What Gets Processed Gets Learned: Formative Assessment and Feedback

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February 18, 2023

"At the heart
of the problem that teachers face in the classroom
is knowing what is going on in the minds of the students"

--Graham Nuthall (2004, p. 295)

What ways do you assess and give feedback to facilitate student learning in your classroom?

What does it look like?

Agenda

1. Starter
2. Welcome and Introductions
3. Review of the literature
4. Formative Assessment examples
5. Feedback examples
6. Close

Welcome and Introductions

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Popham (2009) defined classroom assessment as "the formal and informal procedures that teachers employ in an effort to make accurate inferences about what their students know or can do."

Finish the statement. Formative assessments are….

Formative Assessments are...

1. Ongoing and frequent
2. Check for understanding
3. Used during instruction
4. Provide instructors with actionable feedback
5. Help instructors make instructional decisions
6. Often ungraded (or just for participation)

(Black & Wiliam, 1998; Popham, 2008, 2011)

Crucial in synchronous online/asynchronous classrooms because they:

- **Provide a way to connect with students**
- **Give students opportunities to process**
- **Help students monitor their own learning**
- Let us know that students are there and participating!

Formative Assessment in Higher Education

- "Has the potential to shape, advance and transform student learning" (Brown, 2019)
- Provides evidence of student thinking (Brown, 2019; Brookhart, 2018; Hattie, 2009; López-Pastor & Sicilia-Camacho, 2017; Sadler, 1989)
- Helps students "make sense of their learning" (Brown , 2019)
- Provides feedback and illustrates gaps in student learning

Think-Pair-Share

How do you use formative assessments in your instruction? Are there any challenges to using formative assessments?

We use formative assessments in all of our courses

1. **Univ 1004: College Success Strategies** (Student Success Center)
2. **Social Studies Methods** course (School of Education)
3. **Professional Dispositions and Digital Inquiry** courses (History and ELA cohort in School of Education)
4. **History Lab** (Interdisciplinary course with School of Education, History Department and Art/Creative Technologies.

Formative Assessment in Higher Education

- Be part of the learning process
- Be purposeful
- Promote active engagement, **active learning**, and **PROCESSING**
- Encourage dialogue
- Encourage metacognition, self-reflection, self-assessment

(Bloxham & Boyd, 2007; Brown, 2019)

Part of the Learning Process

Just Do It

One the notecard, write down 2-3 topics (or questions) that you expect to be addressed in an interview for a teaching position.

Professional Dispositions

Part of the Learning Process

Starter

What words or phrases come to mind when your hear the term MOTIVATION?

Write one word/phrase on each post-it. Try to come up with **at least** 5 per group/duo.

Put your post-its on the word wall.

Dialogue

College Success Strategies

What does or what could a starter activity look like in your daily instruction?

Part of the Learning Process

Three W's	Students discuss or write: • **What** did we learn today? • **So What?** (relevancy, importance, usefulness) • **Now What?** (how does this fit into what we are learning, does it affect our thinking, can we predict where we are going)

College Success Strategies

- I learned that I should try to group together information when studying to learn better, plus better study strategies
- This information will help me study better in the future
- I will apply what I learned to my own study techniques

Student Example

Part of the Learning Process

Exit

Explain/Discuss/Describe the difference between studying and learning.

College Success Strategies

① Studying is reviewing and using recall to try and learn something. Learning is actually understanding the inf

1. Studying is the reinforcement of learning studying is the enrichment of concepts & knowledg that war learned

Student Example

Think about how you explained the difference between studying and learning. Get with a partner/small group and share your ideas. Develop a new explanation that reflects a group consensus.

Follow Up

How could a close activity be incorporated into your daily instruction?

How would you use the information from a closure?

Turn and Talk

Purposeful

I. Purpose: The purpose of this assignment is to provide you with the opportunity to reflect on your assigned reading/viewing and to generate short, meaningful summaries. Creating thoughtful summaries requires considerable cognitive organization and reflection, and results in significant meaning making.

25 Word Summaries

History Lab

Purposeful

III. Format: Each summary should be a clear, concise, and coherently organized statement of the main ideas in the reading. Specifically, each summary must be *25-words or less* and should focus on the essential main ideas of the reading. It is important to remember that the task is to represent the *"author's"* main ideas. Whether or not you agree with the main ideas is a different issue. Ultimately, in expressing the author's main ideas, you will demonstrate your own understanding of the material in the reading.

Purposeful

Students explored the Christiansburg Institute using AR and scaffolded inquiry. Students learned about segregation by examining historical evidence and touring the 3D building models. (25)

Students investigated the mystery of the Christiansburg Institute using augmented reality and scaffolded inquiry. Through innovative technology and historical sources students examined school segregation. (25)

Purposeful

Mindset Sort

College Success Strategies

Generally avoid challenges and see obstacles as signs they are in the wrong direction.	Seek out new challenges and see obstacles as problems to solve.
Hides or makes excuses for mistakes, becomes discouraged and frustrated by by failure.	Takes ownership of mistakes and understands that failure often leads to learning and long-term success.
Rejects negative feedback and can become defensive, usually focuses on positive feedback	Appreciates constructive/candid feedback and appreciates the perspectives of others

Purposeful

1. In the search bar, conduct *title* and *just books* search for *Designing Your Work Life* by Bill Burnett and Dale Evans. Where can you find a print copy of this book?

2. Is the book currently available to check out? How do you know?

3. Is there an e-book available? How do you know?

4. Does Virginia Tech have access (print or e-book) to *Teach Yourself How to* Learn by McGuire? If so, what is the format?

5. Find the **MLA 9th ed.** citation for *Teach Yourself How to Learn*. Include it below.

Active Engagement

Look at this list or the list on paper for 30 seconds

Baseball	Picture frame	Tissue	Paper clip
Bread	Pair of dice	Fingernail polish	Spoon
Marble	Leaf	Doll	Scissors
Cup	Jar of sand	Deck of cards	Ring
Blanket	Ice	Marker	String

College Success Strategies

Active Engagement

Practicing reading strategies

Complete the SQ3R handout or annotate the pdf
You can complete on paper or digitally

10-15

College Success Strategies

Question:
What was life like for a child during the Great Depression?

Make a copy of the analysis slides, open the the Bobby Murray source document in the shared drive and **fill in the first SCIM-C template**.

Bobby Murray
Route 3,
Malvern, Ark.
July 8, 1939

Children's Bureau
Dept. of Labor
Washington, D. C.

Dear Sirs:

I write you concerning the help that is given to school children who aren't able to pay all expenses of schooling.

I am a boy, fifteen years old, and in the tenth grade. My only near relatives are a mother and infant niece. My sister, our only support, died last December and without some help from some where I will be unable to continue in school.

My mother has no regular work as she has my late sister's baby to care for. My mother sews and manages to pay our living expenses.

I am very anxious to continue in school and would pay my own expenses but a boy under eighteen can't find work in our town.

Please send me the information and details as soon as possible.

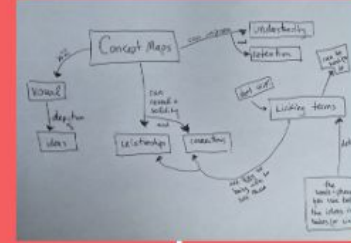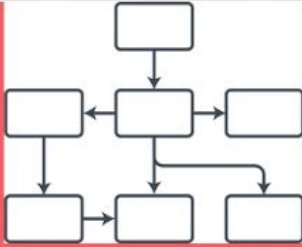For proof of my school attendance, write to:

Supt. J. L. Pratt
Malvern Public Schools
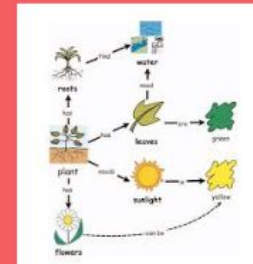Malvern, Arkansas

He will tell you all you need to know.

Hoping for a quick reply,

Bobby Murray

Active Engagement

Using the big paper, make a concept map of study strategies. You can pull from these notes, McGuire and other sources.

College Success Strategies

Active Engagement

You will then create a How-to Guide that introduces the tools and also provides a series of examples of how you would use the tool in your classroom- whether face to face or remotely.

Steps to Take to Create the How-To Guide
- You will need to play with the tool and explore with it affords
  - o Identify its potential and the pedagogical opportunities it can afford (as well as potential issues)
  - o Generate ideas of ways to use the tool within your classroom. E.g. potential assignments, projects, inquiries. How could you use it in class this semester?
- Experiment with the tool in order to create a model/demonstration of how the tool should be used in class as part of the project by students or colleagues.
- Then look to bring all this together in an aesthetically pleasing and easy to follow "how to guide"

Digital Inquiry

What does or what could active engagement look like during your daily instruction?

Encourage Dialogue

"At the heart
of the problem that teachers face in the classroom
is knowing what is going on in the minds of the
students"
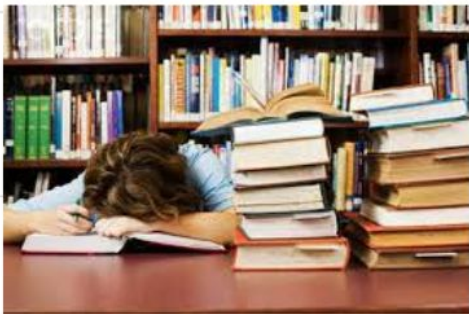--Graham Nuthall (2004, p. 295)
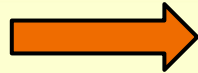
Just Do It: Think, Pair, Share
1. What parts of the lesson plan provide opportunities for you to discover what's going on in the minds of your students?
2. What specific tools/strategies can you use to determine what students know?

Methods

Encourage Dialogue

To Cram or Not to Cram

Talk with a neighbor

Is this an effective strategy?

Why or Why not?

College Success Strategies

Encourage Dialogue

Elevator Pitch

Individually, create an ELEVATOR PITCH/SPEECH for **your assigned topic** using the material from your frame. The pitch should be no more than 20-30 seconds and explain your topic . Elevator pitches are succinct and interesting.

Students then shared elevator pitches with their classmates.

Methods

Encourage Dialogue

Discussion strategies

Hot Seat

- Before group, mentor places questions or statements on random seats in the room. Students pick up question or statement at their seat and answer.
- Students without a hotseat question are asked to agree or disagree with things being said.

Round Table

- Group members speak one at a time in an identified order without interruption – helps to demonstrate the wide range of ideas in the room
- Indicate how much time per person – 2 minutes, or 3 sentences, etc.
- Ask for volunteer to start and then go clockwise or counter clockwise.

Fishbowl

- Put students in a circle and take turns pulling questions related to the topic out of a hat.
- Then pass the question around the circle and each person either passes or responds.

Brainstorming – Idea Listing

- Clarify that all ideas are welcome - discussion, prioritization will come later.
- Figure out how to record ideas.
- Mind Map Variation – facilitator does a visual drawing of the ideas and how they're connected as people share.

Large class sizes can make dialogue challenging. How do or how can students dialogue with each other and you?

Big Paper

Metacognition, Self-Reflection

Exit (Notecard)

How has/does time management affect your academic success? Give 2 specific examples.

Pick one of the strategies we talked about today to try. Which one will you try and why?

We will talk about how it went during the next class.

College Success Strategies

1 - Procrastination destroyed my GPA
2 - Poor time management made me stress out

I Plan on trying the Pick 3 a day strategies

- It helps me complete my assignments.
- It helps me study for exams
- I am going to try to eat me frog, because i think its a great way to look at tasks.

Student Examples

Flip
Flip Grid

Have you used this tool?

Metacognition, Self-Reflection

Students watch webinars and complete video reflections on Flipgrid. Students are given a selection of prompts to address.

Timed Reflection: e.g. 60 seconds.

After viewing the webinar or training video

Immediately **create a summary or synthesis** of what you have watched.

Summarize your reactions, learnings and thoughts. Below are some example prompts if you are stuck:
What resonated with you?
What challenged/scared you?
What was confusing for you?
How would you adapt or modify your learnings to inform your own practice?

Compass Point Reflection

After viewing the webinar or training video

1. **E = Excited**
What excites you about this idea or propositions? What's the upside?
2. **W = Worrisome**
What do you find worrisome about this idea or proposition? What's the downside?
3. **N = Need to Know**
What else do you need to know or find out about this idea or proposition? What additional information would help you to evaluate things?
4. **S = Stance or Suggestion for Moving Forward**
What is your current stance or opinion on the idea or proposition? How might you move forward in

Claim, Support, Question

After viewing the webinar or training video

Make a Claim
Claim: An explanation or interpretation of some aspect of the topic.
Identify support for your claim
Support: Things you see, feel, and know that support your claim.
Ask a question related to your claim
Question: What's left hanging? What isn't explained? What new reasons
does your claim raise?

Digital Tools

- Socrative
- Poll Everywhere
- Mentimeter
- Padlet
- Answer Garden

Socrative PRO for higher education

Stimulate higher learning by tracking the real-time understanding of your students.

Mentimeter

What is AnswerGarden

AnswerGarden is a new minimalistic feedback tool. Use it for real time audience participation, online brainstorming and classroom feedback.

Our easy-to-build presentations, interactive Polls, Quizzes, and Word Clouds mean more participation and less stress

Feedback

Think back to the opening question

How is feedback given and used in your classroom?

———

Feedback

- Formative assessment and feedback are part of the active learning process (Brown, 2019; Nicol & Macfarlane-Dick, 2006)
- Feedback is a dialogue between instructor and student (Nicol & Macfarlane-Dick, 2006)
- Results in learning for both instructors and student (Brown, 2019;Hattie, 2009)
- Students need opportunities to use and apply feedback (Brookhart, 2018; Brown, 2019; Nicol & Macfarlane-Dick, 2006)

Principles of Effective Feedback

- A synthesis of research on feedback identified the following principles of good feedback practice (Nicol & Macfarlane, 2006)
  - Clarifies what good performance looks like
  - Provides students quality information about their learning
  - Provides opportunities to close gaps
  - Provides opportunities to apply feedback
  - Provides information that can shape teaching

Clarifies what good performance looks like

Each summary will be graded using the following criteria and point system:

1. Structural Format   _____/5 pts
    a. Is the summary 25 words or less? (1)
    b. Is the summary a coherent sentence, or sentences?   (2)
    c. Does the summary avoid a simple listing of concepts, terms, or themes? (2)

2. Clarity of Thought and Expression   _____/5 pts
    a. Are the ideas expressed well, well thought out, and integrated? (2)
    c. Does every word in the summary have a meaningful purpose? (2)
    d. Are correct grammar and syntax used? (1)

3. Delineation of Core Message   _____/15 pts 3x5 pts
    a. Does the drafting protocol (step 1-8) and final summary accurately reflect an
    attempt to get to reading's central or essential messages?
    b. Does the drafting protocol and final summary show a clear attempt to
    integrate/incorporate the reading's central or main messages/ideas?
    c. Does the summary reflect an understanding of the reading?

History Lab

Provides students quality information about their learning

6) Are teaching methods/instructional materials, appropriately and effectively (including transitions) used to support answering the guiding question and meeting objectives –if lecture use a frame?

Minimal   Optimal

2_____4_____6_____8_____9_____10

Explain:

You need more WAIT TIME. You asked "what is boycott?"Christian started to answer but you moved on. Try and wait 10 seconds.

Next time, include a variety of formative assessments (questions are fine but WHAT ELSE….can you do?)

Methods

Provides opportunities to close gaps

1. Asking for help or going to offices hours.

2. Review over notes daily.

3. Stay ahead of all my assignments

You have some great discussion in the SMART section. I would add some of that material into the actual goal statement. For example, "I will review my _____(I would state the class) notes every night for 45 minutes."
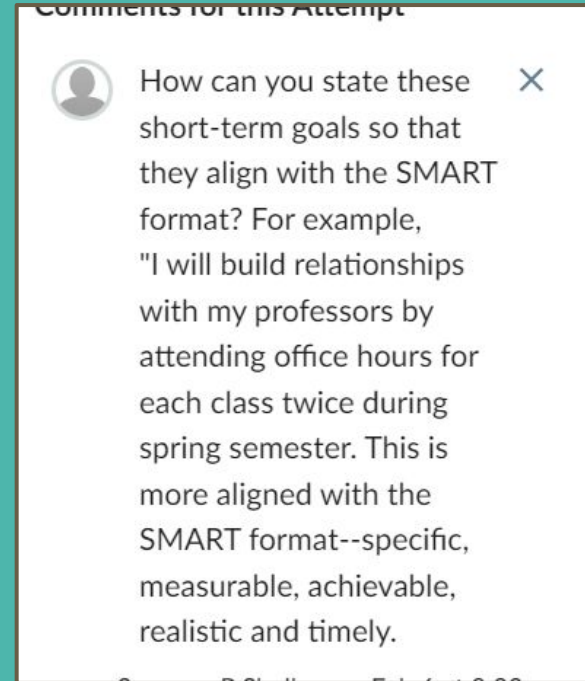
×

College Success Strategies

Provides opportunities to apply feedback

Think back to what we learned about effective presentations. I would suggest you use bullet points instead of paragraphs. You should have less information on the slides and then you could have all the other information in your speaker notes. The slides in your presentation with bulleted or numbered information were easier to read.

Student received the above feedback and had the opportunity to make changes and resubmit.

College Success Strategies

Provides information that can shape teaching

I realized that my asynchronous SMART goal lesson needed revision because students were not writing goals in the SMART format.

Comments for this Attempt

How can you state these short-term goals so that they align with the SMART format? For example, "I will build relationships with my professors by attending office hours for each class twice during spring semester. This is more aligned with the SMART format--specific, measurable, achievable, realistic and timely.

What types of feedback do students receive in your classes?
What opportunities do students have to apply feedback?

Exit

Three Ws

- What did we learn today?
- So what? (relevancy, importance, usefulness)
- Now what? (how does this fit into what we are learning, does it affect our thinking, can we predict where we are going?

Scan QR for folder of materials on formative assessments

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