Assessment Strategies

the science behind how we learn

Goals

Learning Target: I can develop assessments that help guide my students' learning.

- Pretest (15 minutes)

Task: I will participate in different assessment strategies that help guide my learning.

"The most effective way to assess student learning is to provide them with a clear understanding of the success criteria through modeling" (Moss & Brockhart, 2019).

Instructions

Try to answer the questions on your own before we begin our lesson. Do this without using any extra resources (phone, dictionary, friend).

Pretest

Question #5
(TRUE)

Guessing is one of the most effective learning strategies.

Pretest

Question #6
(FALSE)

When students are given the summative assessment at the beginning of the unit, they will not learn; instead, they will just memorize the answer to the summative test.

Case Studies

Roediger

- ~10% higher scores on the final

Bjork and Soderstrom

- 10% higher scores on the final even when questions were changed to assess skill not memorization
- 15% higher scores on open-ended response questions related to the material covered in the pre-assessment

Goals

Learning Target: I can develop assessments that help guide my students' learning.

Task: I will participate in four different assessment strategies that help guide my learning.

Goals

Learning Target: I can develop assessments that held guide my students' learning.

- Pretest (15 minutes)
- Learning Targets (5 minutes)
- Informal and formal formative checks (15 minutes)

Task: I will participate in different assessment strategies that help guide my learning.

Learning Target

Question #1
(B)

Learning target: What students should be able to do by the end of your lesson.

Examples

Algebra	Biology	World Geography	English
I can describe the relationship between rational exponents and radicals.	I can identify the parts of a bacterial cell.	I can explain how infrastructure is related to level of development.	I can use textual evidence to support my inferences.

Learning Target

Question #2
(D)

Purpose: The purpose of a learning target is to help the teacher guide his/her lesson AND to help the students self-assess throughout the lesson

Learning Target Purpose

Help Students Self-assess

"Students who can identify what they are learning significantly outscore those who cannot" (Marzano, 2017).

Help Teachers Guide Lessons

"The single most common barrier to sound classroom assessment is the teachers' lack of vision of appropriate achievement targets within the subjects they are supposed to teach" (Stiggins, 2016).

Apply New Information (Formative Assessment)

Instructions

- Answer the following question on a post-it note:
  - Why do you need to understand your learning target before you create an assessment?

"The single most common barrier to sound classroom assessment is the teachers' lack of vision of appropriate achievement targets within the subjects they are supposed to teach" (Stiggins, 2016).

Apply New Information (Formative Assessment)

Instructions

- Answer the following question on in your workbook:
  - Why do you need to understand your learning target before you create an assessment?
    - Think, Pair, Share

"The single most common barrier to sound classroom assessment is the teachers' lack of vision of appropriate achievement targets within the subjects they are supposed to teach" (Stiggins, 2016).

Show me Your Thumbs (Formative Assessment)

Instructions

1) For each learning target, you will need to decide if it is a good learning target or not.
    - Thumb up=good
    - Thumb down=bad

Be prepared to share your answer!

Examples

Algebra	Biology	World Geography	English
I can describe the relationship between rational exponents and radicals.	I can identify the parts of a bacterial cell.	I can explain how infrastructure is related to level of development.	I can use textual evidence to support my inferences.

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Be prepared to share your answer!

Definition of a good learning target:

- Clear and specific
- Measurable
- Concise
- Tied to course objectives

I can compare and contrast an animal cell and a plant cell.

Definition of a good learning target:

- Clear and specific
- Measurable
- Concise
- Tied to course objectives

I can learn the programming language, Python.

Definition of a good learning target:

- Clear and specific
- Measurable
- Concise
- Tied to course objectives

I can learn the programming language, Python.

I can use the programming language, Python, to complete a data mining analysis.

Definition of a good learning target:

- Clear and specific
- Measurable
- Concise
- Tied to course objectives

I can understand the elements of the periodic table of elements.

Definition of a good learning target:

- Clear and specific
- Measurable
- Concise
- Tied to course objectives

~~I can understand the elements of the periodic table of elements.~~

I can identify the elements of the periodic table of elements based on their symbols.

I can determine the value of a quantity that is squared or cubed.

Definition of a good learning target:

- Clear and specific
- Measurable
- Concise
- Tied to course objectives

I can differentiate between independent and dependent clauses.

Definition of a good learning target:

- Clear and specific
- Measurable
- Concise
- Tied to course objectives

Padlet (Formative Assessment)

Instructions

- Follow the URL and write your learning target for Tuesday.
- When finished, evaluate one learning target.
  - Thumb up=good
  - Thumb down=needs to be changed

https://padlet.com/

Learning Target

Question #3
(TRUE)

Students need to understand the learning target in order to self-assess throughout the lesson.

Learning Target

Question #3
(TRUE)

Students need to understand the learning target in order to communicate gaps in learning.

Analogy (Formative Assessment)

Instructions

- Write an analogy to explain the purpose of a learning target.
- Write this with your neighbor on your whiteboard.
- When finished, hold up your whiteboard for Ms. Baker to check your answers.
- Be prepared to share your analogy with the class.

Learning targets are like _____because _____.

Learning Target

Question #4
(TRUE)

Students who are able to self-assess throughout the lesson are, approximately, 50% more likely to continue working when they run into learning challenges throughout the lesson.

Compare and Contrast (Formative Assessment)

Instructions

- In your workbook, explain the relationship between learning target and assessment.

Summarizing (Formative Assessment)

Instructions

- Explain the importance of a learning target to your neighbor.

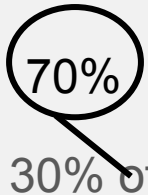
Formative Checks

Question #10
(TRUE)

Being able to summarize new information in your own words is one of the MOST effective ways to learn new material (Carney, 2017).

Formative Checks

Question #8
(FALSE)



People lose about 30% of new learning within two hours of learning it.

Formative Checks

Question #11
(TRUE)

It takes repeating something 20-50 times before it is finally memorized (Miller, 2012; Schneider & Costa, 2014).

Questions (Formative Assessment)

Questions

1. If students forget the majority of what they learn within two hours, how do I help them retain information?
2. If a student repeatedly answers a question incorrectly on his or her homework, how do I get him or her to unlearn the wrong way to answer a question?
3. How do I ensure students are ready to practice a new concept so that they retain the new information?

Assessment Checks

Question #7
(TRUE)

Forcing students to walk away from a problem will help them solve it later (Carney, 2017).

Zeigarnik Effect

“When we do not complete a task, the task is pushed to the top of our mind allowing the information to incubate longer” (Carey, 2017).

Four Corners (Formative Assessment)

Instructions

1) Read the question.
2) If you agreed with the question, walk to the left side of the room.
3) If you disagreed with the question, walk to the right side of the room.

Should you give your students formative assessments that require your students to practice new material every time you introduce a new concept?

Four Corners (Formative Assessment)

Instructions

1) Read the question.
2) If you agreed with the question, walk to the left side of the room.
3) If you disagreed with the question, walk to the right side of the room.
4) Write at least five reasons why you chose your side of the room on the piece of white post-it paper.

Should you give your students formative assessments that require your students to practice new material every time you introduce a new concept?

Four Corners (Formative Assessment)

Instructions

1) Read the question.
2) If you agreed with the question, walk to the left side of the room.
3) If you disagreed with the question, walk to the right side of the room.
4) Write at least five reasons why you chose your side of the room on the piece of white post-it paper.
5) Debate.

Should you give your students formative assessments that require your students to practice new material every time you introduce a new concept?

Formative Assessment

Question #12
(TRUE)

Students who are asked to defend their answer are more likely to get the question correct (Tait, 2015).

Goals

Learning Target: I can develop assessments that held guide my students' learning.

- Pretest (15 minutes)
- Learning Targets (5 minutes)
- Student's self-assessment (10 minutes)
- Informal and formal formative checks (15 minutes)

Task: I will participate in different assessment strategies that help guide my learning.

Formative Checks

Question #11
(FALSE)

Having students assess their learning is not differentiation.

Student Tracking Learning Targets

Learning Targets: Viruses and Bacteria I can….	Just Beginning	On my way…	Success!!
1. Define the word pathogen and provide examples.			
2. Explain why viruses are considered non-living.			
3. i.d. the parts of a virus and describe the functions.			
4. differentiate between the lytic and lysogenic life cycle of viruses and describe how these viral life cycles affect cells.			
5. Compare and contrast viroids, prions and viruses.			
6. Compare and contrast prokaryotes and eukaryotes.			
7. I can i.d. the parts of a bacterial cell.			
8. List the characteristics of bacteria.			
9. Explain the importance of bacteria to human and describe how they can be helpful or harmful.			
10. i.d. the two major groups of prokaryotes?			
11. Explain how gram positive and gram negative bacteria different?			
12. discuss three ways that bacterial reproduce and adapt?			
13. Name 2 ways bacteria cause disease?			
14. Describe antibiotic resistance, explain how it developments and discuss the impact it has had in treating diseases/infections.			

Analyzing my Results

Student Tracking Learning Targets

Strand: Reading Informational Text	Cluster: Key Ideas and Details			Standard: EE.RI.9-10.1							
I can identify words from a text.	Date										
	DATA										
I can determine which citations demonstrate what the text says explicitly.	Date										
	DATA										
I can determine which citations demonstrate what the text says explicitly as well as inferentially.	Date										
	DATA										
I can cite textual evidence to draw inferences from the text.	Date										
	DATA										

Student Tracking Learning Targets

Name: _____

Assignment Log

Assignment	Date Returned	Formative/ Summative	Grade	Did I master everything on the assignment? If not, which learning targets do I need to work on?

Problem Solving (Formative Assessment)

Instructions

1) In groups of 2-4, design a tool for students to assess their learning.

Exit Ticket (Formative Assessment)

Instructions

1) In your workbook, create an assessment for your learning target Tuesday.
2) As you leave, you will need to explain why you chose this assessment using the learning from today.