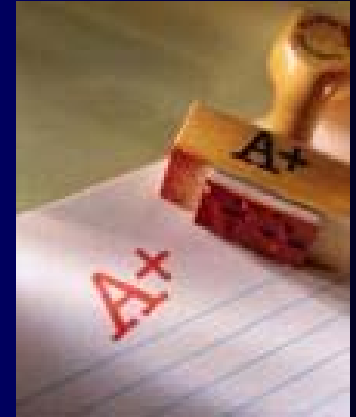


Measuring Student Progress



Presentation by:
Gary Whiteley

Email: gmwhiteley@gci.net
Phone: 907.283.0437

Goals:

- Examine the research on classroom assessment and school improvement.
- Review types of assessments and their use.
- Why use instructionally-oriented assessments?
- Understand the development and use of assessments created by Alaskan teachers, for Alaskan teachers.

An Invitation: Let's take advantage of our time together with colleagues because...

“There is no time to convene people to plan, organize, and follow through. Contact and transactions of business are ‘on the fly.’”

–Gordon Donaldson

Or as Outward Bound states it:

“Lean into the experience!”

And as you work together consider the observation by Peter Senge.

“The quality of an organization is a direct reflection on the quality of the conversations that people have within the organization.”

Accountability has dominated the discussion about assessment

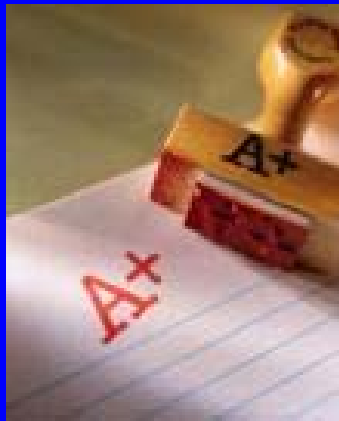
- The HSGQE and the SBA's are summative assessments. They provide meaningful information **after** the learning process.
- The state-mandated assessments are for accountability, but they can also provide specific information for setting overall student performance goals. One Caveat: If achievement data are analyzed to determine patterns of student performance that are linked to state standards and grade level expectations.
- The HSGQE and SBA results have been analyzed.

High-stakes assessments in today's educational environment receive major attention from the media and policy makers, including government officials.

Far less attention is given to classroom assessments, which occupy a far greater percentage of the time in which students are formally tested and have a much greater impact on student learning.

Two “historical” perspectives that describe assessment discussions

Large-scale assessments	→	Authentic assessment
Multiple choice items	→	Inform instruction
Norm-referenced	→	Portfolios
“measurement types”	→	Classroom-based
Summative	→	Teacher decisions
Validity	→	Student generated
Reliability	→	Grades
Bias (of learning)	→	Meaningful feedback (for learning)



Training Activity

- 1) A table moderator who will keep time and help close-out the activity.
- 2) Please locate the two sheets of paper with the header: self-assessment and assessment types.
- 3) Raise your hand when you have the self-assessment “ready” to fill out.

Training Activity: Take the Self-Assessment in your packet

1. Directions:

There are no right or wrong answers, please circle the appropriate response above each statement. (5 minutes)

2. Elbow Partner: After you take the test discuss your answers. Feel free to change an answer. (5 minutes)

Scoring the Self-Assessment

Items 1, 2, 4, and 6

SD=5, D=4, U=3, A=2, SA=1

Items 3, 5, 7, and 8

SA=5 A=4, U=3, D=2, SD=1

Highest Score= 40

Lowest Score= 8

A meta-analysis of research related to classroom assessment and school reform indicates that classroom assessment can have a major impact on school improvement efforts.

- School improvement plans that give attention to better classroom assessments result in substantial learning gains as measured by standardized test results.
- Average improvement ranges from 2-3 grade equivalents at the primary level to 3-5 grade equivalents at the middle school.

A meta-analysis of research

- The impact of improved classroom assessment is greater than that of most educational interventions
- Improved classroom assessments help low-achieving students more than students who perform at a higher level

Source: PDK Topics and Trends Volume 2, Issue 2
(A copy is in your packet)

Practical Implications for Teachers

The following are classroom assessment practices that have been used to increase student learning:

- Students have a clear picture of the achievement target and where they stand in relation to that target.
- Effective assessment involves students in evaluating their progress in reaching established goals.

Practical Implications for Teachers

- Assessment takes many forms and is ongoing through homework, seatwork, and classroom discussions, as well as formal tests.
- Teachers provide positive, specific feedback as to how students can improve their performance.
- Teachers collaborate in producing assessments and reviewing the results. This strengthens assessment practices while easing the work load and alleviating time constraints faced by all teachers.

Springboard Schools Research

(springboardschools.org)

- Compared gap-closing and non-gap closing schools in the Bay Area
- How Are Gap-Closing Schools Different?
- Gap-closing schools engage in data- based decision making.
- Use multiple assessment measures on a frequent basis to engage in continual improvement. (formal and informal assessments)
- Other goals were leadership and equity

Established a **process** and used
a **protocol** to discuss data

Discussing the data with an established
process makes a difference.

Use the Cycle of Inquiry

Non-gap-closers: A few times a year

Gap-closers: A few times a month to a few
times a week

So...frequency matters

Administer Assessments to Students

Gap-closers: Over half reported a few times per week

An important ingredient: Teachers need to administer some of the assessments to students in order to determine strengths and weaknesses in specific skill areas .

Professional Development

- Gap Closers: Received Professional Development on Analyzing Low-Performing Student Data
- Gap Closers: Received Professional Development on Linking Low-Performing Student Data to Instructional Strategies

The results from 1999- 2002

Comparing the API index

Belle Air School

427 students with 67% Hispanic students
and 57% students on free/reduced hot lunch

- White/Asian students:
API index increased from 711 to 737 (+26 scale points)
- Hispanic students
API index increased from 596 to 682(+86 scale points)

*API (Academic Performance Index) is a numeric index from 200 to 1000. Target goal is 800

Roosevelt Middle (944 students 20% African 50% Asian 69% Free/Reduced Hot Lunch)

- Asian Students:
API index increased from 555 to 629 (+74 scale points)
- African-American Students:
API index increased from 357 to 533 (+176 scale points)

The Schools involved in the Springboard schools study did the following:

- **Students** have a clear picture of the **achievement target** and where they stand in relation to that target.
- **Effective assessment involves students in evaluating their progress** in reaching established goals.
- **Teachers collaborate** in producing assessments and **reviewing the results**. This strengthens assessment practices while easing the work load and alleviating time constraints faced by all teachers.

Ineffective assessment practices:

What does not seem to work

- Studies show that, while tests are generally scored conscientiously, little guidance is provided as to how students can make their work better.
- Classroom tests frequently emphasize rote learning, even when teachers say they want to emphasize reasoning and understanding.

Ineffective assessment practices:

What does not seem to work

- Tests are generally developed independently by individual teachers, with little sharing or review of test content to see that each test measures what it was intended to measure.
- Primary teachers tend to emphasize quantity and presentation of work with less attention to quality.

Ineffective assessment practices:

What does not seem to work

- Assessment results often have a negative impact on student learning by causing some students to believe they cannot learn.
- Collection of scores for grading purposes is often given higher priority than determining students' learning needs.

Before the next activity: Words of wisdom from James Comer

In order to have productive conversations:

“Schools need **no fault** conversations in order to help children.”

Activity: Elbow Partner-Classroom
Assessment Practices (Table Moderator
-Please time 20 minutes)

The research findings stated effective and ineffective classroom assessment practices.

Question: Which effective practices do you think can have the greatest impact on student achievement?

Please refer to the Topics and Trends in your packet as a reference.

Summative Assessments

- *Summative assessments summarize what students have learned at the conclusion of an instructional segment. These assessments tend to be evaluative, and teachers typically encapsulate and report assessment results as a score or a grade. Familiar examples of summative assessments include tests, performance tasks, final exams, culminating projects, and work portfolios.*

Diagnostic assessments- pre-assessments

- *Diagnostic assessments—sometimes known as pre-assessments—typically precede instruction. Teachers use them to check students' prior knowledge and skill levels, identify student misconceptions, profile learners' interests, and reveal learning-style preferences.*

Benchmark tests, progress monitoring systems

- *Benchmark tests, progress monitoring systems, and formative assessments—These vendor-developed products and locally developed testing systems are designed to coordinate with state standards and assessments and are administered regularly—often quarterly—to gauge student progress.*

Formative Assessments

- *Formative assessments occur concurrently with instruction. These ongoing assessments provide specific feedback to teachers and students for the purpose of guiding teaching to improve learning. Formative assessments include both formal and informal methods, such as ungraded quizzes, oral questioning, teacher observations, draft work, think-alouds, student-constructed concept maps, learning logs, and portfolio reviews. We should not factor these results into summative evaluation and grading.*

Table Activity: Assessments in Use

(Table moderator/recorder Time: 10 minutes)

- Name of assessment
- Type or use (summative, benchmark/progressing monitoring, diagnostic, formative)
- Frequency used (monthly, annually, quarterly)
- Results used primarily by (classroom, school, district)
- Implications for daily classroom instruction

Instructionally-oriented Assessments

Dylan Wiliam, senior researcher at ETS, recently noted, “I recognize I’ve lost the battle over the term Formative Assessment.”

- Ed Week-Nov. 30, 2005

Vendors have entered the “formative assessment” marketplace. Eduventures Inc., a market research firm, estimates revenue for vendors at \$323 million during 2006.

So...what about the classroom?

Remember:

“Far less attention is given to classroom assessments, which occupy a far greater percentage of the time in which students are formally tested and have a much greater impact on student learning.”

A Definition:

Instructionally-oriented assessments (formative) are developed prior to teaching with primary consideration given to the assessments instructional implications.

- (J. Popham)

Instructionally-oriented assessments benefits for teachers

- Creating the assessment prior to teaching will clarify the instructional goal(s)
- Teachers can assess the effectiveness of instruction
- Teachers can determine how long to teach based on student performance

Instructionally-oriented assessments benefits for students

- Teachers provide positive, specific feedback as to how students can improve
- Students have a clear picture of the achievement target

What has EED done?

- A committee of 50 teachers from 21 schools districts worked for 15 months to create an assessment for each Grade Level Expectation



State Mandated Large-Scale Assessments

- summative (after learning has occurred)
- limited in scope (a set number of questions per subject area) for accountability (AYP)
- to assess or determine competence
- preoccupied with validity and reliability (technical and legal defensibility)

Instructionally-oriented assessments

- formative (during the learning process)
- not limited in scope (numerous measures across subjects)
- for informing instruction (adapt and change teaching)
- to provide timely and meaningful feedback to students
- generally not concerned or involved with validity and reliability

We did not collaborate with the test contractor because:

- First, we did not want to create the perception that the assessments were created for test preparation.
- Second, we did not want to minimize the state standards and Grade Level Expectations (GLE's) by mimicking a sixty item state assessment.
- Third, and most important, the assessments were developed by teachers and for teachers with teaching and learning as the focus.

Technical quality yields better assessments

- The technical quality of assessments has long been the domain of companies that create large-scale tests.
- Sound measurement principles do apply to creating instructionally-oriented assessments (historically, an area of weakness).

One immediate challenge was the use of the assessments in a variety of educational settings (large, urban high schools; small, rural K-12 schools, charter schools, multi-age classrooms, and Re-Inventing Schools Coalition schools).

We believe that a bank of formal, instructionally-oriented assessments created by teachers that addresses content validity and construct validity has the potential to impact student learning.

Content Validity

The process used for developing the Grade Level Expectations (GLE's) took into account the relationship between the Alaska Content and Performance Standards and each individual GLE. Does the item measure the knowledge or skill?

Construct Validity

Construct validity is often overlooked when developing classroom assessments. Which item-type should we use to measure a "construct"?

We also considered reliability and absence-of-bias.

Item Types for Formal Assessments

- *There is no “best” item type. The type of information assessed, the time available for administering and scoring, the scoring criteria, and the depth of student knowledge required on the assessment all factor into the selection of an item type.*

Committee members had in-depth discussions about which item-type to use for each GLE

- 1. Short-Answer Items**
- 2. Matching Items**
- 3. Binary Choice Items**
- 4. Multiple Binary Choice**
- 5. Multiple Choice Items**
- 6. Essay Items**
- 7. Performance Task Items**

Conclusion:

“The impact of improved classroom assessment is greater than that of most educational interventions.”

Springboard schools demonstrated that a process, a protocol, and collaboration by teachers for frequently discussing student data makes a big difference.

The research suggests that achievement gains can occur with high quality, technically sound, and instructionally-oriented assessments that help teachers by clarifying instructional goals while providing specific feedback to students.

*Thanks to the dedicated and amazingly talented
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