Balanced & Accurate Assessment

Tom Schimmer

Balanced & Accurate Assessment

Essential Assessment
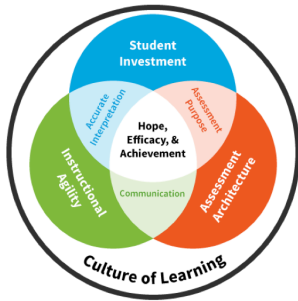
(Erkens, Schimmer, & Vagle, 2017)

_____
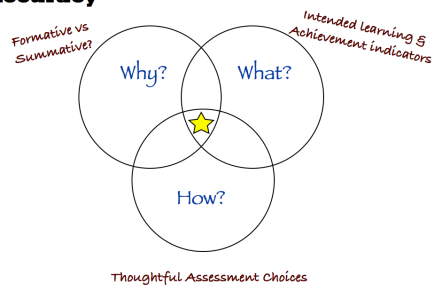_____
_____
_____
_____
_____
_____
_____
_____

ACCURACY

Inaccurate **formative assessment** has the potential to misinform students about what comes next.

Inaccurate **summative assessment** has the potential to misinform others about levels of proficiency.

_____
_____
_____
_____
_____
_____
_____
_____
_____

Assessment Accuracy

_____
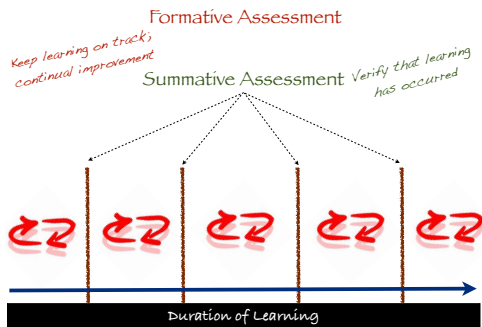_____
_____
_____
_____
_____
_____
_____
_____

Rank the essential elements from 1-3, with 1 being the element you give the most attention to and 3 being the element you give the least attention to.

Explain your 1-3 order to your partner.

"The formative and summative purposes of assessment can be so intertwined that they are mutually supportive rather than conflicting. Unless this is done, formative assessment cannot achieve its full potential to improve learning,
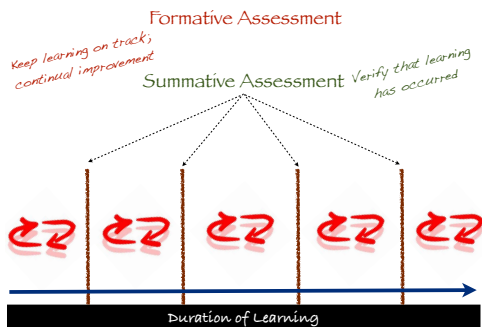
-Paul Black (2013)

Formative Assessment

Keep learning on track; continual improvement

Summative Assessment *Verify that learning has occurred*

Duration of Learning

_____

_____

_____

_____

_____

_____

_____

_____

_____

Analyzing Standards
Nicole Dimich Vagle (2015) *"Design in 5"*

1. Circle the **verbs** (and other words that indicate what students should do) in the standards.

  • *"These words lead us to the cognitive level required and the type of work in which our students need to engage."* (pg. 25)

2. Underline **key concepts**, **vocabulary words**, and **contextual information**.

  • *"Consideration of concepts and vocabulary also helps inform instruction and the type of academic language pertinent to the grade level and content area."* (pg. 26)

_____

_____

_____

_____

_____

_____

_____

Formative Assessment

Keep learning on track; continual improvement

Summative Assessment *Verify that learning has occurred*

Duration of Learning

_____

_____

_____

_____

_____

_____

_____

Under what circumstances or conditions would each of the following assessment methods be most appropriate?

Selected Response | **Constructed Response**

Performance Assessment

_____

_____

_____

_____

_____

_____

_____

_____
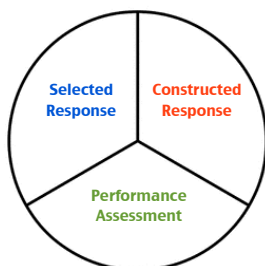
Instructional Agility

- Assessment as NOUN creates an *event-based* mindset where teachers have to "stop teaching" in order to "conduct" their formative assessment**s**.

- Assessment as VERB creates a mindset of *infused assessment* where assessment is instruction and teachers develop their instructional agility.

INSTRUCTIONAL AGILITY: The ability to make "real-time" instructional adjustments

QUESTION: What makes any *activity* a *formative assessment?*

BEFORE: _____

DURING: _____

AFTER: _____

Evidence through Questions

- Whole Class or Small Group; Individual or Partner

- Ask a question for immediate response to "assess" levels of understanding.

- Use a variety of tools: whiteboards, electronic responders, notecards, etc.

- ALL CORRECT - Move on

- NOT CORRECT = Reteach in a different way.

- COMBINATION = More questions and/or discussion

What is a "Hinge" Question
(Dylan Wiliam)

- A well constructed question that reveals the students' true level of understanding.

- Based on an important concept that is critical for students to understand.

- Students rarely (if ever) get the *right answer* for the *wrong reason.*

- Usually in multiple choice format (limits responses).

- *Other* choices represent common errors in thinking.

_____
_____
_____
_____
_____
_____
_____
_____
_____

Reflect on any successful experiences you've had/seen using *hinge questions?* What made them successful? What further enhancements would maximize their impact?

What subject/level could you see introducing *hinge* questions? Describe your initial thoughts?

Exit Slips

• Determine a key concept you want your students to reflect upon OR you wish to check for understanding.

• Can be done orally, posted, or pre-printed "slips" handed to students.

• Last 5-10 min of class...collected as students exit.

• Reviewed to determine next instructional steps.

_____
_____
_____
_____
_____
_____
_____
_____
_____

Exit Slip

$$\frac{1}{3} + \frac{3}{7} = \qquad \frac{3}{5} - \frac{2}{7} =$$

$$\frac{5}{12} + \frac{11}{18} =$$

Exit Slip

3 things I know about life during the late Middle Ages...

2 significant differences between living in the early/late middle ages...

1 similarity between life in the late middle ages and life today...

Exit Slip

This week I learned...

I am still not sure about...

I hope we will learn about...

Exit Ticket

Describe the differences between verbal, situational, and dramatic irony. Provide an example of each to clarify your explanations.

Describe the most effective ways you and/or a colleague have utilized exit tickets in the past?

What new ideas uses for exit tickets are you now thinking of?

Four Corners

- Begins with a statement/word in each corner of the room.

- Teacher presents a statement and students move to appropriate corner.

- Pair with another student to share/solidify their position.

- Group discussion ensues and student may, at the end of the discussion, move to a different corner.

- Students then write about their position.

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

A   B

Which two fractions are equivalent?

(A) $\frac{6}{2}$ & $\frac{2}{6}$

(B) $\frac{5}{9}$ & $\frac{10}{18}$

(C) $\frac{1}{5}$ & $\frac{2}{5}$

(D) $\frac{4}{7}$ & $\frac{4}{9}$

C   D

Strongly Agree   Agree

Imperialism was most responsible for the tension that led to World War I.

Disagree   Strongly Disagree

Exemplars

- Identifies clear learning targets & curricular standards through exemplars from previous years. (omit names)

- Exemplars should represent various levels of quality.

- Provide the RUBRIC or CO-CONSTRUCTED CRITERIA.

- Have the students arrange them in order of quality.

- Also, have them identify areas of strength and weakness in each exemplar.

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

"The result of decades of research on feedback and learning offers near unanimous agreement on the importance of feedback in improving student learning."

"It appears that as researchers we know less about formative feedback than would have been predicted. Our degree of not knowing, however, must be appreciated as the accumulation of knowledge resulting from 30 years of research on feedback."

-Maria Araceli Ruiz-Primo & Min Li (2013)

Limitations of Feedback Research
(Maria Araceli Ruiz-Primo & Min Li, 2013)

1. High percentage of studies focus on feedback in one experimental session. *(Long-Term effects?)*

2. Most feedback studies for math/science provided no background, guidance, or direction. *(Instructional benefits?)*

3. Many studies provided little information about the the specific tasks OR tasks were artificial. *(Link to specific type of learning?)*

Five Keys to Effective Feedback

1. Does it elicit a *productive response*?

2. Does it identify *what's next*?

3. Is it *targeted* to the learner?

4. Is it *strength-based*?

5. Does it *cause thinking*?

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

(1) Does it elicit a Productive Response?

"To compound matters further, even when feedback is well designed it will only have an effect if it's acted upon by the learner."

-Dylan Wiliam (2013)

Potential Impact of Scores

• High score OR atypically high?
  • *Unnecessary*

• Low score OR atypically low?
  • *Undesirable*

_____

_____

_____

_____

_____

_____

_____

_____

Possible Responses to Feedback

Wiliam, D. (2011). *Embedded Formative Assessment.* Bloomington, IN: Solution Tree Press.

Response Type	Feedback indicates performance EXCEEDS goal.	Feedback indicates performance FALLS SHORT of goal.
Change Behaviour	Exert less effort	Increase effort
Change Goal	Increase aspiration	Reduce aspiration
Abandon Goal	Decide the goal is too easy	Decide the goal is too hard
Reject Feedback	Ignore Feedback	Ignore Feedback

"When we try to determine what kind of feedback works we are [often] asking the wrong question. What matters is what response the feedback triggers in the recipient."

-Dylan Wiliam

1. Of the six potential negative responses to feedback, which 1 or 2 do you see most often?
2. Is there anything about your current feedback routines/habits that contributes to making these two the most common responses?

Motive - Opportunity - Means
(Valerie Shute, 2008)

- **Motive** is in reference to whether the learner needs the feedback.

- **Opportunity** is that learners receive the feedback at time when they are most able to use it.

- **Means** is a question of whether the learner has the willingness and capacity to act upon the feedback.

_____

_____

_____

_____

_____

_____

_____

_____

(2) Does it provide clarity on *what's next*?

(3) Is it targeted to the learners' levels?

The Three Levels of Feedback
(John Hattie, 2012)

Task Feedback *Novice*   *Content*
  -Describes how well the student has performed on a task.
  -Right/Wrong, acquiring specific information, building knowledge.

Process Feedback *Proficient*   *Strategies*
  -Describes the process underlying or related to tasks.
  -Strategies to detect/learn from errors.
  -Ways to establish a relationship among ideas.

⭐ Self-Regulation Feedback *Competent*   *Understandings*
  -Describes how learners can monitor, direct, and regulate their
  own actions as they work.
  -Foster the willingness and capacity to seek and effectively deal
  with feedback.
  -Encourage students to self-assess and self-correct.

_____

_____

_____

_____

_____

_____

_____

(4) Is it strength-based?

_____

_____

_____

_____

_____

_____

(5) Does it cause thinking?

_____

_____

_____

_____

_____

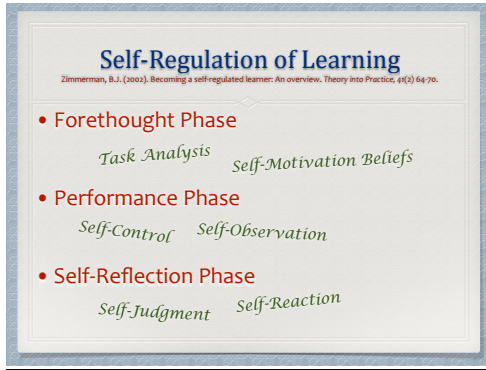# Self-Assessment & Self Regulation

Prerequisites
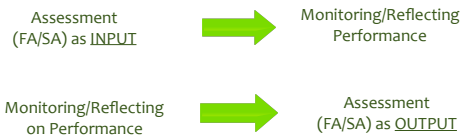
- Clear learning goals
- Clear success criteria
- Clear interpretation of the criteria.
- Classroom culture where *being wrong* is supported.
- Classroom culture with a norm of working together.
- Students who have some proficiency.
- ??

Now we're ready!

_____

_____

_____
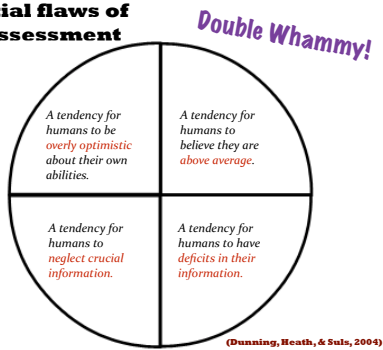
_____

_____

_____

_____

_____

Self-Assessment

Self-Regulation of Learning
Zimmerman, B.J. (2002). Becoming a self-regulated learner: An overview. Theory into Practice, 41(2) 64-70.

- Forethought Phase

  Task Analysis   *Self-Motivation Beliefs*

- Performance Phase

  Self-Control   *Self-Observation*

- Self-Reflection Phase

  Self-Judgment   *Self-Reaction*

ASSESSMENT & SELF-REGULATION

Assessment (FA/SA) as <u>INPUT</u> → Monitoring/Reflecting Performance

Monitoring/Reflecting on Performance → Assessment (FA/SA) as <u>OUTPUT</u>

It's not as clean as "IF/THEN"

Potential flaws of self-assessment

Double Whammy!

A tendency for humans to be *overly optimistic* about their own abilities.

A tendency for humans to believe they are *above average*.

A tendency for humans to *neglect crucial information*.

A tendency for humans to have *deficits in their information*.

(Dunning, Heath, & Suls, 2004)

Peer Assessment

"Peer assessment is generally an arrangement for classmates to consider the level, value, or worth of the products or outcomes of learning of their equal-status peers. However, it can also extend to learning behavior or social behavior and sometimes encompass both academic products and associated behavior."

-Keith J. Topping (2013)

Formative Assessment
Qualitative detail about areas of strength and that which needs strengthening; where, why, & how.

(+) More available (-) May not be *as* accurate

Summative Assessment
Overall, holistic judgment of quality that considers overall strengths and weaknesses.

(+) More reliable (-) Validity/Reliability concerns

GRADES?

Peer Assessment *Typology*
(Keith Topping, 2013)

- Qualitative? Quantitative? Both?
- Single sample? Multiple? Varied?
- Balanced feedback? Only one (+/-)?
- Opportunity to act?
- Individual? Pairs? Groups?
- Reciprocal? One-way? Group?
- Deliberate matching? Random?
- Same year? Different year?
- Same ability? Different ability?

Balanced Assessment References

Black, P. (2013). Formative and summative aspects of assessment: Theoretical and research foundations in the context of pedagogy. In J. H. McMillan (Ed.), *Sage handbook of research on classroom assessment* (pp. 167-178), Thousand Oaks, CA: Sage Publications.

Vagle, N. (2015). *Design in five: Essential phases to create engaging assessment practices*. Bloomington, IN: Solution Tree Press.

Wiliam, D. (2011). *Embedded Formative Assessment*. Bloomington, IN: Solution Tree Press.

Effective Feedback References

Andrade, H. (2013). Classroom assessment in the context of learning theory and research. In J. H. McMillan (Ed.), *Sage handbook of research on classroom assessment* (pp. 17-34), Thousand Oaks, CA: Sage Publications.

Black, P. (2013). Formative and summative aspects of assessment: Theoretical and research foundations in the context of pedagogy. In J. H. McMillan (Ed.), *Sage handbook of research on classroom assessment* (pp. 167-178), Thousand Oaks, CA: Sage Publications.

Butler, D. L. & Winnie, P.H. (1995). Feedback and self-regulated learning: A theoretical synthesis. *Review of Educational Research, 65(*3) 245-281.

Dunning, D., Heath, C., & Suls, J.M. (2004). Flawed self-assessment: Implications for health, education, and the workplace. *Psychological Science in the Public Interest, 5*(3), 69-106.

Hattie, J. (2009). *Visible learning: a synthesis of over 800 meta-analyses relating to achievement*. United Kingdom: Routledge.

Hattie, J. (2012). Know thy Impact. *Educational Leadership, 70*(1), 18-23.

Ruiz-Primo, M. A., & Li, M. (2013). Examining formative feedback in the classroom context: New research perspectives. In J. H. McMillan (Ed.), *Sage handbook of research on classroom assessment* (pp. 215–232). Thousand Oaks, CA: SAGE Publications.

Shute, V. J. (2008). Focus on formative feedback. *Review of Educational Research*, *78*(1), 153–189.

Self-Assessment & Self-Regulation References

Dunning, D., Heath, C., & Suls, J.M. (2004). Flawed self-assessment: Implications for health, education, and the workplace. *Psychological Science in the Public Interest, 5*(3), 69-106.

Hattie, J. (2012). Know thy Impact. *Educational Leadership, 70*(1), 18-23.

Ruiz-Primo, M. A., & Li, M. (2013). Examining formative feedback in the classroom context: New research perspectives. In J. H. McMillan (Ed.), *Sage handbook of research on classroom assessment* (pp. 215–232). Thousand Oaks, CA: SAGE Publications.

Topping, K. (2013). Peers as a source of formative and summative assessment. In J. H. McMillan (Ed.), *Sage handbook of research on classroom assessment* (pp. 395-412). Thousand Oaks, CA: SAGE Publications.

Zimmerman, B.J. (2002). Becoming a self-regulated learner: An overview. *Theory into Practice, 41*(2) 64-70.