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

Bennet, S. (2011). "Fulfilling the Promise of 'All Students Can.'" *Comprehension Going Forward.* Portsmouth, NH: Heinemann.

Buehl, D. (2011). *Developing Readers in Academic Disciplines.* Newark, DE: International Reading Association.

Hattie, J. & Timperley, H. (2007). "The Power of Feedback." *Review of Educational Research.* 77 (1), 81-112.

Moss, C. & Brookhart, S. (2012). *Learning Targets: Helping Students Aim for Understanding in Today's Lesson.* Alexandria, VA: ASCD.

National Research Council. (2000). *How People Learn: Brain, Mind, Experience and School*. Washington: National Academic Press.

Ontario Ministry of Education. (2013). *Creating Pathways to Success: An Education and Career/Life Planning Program for Ontario Schools*. Queen's Printer for Ontario.

Ontario Ministry of Education. (2010). *Growing Success: Assessment, Evaluation and Reporting in Ontario Schools.* Queen's Printer for Ontario.

Ritchhart, R., Church, M. & Morrison, K. (2011). *Making Thinking Visible: How to Promote Engagement, Understanding and Independence for All Learners*. San Francisco: Jossey-Bass.

ALERT

FOR MORE ON...

Adolescent Literacy

Literacy GAINS. (2012)
Adolescent Literacy Guide: A Professional Learning Resource for Literacy, Grades 7-12

Questioning

Literacy GAINS. (Winter 2013)
ALERT: Make room for Students to Pose and Pursue Questions

Student Collaboration

Literacy GAINS (Winter 2015)
ALERT: Make room for Inferring During Reading

"It is this metacognitive awareness that needs to be awakened…[o]therwise students drive merrily, or perhaps begrudgingly, along through the dense of of text, regardless of smash-ups in comprehension."
Beuhl, 2011

ALL
ADOLESCENT LITERACY LEARNING
Winter 2016

ADOLESCENT LITERACY: ENGAGING RESEARCH AND TEACHING

Make room for
THINKING METACOGNITIVELY

DID YOU KNOW?

Being metacognitive is like having a voice that checks in along the way as we learn. Learners who are metacognitive have an internal dialogue with themselves when they are learning (and at other moments in their lives). Our metacognitive voice wonders "Is this making sense?" "I know I didn't totally understand what I heard, but do I have enough information?" and "I must have totally misread the previous page because this isn't what I was expecting" (Beuhl, 2011; National Research Council, 2000). Then, it is acting on those wonderings that makes metacognition powerful, because it allows the learner to continue or to change course toward attaining the learning goal .

However, students do not necessarily know how to have an internal dialogue that helps them plan, monitor, and evaluate their understanding. "A 'metacognitive' approach to instruction can help students learn to take control of their own learning by defining learning goals and monitoring their progress in achieving them" (National Research Council, 2000).

Adolescents can 'use' metacognition to help guide their learning over time. They are metacognitive when they plan at the beginning of a task and monitor as they complete it. They are also metacognitive when, in the moment, they stop in the middle of their reading because it doesn't make sense, and they re-read to see if their understanding improves.

WHY IS IT IMPORTANT FOR ADOLESCENT LEARNERS?

When adolescents are metacognitive, they are more likely to feel a sense of independence and control in their learning. Metacognition allows students to be able to stimulate and monitor their learning with less teacher support. This is particularly important as adolescents progress through the grades and are required to learn more specialized concepts and processes in the various disciplines, and as they prepare to apply a wide range of knowledge and skills in a variety of life situations.

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 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."

Ontario Ministry of Education, 2013

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 metacognition, including words such as strategy, monitor, and self-assess.
- Use think alouds to explicitly demonstrate metacognitive thinking. Ask students to identify the 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

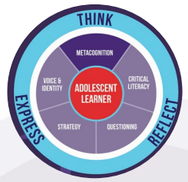
Hattie and Timperley (2007) state that an ideal learning environment occurs when both teachers and students seek answers to three questions: *Where am I going? How am I going?* and *Where to next?* For the teacher, answers to these questions help to inform next steps in instruction, and for the learner,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

Where am I going?	How am I going?	Where to next?
What are the learning goals? What are the success criteria?	**What progress is being made toward the learning goal(s)? What's the gap between what I know and what I need to know?**	**What activities need to be undertaken to improve the progress? What is the next learning goal?**
Sample questions for learning in general		
• How do these learning goals compare to others learning goals I have tackled? • Do the success criteria give me ideas about what I need to know and do? • What process will I need to use? • What might a plan of action or timeline look like for my learning? • What strategies might I need to use to help me reach the goal(s)?	• Which of the learning goals and success criteria (at this point in the learning) do I feel I understand? • 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?	• Based on where I am now, what do I need to do next? What strategies will be most helpful? Why? • Did the adjustments help? Is my monitoring helping? • What strategies did I need to use? Were there things I didn't do that I would do next time? • What can I take forward from this point in my learning that will help me further my learning?
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?	• As I read, is this text making sense? Do I need to stop and re-read? • Are the strategies I am using helping me understand? • Now that I am into the text, is this really the text I need (for my learning goals)? • When I am not understanding, what's getting in the way? Do I need to focus more? • Do I need to change the environment I'm in so that I can focus more?	• What are my next steps (e.g., now that I am this far in the text, now that I have finished the text)? • Did I get what I needed from this text? • Did I feel like I had enough strategies to help me understand? • Now that I have read the text, do I know what I need to do next? • Are there parts of the text I need to return to (e.g., to make jot notes, to share with someone)?
Sample questions for writing		
• What do I know about the purpose of this writing? • How will knowing the purpose of and audience for the writing guide my work (e.g., are these jot notes for myself, and I can use my own abbreviations or is this for someone else and I need to think about the language)? • Are there resources and tools I am going to need to do this writing? • Do I have enough background knowledge to be able to write on this topic?	• Do I need to stop and read what I have so far to see if it makes sense? To see where I need to go next? • Did reading my writing out loud to myself help me to think about the flow of the writing? • Did getting feedback from my peer help me with a part I am having trouble with? • Is the writing taking me in a direction I didn't expect to go? Am I getting off-track, or is this something I need to explore further? • When I check in with the learning goals, does it seem like I am on the right track?	• What do I really need (in my environment) to be able to do this kind of writing? • At this stage in my writing, do I need to gather more information from other sources? • When I read over this feedback on my draft, what are the things I need to do next? • Now that I am finished with this piece of writing, what worked and what didn't work? What might I try to remember to change for next time?

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."

National Research Council, 2000



The *Adolescent Literacy Guide* outlines components which support students' abilities to think, express and reflect. Metacognition is one of the components to which this ALERT connects.