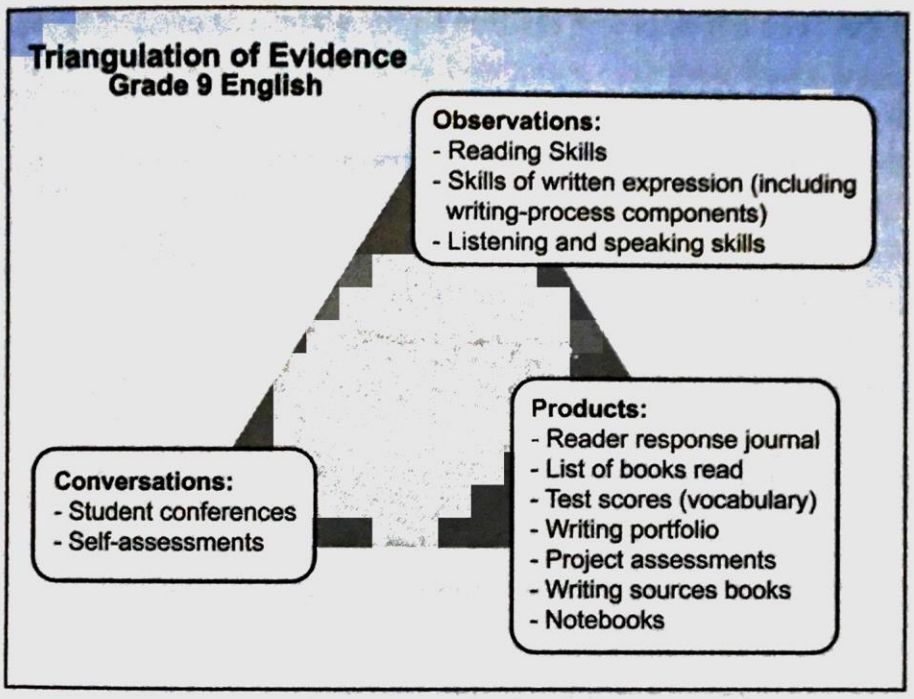


How can teachers be sure the evidence will help make their evaluations reliable and valid?

If teachers have collected enough evidence and the right kind of evidence, and have thoughtfully worked with colleagues to improve their professional judgment, then they can feel confident that their evaluations will be reliable and valid. In general, confidence increases when there is a wide range of evidence, when it is collected over time and when there are clear criteria that define quality. Remember that everything students do, say, and create is potential evidence. Consider assessing more and evaluating less.

Teachers interrupt learning if they evaluate too often, whereas assessment information can guide instruction and support learning.

When teachers get ready to evaluate and report on how well students are doing in relation to what needs to be learned, they first need to review the description of learning, check that they have the right kinds of evidence, and use the observations, products, and conversations to answer the questions: Did this student learn what she or he needed to learn? How well? In order to make an evaluation, we may look at different collections of evidence for different students.



It is important that teachers use the evidence available for each student and compare it to the same set of curriculum standards and expectations. In a standards-based evaluation system, teachers have to account for each student's learning in relation to the expectations for that grade and subject area. While a teacher's written and verbal comments may speak to the amount of progress students have made in their learning, the evaluation must reflect their accomplishments in relation to the standards for the subject area and level at which they are working.

"Even with the best of maps and instruments, we can never fully chart our journeys."

Gail Pool