

What is Formative Assessment?

Use your smartphone to access the link below:

<https://padlet.com/burkekathy/fa>



Click



Start this as
you walk in
the room



Creating & Evaluating Reliable Formative Assessments for All Students

LUHSD 2019-2020 SDD

Research Supported Best Practices

Learning Intentions

Success Criteria

Access and Equity and Differentiation

Engagement

Adolescent Learner

Formative Assessment

Collaboration and Academic Discourse

Opportunity for student-centered learning



Agenda

- What is Formative Assessment?
- Purpose of Formative Assessment
- Formative Assessment Examples
- Designing Reliable Formative Assessments
- Sharing Formative Assessments
- Grading and the effects of Formative Assessment
- Question/Answer
- Reflection



Learning Intention/Target

- I will be able to create formative assessments.
- I will be able to gather meaningful data on their effectiveness.



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**Start this as
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the room**

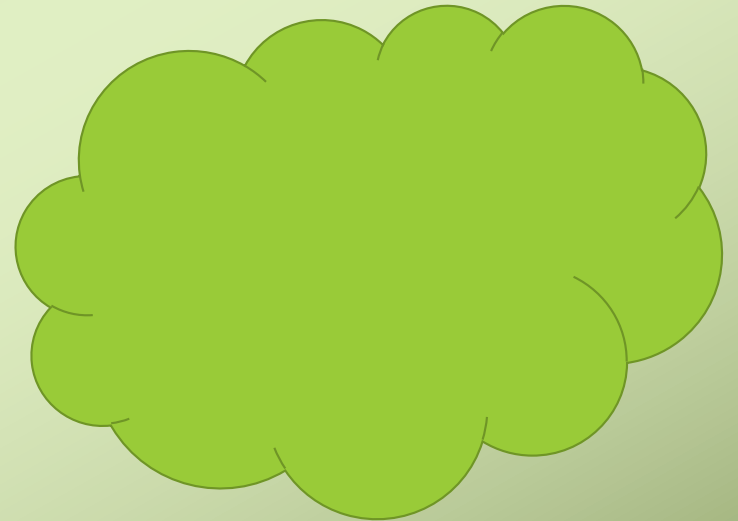
What is Formative Assessment By Rick Wormeli



Revised Formative Assessment

- After watching the video, has your definition changed?
- **Share with an elbow partner and give each other descriptive feedback on your definition - 2 minutes**

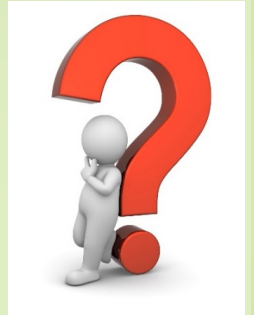
feedback **Descriptive**
Peer ~~editing~~ helps writers grow! **feedback!**



Rick Wormeli on FA

- Evaluate focused areas of the curriculum to guide instruction.
- Purposeful on-going checks for understanding that result in teachers revising instruction based on assessment data and students discovering more ways to learn as a result of the experience.
- After descriptive feedback, teachers give students opportunities to pursue those new strategies.
- Is not safe or passive; it provokes. It compels a response in the teacher and student.

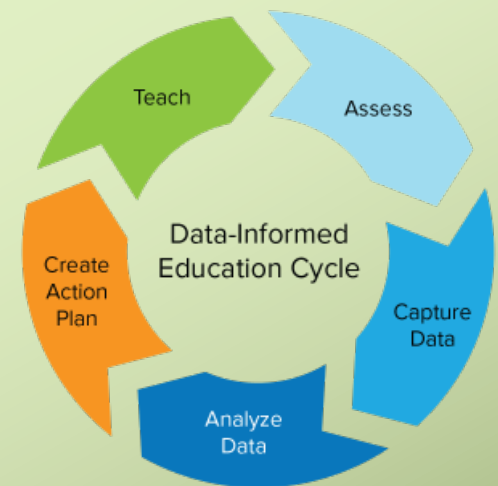
Purpose of Formative Assessment



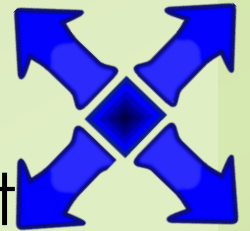
- Checks for understanding along the way that gives the “pulse” of student learning and guides teacher decision-making about future instruction.
- Provides feedback to students so they can improve their performance.
- Provides an opportunity for progress, not a declaration of deficiency.

Role of Learning Targets in Formative Assessment

- Select a learning target for the day
- How can students demonstrate their understanding of target in class?
 - **Kinesthetic, Oral, Visual, Written, Tech**
- Collect Data
- Assess
- Give Feedback
- Reflection
- Adjust teaching accordingly



Kinesthetic Formative Assessment



- ❖ Pick a room location based on your answer to the following question:

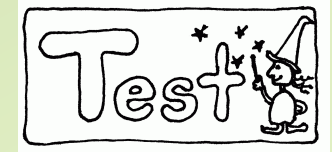
Formative Assessment can be used for:

- Front Right Corner: **Determining grades**
- Front Left Corner: **Learning Concepts**
- Back Right Corner: **Closing Achievement Gaps**
- Back Left Corner: **Giving Feedback to Students**

- ❖ What can we learn from this information?



Formative vs Summative



Formative Assessment (Assessment for Learning)	Summative Assessment (Assessment of learning)
To improve learning and achievement	To measure or audit attainment
Carried out while learning is in progress (day-to-day, minute-by-minute)	Carried out from time to time (snapshots of what happened)
Focused on the learning process	Focused on the products of learning
Part of Teaching-Learning process	End of Teaching-Learning process
COLLABORATIVE (students and teacher guide progress)	TEACHER DIRECTED (teachers control what to do)
FLUID (process influenced by student need)	RIGID (unchanging measure of mastery)
Teacher and students are learners	Teacher audits, students are audited
Evidence is gathered for improvement	Evidence is for "success or failure".

Visual Formative Assessment

Thumbs Up = **Formative**
Thumbs Down = **Summative**
Thumbs Mid = **Not Sure**



- Test at end of Unit
- Drives Daily Instruction based on student data
- Carried out weekly
- Carried out daily or more
- Teachers and students learn together
- Focused on products

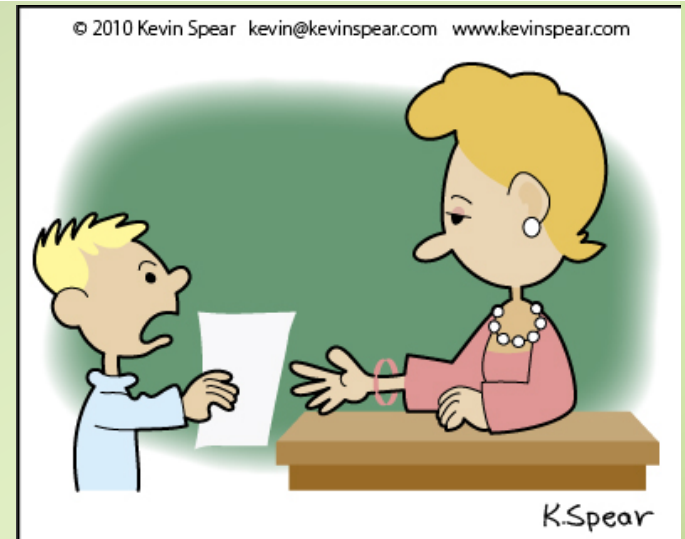
Designing Reliable Written Formative Assessments

**THREE TIPS FOR
GREAT
FORMATIVE
ASSESSMENT**



Self-Assessment

- Some students may need instruction about how to use feedback and how to do self-assessment.
- Students who have never experienced self-assessment may at first claim that feedback is solely "the teacher's job."



Research suggests, however, that once students realize that information from both teacher feedback and their own self-assessment can help them improve, they will process material more deeply, persist longer, and try harder. In short, they will become more self-regulated learners. Wiggins, G., & McTighe, J. (2005)

Self-Assessment

Learning Targets: "I can ..."	My Pre self-assessment	Score #1	Score #2	My Post self-assessment
2A: I CAN graph and describe transformations of quadratic functions in vertex form.	4	$\frac{4.5}{5} = 92\%$	89%	4
2B: I CAN graph and describe vertex, axis of symmetry, max/min value, domain and range for a quadratic function in vertex form and standard form.	5	$\frac{9.2}{10} \approx \frac{9.5}{10} = 95\%$	95%	5
2C: I CAN write equations of quadratic functions using vertices, points and intercepts.	5	$\frac{7.5}{10} \approx \frac{10}{10} = 100\%$	100%	5
1A: I CAN compare, describe and identify the different families of functions.	5	100%	97%	5
1B: I CAN compare, describe and identify transformations of parent functions.	5	97%	94%	5
1C: I CAN create and identify equations of linear functions using points and slopes.	5	94%	88%	4

RUBRIC	DESCRIPTIVE CATEGORIES	5- POINT RUBRIC DESCRIPTION
5	Perfect (MASTERY)	The student has demonstrated that he or she has a complete understanding of the learning objective. The solution is completely correct --- no mistakes or errors.
4	Proficient (MASTERY)	The student has demonstrated that he or she has achieved the learning objective, however there is a minor mistake in computation/arithmetic.
3	Close	The student has shown significant progress towards achieving the learning objective; there is a minor gap or error in the solution.
2	Off Track	The student demonstrates some progress toward achieving the learning objective; there are major gaps or errors in the solution.
1	No Progress	The student is unable to demonstrate any progress towards achieving the learning objective.
0	No Response	The student does not attempt the problem.

Self-Assessment

Student SMART goals

Directions: Spend some time looking over your tests or quizzes and assess your performance by completing the following items. Please take the time to seriously reflect on your work and do your best to offer neatly organized responses.

1. Identify one or two learning targets that were strengths and one or two that were weaknesses. Describe why you believe each one is a strength or weakness.

Strength: 2A, & 2B are my strengths because I can do it easily.

Weakness: 1B & 3C are my weaknesses cause I make simply mistakes.

2. This is one(or more) learning target I am going to work to improve on over the next week. You should come up with a SMART (strategic, specific, measurable, attainable, results-oriented and time-bound) plan.

Learning target(s): 3C

My SMART plan:

I am going to spend time each day working on this target slowly so I don't make any mistakes.

More Examples

Formative Assessment Example 1

Week 1 Quiz

Part 1

Read the description of a school.

I love my school! My classroom is painted a cheerful, yellow color. My favorite parts of the day are recess and taking care of the class hamster. His name is Bert. Bert has brown fur and loves to run in his wheel. Daddy picks me up from school every day. Sometimes we go get ice cream together.

1. What **inference** can you make about who this speaker is?
2. What **diction** helps you make an inference about the speaker? Give an example from the passage.
3. What is the **syntax** of this passage like?
4. What kind of **imagery** does the speaker use? Give an example from the passage.
5. What is the **tone** of the passage?

Formative Assessment Example 2

Find the common ratio, the term named in the problem, and the explicit formula.

1) 4, -12, 36, -108, ...

Find a_{12}

2) -1, -2, -4, -8, ...

Find a_{12}

Circle what number best describes your current level of understanding when you are done.

Level 1	Level 2	Level 3	Level 4	Level 5
I can completely unclear about what to do. I cannot figure out what I am doing wrong.	I understand some parts but I am still confused about others. I am beginning to learn this concept but I still need help.	I can use models and examples from the teacher to help me. I still make mistakes sometimes.	I am clear about what to do without help. I can show my work with models and/or symbols.	I can solve three similar problems alone. I can explain my thinking and work. I can help others understand.

Formative Assessment Example 3

Presentation Rubric

Rate areas as excellent ✓+, good ✓, or needs work ✓-

5	Presents information, findings, and supporting evidence clearly, concisely, and logically (using appropriate eye contact, adequate volume, and clear pronunciation) such that listeners can follow the line of reasoning and the organization , development, substance, and style are appropriate to purpose audience and task. Makes strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.
4	The student has demonstrated that he or she has achieved the learning objective, however there is a minor component from the above missing.
3	The student has shown significant progress towards achieving the learning objective; there is a minor gap or component from above missing.
2	The student demonstrates some progress toward achieving the learning objective; there are major gaps
1	The student is unable to demonstrate any progress towards achieving the learning objective.

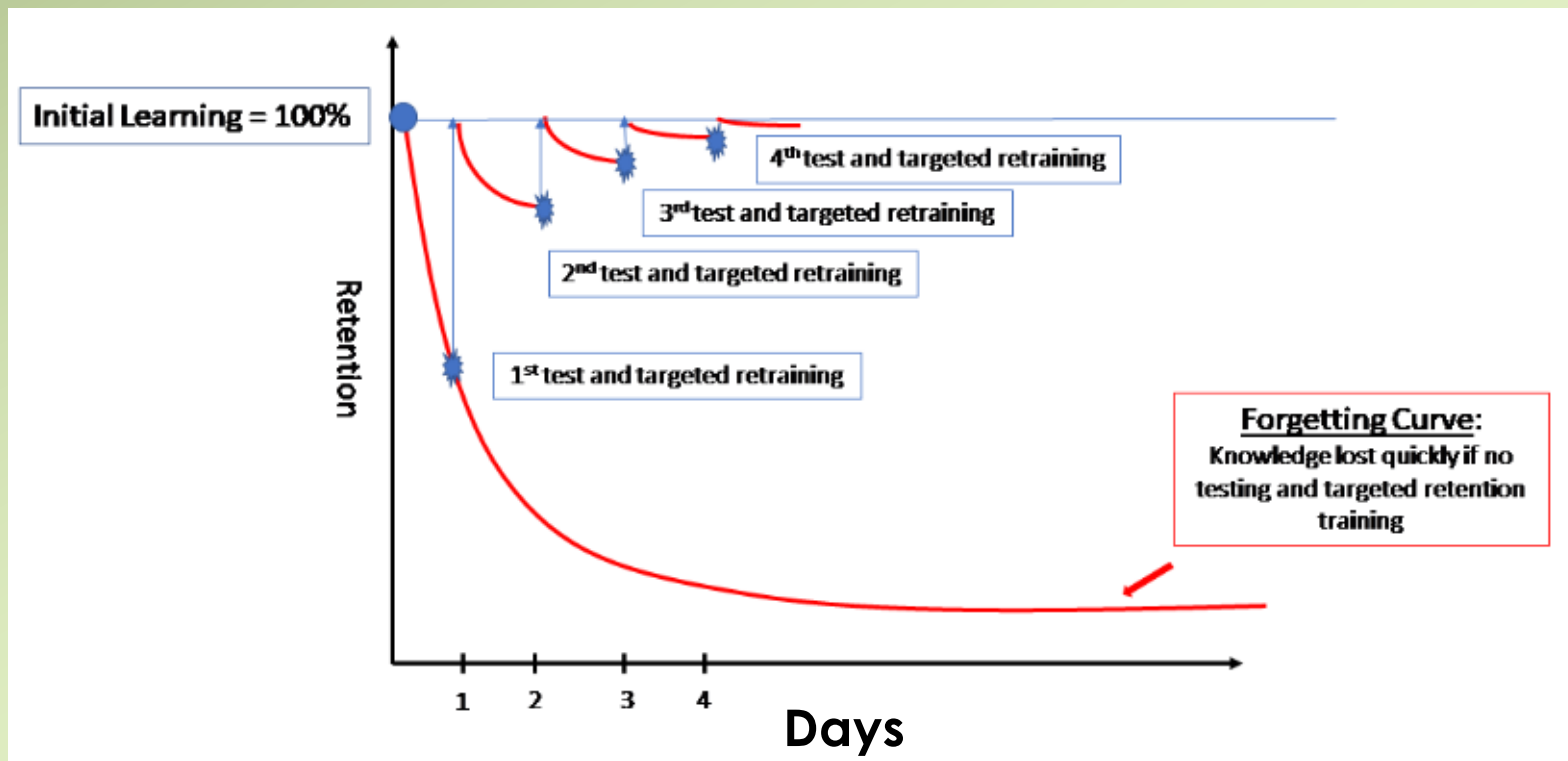
Circle a score:

1 2 3 3.1 3.6 3.9 4 4.3 4.6 4.9 5
40% 53% 65% 70% 75% 80% 83% 89% 94% 98% 100%

Peer Feedback for classmate on presentation:

1. What did you notice? What did you wonder? Mention strengths and areas of growth.

Effect of Formative Assessment



Ebbinghaus Forgetting Curve

When to grade formative assessment?

⊕ Quiz Target 3A	9.4	10	first 4, retake 5.4, retake 9.4
⊕ Quiz Target 3B	7.5	10	first 4, retake 5.3, retake 7.5
⊕ Quiz Target 3C	10	10	first 4, retake 10

- ✓ Do make learning targets clear and achievable goals
- ✓ Do provide individual and class feedback so that students know if they are progressing towards their goals
- ✓ Do allow students multiple attempts to meet a learning target

When to grade formative assessment?

- How do you grade formative vs summative assessments?
- Do formative assessments always have to be entered in the grade book?

Tech Enhanced Formative Assessment

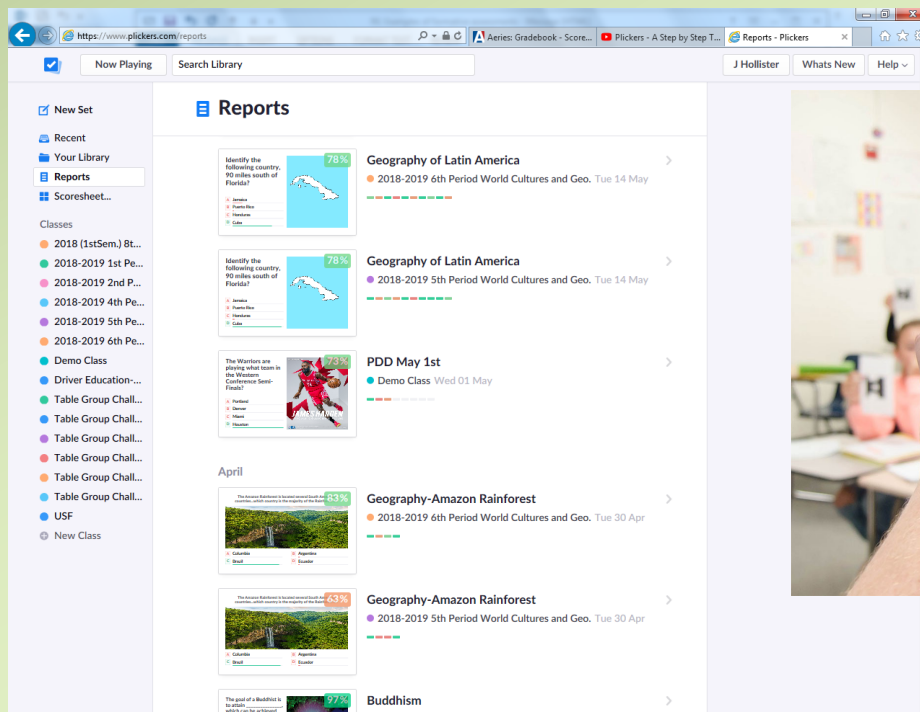
- Why digital?
 - ❖ Generates student excitement
 - ❖ Reliable data gathering
 - ❖ Can be quick
- Apps/Programs
 - ❖ Formative
 - ❖ Padlet
 - ❖ Plickers
 - ❖ Desmos
 - ❖ Turnitin.com
 - ❖ Illuminate
 - ❖ Digital Curriculum



Tech Formative Assessment

"I use Plickers a lot for my "exit ticket" or pre-assessments. Here are some screen shots of results from some recent formative assessments.

Here is a class by class breakdown, it can also be exported to Excel"



Tech Formative Assessment: Feedback

Browser: <https://www.plickers.com/setreport/5cd53c311ea320004a0f2b9>

Navigation: J Hollister | Whats New | Help

Left Sidebar:

- Now Playing
- Search Library
- New Set
- Recent
- Your Library
- Reports
- Scoresheet...
- Classes
 - 2018 (1stSem.) 8t...
 - 2018-2019 1st Pe...
 - 2018-2019 2nd P...
 - 2018-2019 4th Pe...
 - 2018-2019 5th Pe...
 - 2018-2019 6th Pe...
 - Demo Class
 - Driver Education...
 - Table Group Chall...
 - Table Group Chall...
 - Table Group Chall...
 - Table Group Chall...
 - Table Group Chall...
 - Table Group Chall...
 - Table Group Chall...
 - USF
 - New Class

Geography of Latin America

77%

2018-2019 2nd Period World Cultures and Geo.

Played Wednesday 15 May 11:00 AM

STUDENT OVERVIEW


A-Z HIGH-LOW

Adrian	70%	Erick	70%	Keyon	70%	Olivia G	100%
Aiden	80%	Giselle	50%	Kyla	100%	Omaid	90%
Andrade	50%	Hailey	60%	Kyleigh	100%	Ravnect	70%
Brynn	80%	Isaiah	60%	Lilly	90%	Reginamarie	Abs.
Camille	80%	Jenica	90%	Marcos	70%	Sarah	90%
Daenen	90%	Jessica	60%	Meghan	90%	Williams	80%
Dominic	60%	John	90%	Meranda	100%	Zachary	50%
Eduardo	80%	Karlee	90%	Oksana	70%		
Emmilio	80%	Kaylie	70%	Olivia D	60%		

QUESTIONS


ALL ANSWERED

Identify the following country, 90 miles south of Florida? **91%**



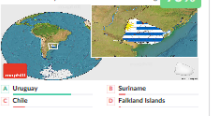
- Jamaica
- Puerto Rico
- Honduras
- Cuba

This South American country shares its northern border? **82%**




- Guyana
- Colombia
- Venezuela
- Ecuador

This country shares its border with Brazil and Argentina? **73%**




- Uruguay
- Suriname
- Chile
- Falkland Islands


This South American country has beaches on both the Atlantic Ocean and the Pacific Ocean. (See image below) **73%**



The Dominican Republic shares its island with which nation? **85%**



Which two countries share a border with Mexico (South)? **39%**



Right Sidebar:

- Continue Playing
- Reveal Set in Library...
- Archive Report
- Delete Report

Plicker Time

Who was the last person to walk on the moon?

- A Neil Armstrong
- B Gene Cernan
- C Buck Rogers
- D Buzz Aldrin



Talk to an elbow partner,
How did you know the answer/why didn't
you know the answer?

Rate your understanding of formative assessment:

- A** Really confused!
- B** Still need some clarification.
- C** I can experiment this quarter
- D** I get it and can use it (Complete Understanding)

More Examples!

Example: Formative Assessment



Peer assessment

Rotate groups

Have students work in stations, and rotate through the stations. In small groups, supervise an activity (or a discussion) and assess students in the small groups, and provide everyone in the group with feedback relevant to the discussion.

Draw Two Names

Clip slide

- You have one minute to think about how you might summarize today's lesson.
- Two names will then be drawn and those two people will stand and each give a thirty second summary of the key points of the lesson.



Summarizing is defined as synthesizing important ideas. – M. McLaughlin

Card Trick

- Each student picks a playing card.
- When the teacher asks a question, discuss it with your partner.
- The teacher will say something like, “all red cards stand” or “all Queens stand.”
- The teacher will pick someone who is standing to respond.



Classic Formative Assessment Examples



Creative Ideas for Formative Assessments

Methods to Check Student Understanding of Learning Intentions/Target

- **Exit Ticket**-ask students to respond to a quick question that they hand to you as they exit the room. (post it notes work great!)
- **Four corners**-teacher displays a question and four answer choices. Students choose an answer by going to different corners of the room. This will help the teacher determine which concepts are the most difficult for the class. Deepen critical thinking by asking students to explain/defend their answers.
- **Mini-quizzes**-give students multiple quizzes in the same format as the test so they can check their understanding.
- **Musical chairs**-using whiteboards, have students sit in a circle. Ask students a question or have them translate a word. Play some music in the background and as soon as students have the answer, they need to hold their boards in the air. If they have the incorrect response, they should fix it and hold up their board again. The last person to have the correct response loses a spot in the circle and the circle slowly closes in with each round.
- **Padlet**-students respond to questions/polls using their computers/handheld device. Gives teachers instant feedback
- **Parking lot**-allow students to write questions/comments they have throughout the lesson on a post it note and post to a board/wall in the room. Refer to the parking lot throughout the lesson to track student's needs/understanding.
- **Plickers**-students choose the response to a multiple choice question using a card that is scanned digitally and recorded by the teacher.
- **Scale of 1-4**: the teacher evaluates a performance task (like a discussion) on a scale of 1-4. 4= you got it! 3= Almost there. 2=Needs more work. 1=Needs a lot of work
- **Sequence Cards**-give students cut up sentences and have them try to put all of the words in sentences that make sense. This activity can be done individually or in pairs.
- **Snowball fight**-have each students write a question or action statement on a piece of paper. Then, students will ball them up and on the count of three throw them throughout the room. Each student will then pick up a piece of paper from the group and answer the question or complete the action statement written.
- **Stop/Go**- give each student a card with a red light on one side and a green light on the other. As students are learning a new concept, they can flip the card to the stop sign when they need help/more explanation.
- **Thumbs Up/Thumbs Down**-After practicing a skill, ask students how they feel they are doing by showing thumbs up/down. Alternative: students show a scale of 1-5 on their hand.
- **Whiteboards**-students practice writing on a small whiteboard and then hold up their boards and compare their answers with the teacher's answer. Works great for spelling/vocab/verb conjugation/equation solving etc. Can also use flashcards for pair work using the same procedure.

Regardless of which format you choose, remember.....

- Formative assessment is a cyclical *process*, not any particular test
- It is used not just by teachers but by both *teachers and students*
- Formative assessment takes place *DURING* instruction
- It provides *assessment-based feedback* to teachers and students
- The function of this feedback is to help teachers and students *make adjustments* that will improve students' achievement of intended curricular aims. (Marzano, 2010)

Formative Assessment

Answers three questions for learners

Where am I going?

Where am I now?

Where to next?

Begins with a positive, safe learning environment, an environment that promotes ongoing improvement

Clarity about learning expectations

Evidence gathering

Responsive action

Teacher:

- Identifies clear learning targets and performance criteria aligned to standards.
- Selects/develops student task(s) aligned to both content and cognitive demand of standards.
- Communicates learning expectations to students.
- Builds relevance of new learning with students.
- Clarifies: Why is this content/skill important to learn?

Teacher:

- Formulates a plan for evidence gathering (when/how during instruction).
- Probes student thinking to ascertain student understanding and/or misconceptions.
- Administers checks for understanding (individual task, writing prompt, exit ticket, ungraded quiz, etc.).
- Documents student progress.

Teacher:

- Determines best instructional next step for student learning.
- Provides descriptive feedback and/or additional instruction.
- Groups students as needed for reinforcement/extension of learning.
- Provides time for students to take individual action.
- Moves to summative assessment activities (after responsive action loop is complete).

Student:

- Internalizes learning expectations through discussion with teacher and peers, reviews anchor and exemplar artifacts.
- Connects prior knowledge of topic to expected new learning.
- Finds personal connection and relevance with topic.

Student:

- Participates in peer feedback activities.
- Tracks own progress toward learning targets.
- Participates in self-assessment activities.
- Reflects metacognitively on learning successes and challenges.

Student:

- Takes action based on teacher and peer feedback (self-regulation).
- Revisits own progress toward learning targets.
- Requests help as needed.
- Prepares for summative assessment.

Student engages with new learning

Question/Answers/Reflection

❖ Formative Assessment...How'd we do?

□ Link to reflection (understanding feedback) Padlet:
<https://padlet.com/burkekathy/feedbackfa>

❖ Questions please email:

yahrm@luhsd.net ; amaros@luhsd.net ; burkek@luhsd.net

❖ Thanks for attending.

