ANALYSING SAMPLES OF STUDENT WORK

Analysing samples of student work allows students to recognize, describe and apply success criteria, and use the information to monitor their progress toward their learning goals (Ontario Ministry of Education, 2010).

A process to support students to analyse samples of student work may include:

- Providing a variety of samples of student work (with names removed) of varying levels of quality.
- Students, working in pairs or small groups, review success criteria for the work.
- Using the success criteria and three or four samples of work of varying levels of quality, students describe the qualities of each sample of work (e.g., by annotating the work).
- Students analysing each sample of work to assess:
  - Does the work meet the success criteria?
  - What level of quality does it have and why?
  - What next steps need to be taken in order to improve samples of lower quality?

By critiquing student work samples at various levels of quality, adolescents develop the evaluative skills they can apply to their own work, and they become partners and advocates in the assessment process (Ministry of Education, 2010). In turn, students become invested in their roles and responsibilities as learners.

IN BRIEF

Students who are metacognitive are able to consciously focus attention on important information, accurately judge how well they understand something, use intellectual strengths to compensate for weaknesses, and employ fix-up strategies to correct errors. Most importantly, they are their own best self-assessors as they proceed through their learning.

REFERENCES

Adolescents who are metacognitive, experience more confidence as they learn, make accurate self-assessments of why they are or are not succeeding, and are more aware of what they know and don’t know (Bennet, 2012; National Research Council, 2000; Ritchard, Church & Morrison, 2012). Metacognitive adolescents also seek to expand their repertoire of strategies and resources, and view themselves as on-going learners and thinkers (Moss & Brookhart, 2012).

IN THE CLASSROOM

IN THE CLASSROOM

GETTING STARTED

• Provide learning goals and opportunities for students to use co-constructed success criteria and descriptive feedback to monitor learning and plan next steps. Make learning goals and success criteria visible in the classroom. Explicitly show students how to use the learning goals and success criteria to guide their learning. Include opportunities to assess students’ understanding, making clear which learning goal and success criteria are used to gather the assessment information.

• Incorporate frequent and varied opportunities for students to think metacognitively and to express their thinking in writing and orally. Help build students’ vocabulary to express ideas about their metacognitive, including words such as strategy, monitor, and self-assess.

• Use think alouds to explicitly demonstrate metacognitive thinking. Ask students to identify how their metacognitive thinking would support further learning.

• Help students understand what it means to have a growth mindset, and explore the connections between growth mindset and metacognition.

TRY IT OUT: INTEGRATING METACOGNITION INTO LEARNING PROCESSES

Students use a number of processes that guide their learning, including the Design Process in Technological Education, the Creative and Critical Analysis Processes in The Arts, and Scientific Investigation in Science. There are also processes that are used across subjects, including the inquiry process, and the writing and reading processes. Students are metacognitive when they can articulate how each stage of the process contributes to their learning.

As students work through these processes, integrate opportunities for students to plan (e.g., creating plans of action, identifying strategies and resources required for each stage of the process), monitor (e.g., reviewing plans of action and revising as necessary), and evaluate (e.g., judging the effectiveness of their use of a process).

PROMPTING STUDENTS’ METACOGNITIVE VOICE

Hattie and Timperley (2007) state that an ideal learning environment occurs when both teachers and students seek answers to three questions: Where am I going? How am I going? and Where to next? For the teacher, answers to these questions help to inform next steps in instruction, and for the learner, these answers provide a framework to metacognitively think about and act on their learning.

In the chart below, these questions are expanded on to provide a variety of sample prompts for students to develop their internal metacognitive voice.

<table>
<thead>
<tr>
<th>Where am I going?</th>
<th>How am I going?</th>
<th>Where to next?</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the learning goals?</td>
<td>What progress is being made toward the learning goal?</td>
<td>What activities need to be undertaken to improve the progress?</td>
</tr>
<tr>
<td>What are the success criteria?</td>
<td>What’s the gap between what I know and what I need to know?</td>
<td>What is the next learning goal?</td>
</tr>
</tbody>
</table>

Sample questions for reading in general

• How do these learning goals compare to others’ learning goals I have tackled? Why? What steps have I taken this far? Are the strategies I’m using helping? Do I need to choose other strategies? What feedback have I received at this point? What is the feedback telling me? Based on where I am now, are there adjustments I need to make?

Sample questions for reading

• What do I need to get out of this text? What is my purpose for reading?
• Do I need to read this entire text, or can I just scan and look for the sections that I need?
• Is this text like others I have read?
• Do I have any previous experiences with this type of reading task that will be helpful to keep in mind for this task?
• What is the next learning goal?
• Which of the learning goals and success criteria (at this point in the learning) do I feel I understand?
• What strategies did I need to use? Were they the most helpful? Why?
• What process will I need to use? Is the writing taking me in a direction I expected? What are my next steps (e.g., now that I am finished with this piece of writing, what worked and what didn’t?)
• What progress is being made toward the learning goal(s)? What activities need to be undertaken to improve the progress? What is the next learning goal?
• What criteria and descriptive feedback to monitor learning and plan next steps. Make

Students can be taught metacognitive strategies, “including the ability to predict outcomes, explain to oneself in order to improve understanding, note failures to comprehend, activate background knowledge, plan ahead, apportion time and memory.”

Ontario Ministry of Education, 2013

“Grades 9 to 12, curriculum expectations in many disciplines focus directly on education and career/life planning. In addition, there are opportunities within the secondary school curriculum for students to focus on self-awareness and on decision making and goal setting. In a number of disciplines (e.g., health and physical education, the arts, English) students develop personal and interpersonal skills and metacognitive skills.”

Canada, 2013

Ontario Ministry of Education, 2013

Conclusion

Adolescent learners can be taught metacognitive strategies, "including the ability to predict outcomes, explain to oneself in order to improve understanding, note failures to comprehend, activate background knowledge, plan ahead, apportion time and memory.”

National Research Council, 2000

The Adolescent Literacy Guide outlines components which support students’ ability to think, reflect, and express Metacognition is one of the components to which this ability connects.