Module 4: Closing the gap, Part 2: Involving students and their peers in the formative assessment process

Micro-Course 2: Learning Acceleration Using Formative Assessment Processes in the Classroom (Advanced Version)

Warm-Up

Metacognition is described as thinking about one's own thinking.

In what ways do students in your class engage in self-monitoring and demonstrate that they are thinking about their own thinking?

Formative Assessment Process

“...a planned, ongoing process used by all students and teachers during learning and teaching to elicit and use evidence of student learning to improve student understanding of intended disciplinary learning outcomes and support students to become self-directed learners.”

Self- and Peer-Assessment

<table>
<thead>
<tr>
<th>Where the learner is going</th>
<th>Where the learner is now</th>
<th>How to get there</th>
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</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>Clarifying, sharing, and understanding learning intentions and success criteria</td>
<td>Engineering-effective discussions, tasks, and activities that elicit evidence of learning</td>
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<tr>
<td>Peer</td>
<td>Activating students as learning resources for one another</td>
<td>Activating students as owners of their own learning</td>
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<tr>
<td>Learner</td>
<td>Activating students as owners of their own learning</td>
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Students as Owners of Their Own Learning

- **Where am I going or what are the goals?** At this point students must understand the learning target and success criteria.
- **Where am I now or what progress is being made toward the goal?** This requires ongoing formative assessment including self- and peer-assessment.
- **What do I need to do next or what activities need to be undertaken to make better progress?** In order for students to close the gap between the intended and current learning, instructional adaptations are made by the teacher and learning adjustments are made by the student.

Self-Regulating Learners

- Cognition
- Metacognition
- Motivation
Metacognition

- Identifying what one knows
- Identifying what one can do
- Identifying what one knows about one's own cognitive abilities
- Identifying what one has learned from previous experiences

Goal Setting

Self-assessment questions:
- Where am I going?
- Where am I now?
- What do I need to do next?

Metacognitive Lenses:
- What I know
- What I can do
- What I know about my own cognitive abilities
- What I have learned from previous experiences

Consider a goal that you have created for yourself. How have you considered the self-assessment questions and the metacognitive lenses when you created this goal?

Self-Assessment

...a formative assessment process in which students:
1) practice applying concepts and skills
2) recognize the successful characteristics of concepts and skills in their work
3) translate judgments into action plans for improvement

Formative Self-Assessment

Right click on the image to open the hyperlink and watch a 5-minute video on self-assessment or use the hyperlink below.

https://www.youtube.com/watch?v=CkFWbC91PXQ&t=1s

Strategies/Tools for Formative Self-Assessment

Strategies for self-assessment range from those that focus on one particular lesson, assignment, or topic to those that are more broad and encompass self-assessment over a period of time (e.g., end of unit, end of the school year, etc.)

A couple broad self-assessment strategies include:
- **reflective journaling** where students are asked to think back on their learning growth and progress over a specified amount of time
- **students gathering work to put into a portfolio** intended to demonstrate growth or achievement and share their reflections with their parents during student-led conferences

Example self-assessment tools:
- Checking work against success criteria with highlights
- Traffic light code
- Reflection: I used to think, now I think
- Two star s and a wish
- What happened, what’s next reflection

Strategies/Tools for Formative Self-Assessment

Example self-assessment tools:
- Reflection on learning growth and progress
- Traffic light code
- I understand
- I sort of get it
- I don’t get it

Example self-assessment tools:
- Comparative analysis of student work and goals
- Self-assessment rubrics
- I understand
- I sort of get it
- I don’t get it

Example self-assessment tools:
- Reflection on learning growth and progress
- Traffic light code
- I understand
- I sort of get it
- I don’t get it
Effective Formative Self-Assessment

Does the student...
- accurately identify strengths and weaknesses
- internalize the self-assessment process
- evaluate their own work regularly
- set goals and monitor their progress
- ask questions
- see mistakes as opportunities for learning

Peer Feedback

“Research shows that the people providing the feedback benefit just as much as the recipient because they are forced to internalize the learning intentions and success criteria in the context of someone else’s work, which is less emotionally charged than one’s own.”


Success Criteria:
- Introduce your topic in a way that engages your audience
- Appeal to pathos (emotion), logos (logic), and/or ethos (credibility)
- Use a combination of visuals and multimedia to reinforce important points
- Provide an ending that provides a call to action

Starting your speech with an inspired “what if” scenario was a good way of getting the audience’s attention. I thought the scenario was well thought out and the way you rewrote the scenario at the end of the speech really tied into your main message. I think the ending could have been stronger if you returned to the scenario when you had your call to action. By the end of the speech, I had forgotten why you had this call to action. Your visuals were really helpful as you were making each of your points and they really appealed to my emotions.
Peer Feedback: A secondary math example...

Success Criteria:
• I can explain what it means to find the volume of a solid figure and how volume is measured.
• I can find the volume of cylinders, pyramids, cones, and spheres by using formulas.
• I can solve real-world math problems using my understanding of volume.

We noticed you correctly identified the formulas for cylinders, pyramids, cones, and spheres, but when you went to apply the formulas in the context of the real-world math problem you seemed to have a hard time applying the correct formulas. Consider breaking the complex figure into distinct solid figures first and then applying the formulas. We use our pencil to draw over the complex figure to help visualize the different solid figures within the complex figure.

Peer Feedback: An elementary science example...

Success Criteria:
• Explain what you want to measure and what tools will be used
• Identify the key variable and factors that are controlled and held constant
• Make predictions about what would happen if a variable changes

Your design shows that you know what you are going to measure at time. You’ve identified the control variable as the height that you will drop the feather and the tested variable as the size of the feather. But we’re not clear about your predictions of what will happen with changing the size of the feather. Can you provide a prediction with an explanation?

Peer-Assessment

Right click on the image to open the hyperlink and watch a 5-minute video on peer-assessment or use the hyperlink below:
https://www.youtube.com/watch?v=hqh1MRWZjms
Peer Feedback Tools

Example peer assessment tools: Ladder of Feedback, Prompts, Sentence Starters, Glow & Grow

Strategies for Instruction

- Sentence Starters:
  - “Have you thought about ...?”
  - “I wasn’t clear what you meant when you said...”
- Model... Model... Model along with think-alouds
- Fishbowl

Characteristics of Useful Formative Feedback

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<th>Feedback from Peers</th>
<th>Student Self-Assessment</th>
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<td>Students engage in peer assessment and become activators of thinking for one another.</td>
<td>Feedback is used to engage students as they become self assessors.</td>
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<td>Students are provided supports, such as rubrics or other success criteria formats, to help them engage in the process.</td>
<td>Students may use a rubric, model, or other success criteria to determine where they are in relation to mastery of the learning target.</td>
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<td>Models of student performance can assist students as well.</td>
<td>Armed with this knowledge, they then plan revisions for their work and set goals for future learning.</td>
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<td>By engaging in this process, students not only help one another, they also have the opportunity to refine and deepen their own thinking.</td>
<td>Teachers monitor this process and provide scaffolds as necessary.</td>
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Going Deeper: Micro-Course 2

Module 1
➢ Overview: Formative assessment processes and learning acceleration (Advanced)

Module 2
➢ Where the learner is going: Clarifying, sharing, and understanding learning intentions and success criteria

Module 3
➢ How to get there: Providing feedback that moves student learning forward

Module 4
➢ Closing the gap, Part 2: Involving students and their peers in the formative assessment process

Reflection Questions

1. Describe the benefits of self- and peer-assessments as part of the formative assessment process.
2. Examine upcoming assignments and create a plan for students to engage in either self-assessment and/or peer-assessment.
3. Based on what we discussed in this module and your prior knowledge, what are some additional ways that students can learn how to self-assess their work?
5. What is one key takeaway and one lingering question you have after listening to this module?