

**CLASSROOM ASSESSMENT
FOR
STUDENT LEARNING:
DOING IT RIGHT—
USING IT WELL**

We want you to learn
how to:

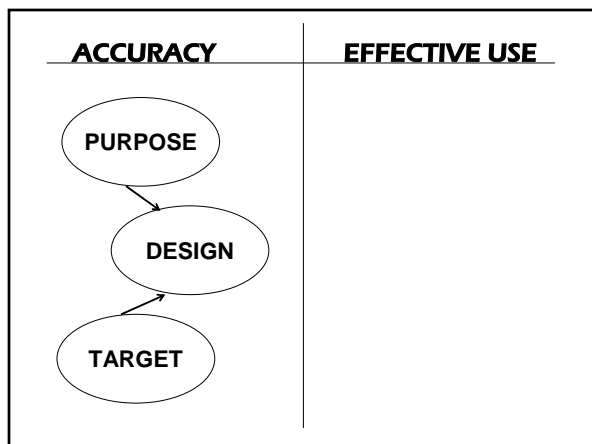
- Gather **dependable information** about student achievement
- Use the assessment process and results to **promote maximum achievement**

Think of a time when you were assessed and it was a **positive** experience. **What made it positive?**

Now, think of a time when you were assessed and it was a **negative** experience. **What made it negative?**

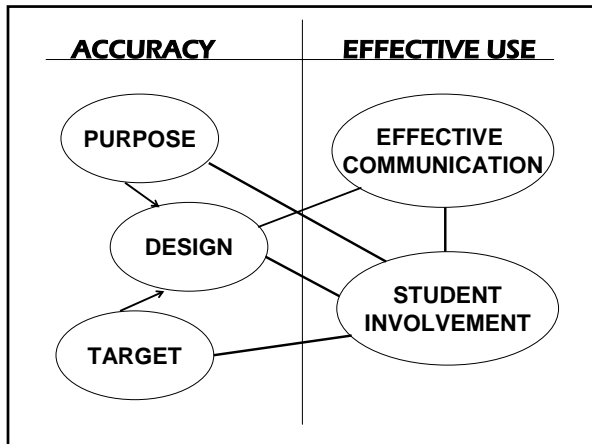
Share your answers to the two questions with a partner.

Assessment quality requires
ACCURACY
as well as
EFFECTIVE USE



Design Features

- Select a **proper method**
- Create **quality items/tasks**
- Gather **enough evidence**
- **Minimize bias**



TWO USES OF ASSESSMENT:

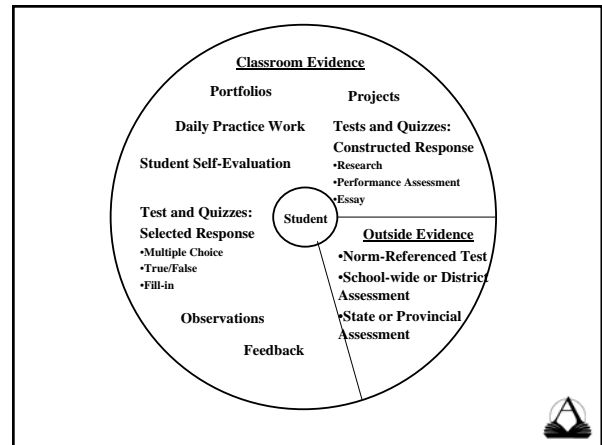
SUMMATIVE
Assessments *OF* Learning

FORMATIVE
Assessments *FOR* Learning

CRUCIAL DISTINCTION

Assessment OF Learning:
How much have students learned as of a particular point in time?

Assessment FOR Learning:
How can we use assessment information to help students learn more?



FORMATIVE ASSESSMENT

All those activities undertaken by teachers and by their students [that] provide information to be used as **FEEDBACK** to modify the teaching and learning activities in which they are engaged.

-Black & William, 1998

What formative assessment practices are you familiar with?

Research consistently shows that regular, high-quality **FORMATIVE ASSESSMENT** increases student achievement.

Black & William Synthesis of Research:

1. Does better **FORMATIVE** assessment = higher learning?
2. Does formative assessment need improving?
3. What improvement is needed?

Research On Effects

.5 to 1.0 Standard Deviation Score Gain

Largest Gain for Low Achievers



1.0 STANDARD DEVIATION EQUALS:

- 30+ Percentile Points On ITBS (middle of score range)
- 4 Grade Equivalents
- 100 SAT Score Points
- 6 ACT Score Points
- U.S. TIMSS Rank from 23rd to Top 5



We know of **NO OTHER WAY OF RAISING STANDARDS** for which such a strong case can be made on the basis of evidence of such large learning gains.

—Black and William, 1998

NEEDED IMPROVEMENTS

- **Increased Accuracy of Formative Assessments**
- **Increased Descriptive Feedback**
- **Increased Student Involvement**



NEW IDEA:

Formative assessment can and should be done BY STUDENTS, as well as by teachers. The key to improvement is how *students and teachers use assessment information.*

A key premise is that for students to be able to improve, they must have the capacity to monitor the quality of their own work during actual production. This in turn requires that students:

- Know what high quality work looks like
- Be able to objectively compare their work to the standard
- Have a store of tactics to make work better based on their observations

–Royce Sadler, 1989

Formative Assessment: Three Guiding Questions

- Where are you trying to go?
- Where are you now?
- How can you get there?

FEEDBACK

The **QUALITY** of the feedback rather than its existence or absence is what determines its power.

–Bangert-Dewns, Kulik, Kulik, & Morgan, 1991;
Sadler, 1989

Feedback is most effective when it points out success and is designed to stimulate correction of errors relevant to the task.

–Bloom

Effective learners operate best when they have insight into their own strengths and weaknesses and access to their own repertoires of strategies for learning.

–Brown, 1994

With regard to feedback, research makes the case for the use of **DESCRIPTIVE, CRITERION-BASED** feedback as opposed to numerical scoring or letter grades without clear criteria.

–Butler & Neuman, 1995; Cameron & Pierce, 1994; Kluger & deNisi, 1996

Research shows that feedback that **EMPHASIZES LEARNING GOALS** leads to greater learning gains than feedback that emphasizes self-esteem.

–Ames, 1992; Butler, 1998; Dweck, 1986

When receiving feedback emphasizing self-esteem, high-performing students often attribute their performance to effort and low-performing students attribute their performance to lack of ability.

–Butler & Newman, 1995; Cameron & Pierce, 1994; Kluger & deNisi, 1996

Feedback that cues the individual to direct attention to *self* (praise, effort, etc.) rather than to the *quality of the task* appear to have a negative effect on learning. Many studies speak to effective teachers praising less than average.

–(Cameron/Pierce, 1994; Kluger/DiNisi, 1996)

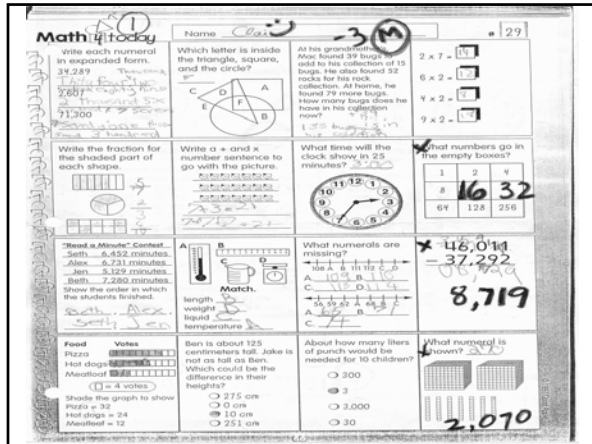
GRADES AS FEEDBACK:

Grading every piece of work is misdirected. A numerical grade does not show students how to improve their work. Further, students ignore comments when grades are given.

–Butler, 1998

Intensive correction, where the teacher marks every error in every paper a student writes, is completely useless. Marking all errors is no more advantageous in terms of student growth than marking none of them.

–Hillocks, 1986

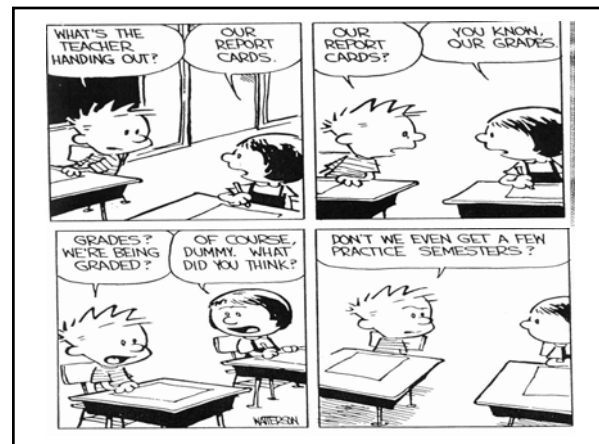


NCTM STANDARDS REPRESENTED			
NUMBER SENSE (3)	REPRESENTATION (1)	PROBLEM SOLVING / NUMBER OPERATIONS (1)	NUMBER OPERATIONS (4)
NUMBER SENSE (3)	ALGEBRA (2)	MEASUREMENT (1)	ALGEBRA (2)
NUMBER SENSE (1)	MEASUREMENT (4)	NUMBER SENSE (7)	NUMBER OPERATIONS (1)
DATA ANALYSIS & PROBABILITY (3)	MEASUREMENT (1)	MEASUREMENT (1)	NUMBER SENSE (1)

STUDENT-FRIENDLY LEARNING TARGETS (3 RD GRADE)			
PLACE VALUE	VENN DIAGRAM	PROBLEM SOLVING / ADD WITH CARRYING	MULTIPLY BY 2
FRACTIONS	NUMBER SENTENCES	TIME MEASUREMENT	NUMBER PATTERNS
PLACE VALUE	COMPARING MEASUREMENTS	PLACE VALUE	SUBTRACT WITH BORROWING
TABLES, CHARTS, & GRAPHS	LENGTH MEASUREMENT	LIQUID MEASUREMENT	PLACE VALUE

LEARNING TARGETS BY STRAND NCTM LANGUAGE			
NUMBER SENSE	NUMBER SENSE	NUMBER SENSE	NUMBER SENSE
NUMBER OPERATIONS	NUMBER OPERATIONS	NUMBER OPERATIONS	NUMBER OPERATIONS
MEASUREMENT	MEASUREMENT	MEASUREMENT	MEASUREMENT
DATA ANALYSIS & PROBABILITY	REPRESENTATION	ALGEBRA	ALGEBRA

LEARNING TARGETS BY STRAND STUDENT-FRIENDLY LANGUAGE			
PLACE VALUE	PLACE VALUE	PLACE VALUE	PLACE VALUE
FRACTIONS	MULTIPLY BY 2	SUBTRACT WITH BORROWING	PROBLEM SOLVING / ADD WITH CARRYING
TIME MEASUREMENT	LENGTH MEASUREMENT	LIQUID MEASUREMENT	COMPARING MEASUREMENTS
TABLES, CHARTS, & GRAPHS	VENN DIAGRAM	NUMBER PATTERNS	NUMBER SENTENCES



Effective Descriptive Feedback...

- Describes features of work or performance
- Relates directly to learning targets and/or standards of quality
- Points out strengths and gives specific information about how to improve



Descriptive or Evaluative Feedback?

Mark each example of descriptive feedback with a D and each example of evaluative feedback with an E. If you believe it is neither, mark it with an X.

What kinds of feedback do students in your class receive?

When does it occur in the learning process?

How often?

NEEDED IMPROVEMENTS

- Increased Accuracy of Formative Assessments
- Increased Descriptive Feedback
- Increased Student Involvement



Self assessment by pupils, far from being a luxury, is in fact an essential component of formative assessment.

-Black & William, 1998

Student **SELF**-assessment is crucial for feedback to be used effectively. Students are the ones who must ultimately take action to bridge the gap between where they are and where they are heading.

The transition from feedback to self-monitoring can occur only when the student comes to know what constitutes quality.

–Sadler, 1989

The process of engaging in self-assessment increases students' **COMMITMENT** to achieving important educational goals.

–Covington, 1992

- Only possible when students know the goal of the work and have a vision of quality.
- Helps students make decisions about what to focus on next.

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–Sadler, 1989

Student self assessment promises to increase students' responsibility for their own learning...In case studies, students became more interested in the criteria and the substantive feedback than in grades...more honest about their own work, fair with other students, and able to defend their own opinions in terms of the evidence.

–Klenowski, 1995

Assessment criteria were developed for attributes desired while conducting investigations in science...At several stages of the Inquiry Cycle curriculum, students evaluated their own work in terms of the criteria. Each time they applied the criteria and wrote a brief rationale pointing to the features of their work that supported their rating. Students used the criteria to give feedback to classmates.

Compared to students in control classrooms, students in reflective classrooms produced more highly rated projects (with the greatest gains for low achieving students). Low-achieving students also showed dramatic gains on a measure of conceptual understanding.

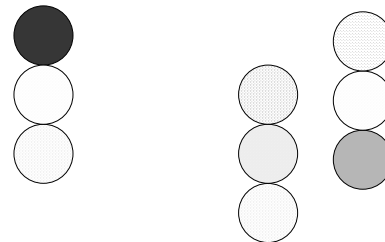
-White & Fredericksen, 1996

The research indicates that improving learning through assessment depends on five simple yet key factors:

- **Adjusting teaching** to take account of the results of assessment
- The provision of **effective feedback** to students
- The **active involvement** of students in their own learning
- The need for students to be able to **assess themselves** and understand how to improve
- A recognition of the profound influence assessment has on **motivation and self-esteem**

TRAFFIC LIGHT

- Green, amber or red for their perception of level of understanding: good, partial, little
- Justify judgments in a peer group, linking self and peer assessment
- Pair green with amber, teachers takes reds



What kinds of self-assessment activities do your students engage in?

When in the learning process?

How often?

Assessment for Learning Strategies

Where am I going?

1. Provide a clear statement of the learning target
2. Use examples and models

Where am I now?

3. Offer regular descriptive feedback
4. Teach students to self-assess and set goals

How can I close the gap?

5. Design focused lessons
6. Teach students focused revision
7. Engage students in self-reflection; let them keep track of and share their learning

Which of these questions do the practices you use match?

Assign each entry on your own list of formative assessment practices to one of the three questions:

- Where are you going?
- Where are you now?
- How can you get there?

