



# SDCO CONNECTION

## SPECIAL EDITION ON ASSESSMENT & EVALUATION – PART THREE

# ASSESSMENT as LEARNING

by  
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### WHAT IS METACOGNITION?

**Metacognition** is the act of *thinking about thinking*. It includes what learners understand about the way they learn and how well they can regulate and adjust or correct their learning.

Students who are highly metacognitive:

- are aware of the factors that influence their performance;
- know how to execute procedures that will help them learn;
- know when and why to apply various strategies;
- plan appropriately for learning;
- monitor their learning;
- regulate and evaluate their goals and conclusions.



Metacognitive awareness has been identified as a characteristic that distinguishes expert from novice learners in regard to their ability to regulate their understanding and transfer their learning to new situations (Bransford, Brown, & Cocking, 2000).

### CAN METACOGNITION BE TAUGHT?

**Yes.** Teaching for metacognitive awareness, also known as assessment as learning, involves teachers “helping all students develop their capacity to be independent, autonomous learners who are able to set individual goals, monitor their own progress, determine next steps, and reflect on their thinking and learning” (Growing Success, 2010). It is important for people to learn to recognize when they have not acquired sufficient understanding of concepts and material and regulate their learning in order to identify what needs improving. Two basic approaches to support metacognition in the classroom include strategy-based instruction and the creation of supportive social environments (Lin, 2001).

### WHAT EFFECTIVE STRATEGY-BASED INTERVENTIONS CAN TEACHERS USE?

#### EXPLICIT INSTRUCTION

*Students require explicit instruction to learn how to learn from text.*

*“If students are to acquire advanced reading skills and become critical readers within their disciplines, then teachers need to go beyond assigning merely what to read by giving students explicit explanations about the why and how of their reading” (Jacobs, 2008, p.14).*

Teachers can:

- select strategies that will engage students in complex thinking. Strategies that require students to compare and contrast, summarize, and synthesize facilitate students’ engagement in the material at a more elaborate and deeper level;
- provide explicit instruction by explaining in a step-by-step manner the knowledge, skills and processes that are involved in the learning of a particular concept or strategy;
- make their thinking visible and obvious to students. Strategies such as think aloud provide models that expose students to new methods of processing information;
- explain the value of metacognitive activity (by highlighting how strategies help facilitate performance) and emphasize the need for self-monitoring;
- release responsibility gradually to help students move beyond their current level of achievement. Provide models, shared practice, and guided practice prior to asking students to complete tasks independently.

## WHAT CAN TEACHERS DO TO CREATE SAFE SOCIAL ENVIRONMENTS?

Teachers can:

- make learning goals explicit at the beginning of every unit and lesson;
- provide time and guidance for students to set and frequently monitor their own learning goals;
- help students to recognize that achievement can be obtained through effort. Learners that attribute success to effort as opposed to ability are more likely to sustain strategy use;
- encourage questioning and ongoing discussion about thinking and learning. Foster dialogue where learners openly and honestly share what they do and do not know;
- provide opportunities for students to make their thinking visible;
- include self-reflection as part of your routine instruction;
- engage students in self-assessment by asking them to consider how well they did rather than giving direct feedback;
- motivate students to use the strategies they were taught by making the effects of strategy use obvious to students.

### LEARNING GOALS versus PERFORMANCE GOALS

*Students who set performance goals (e.g., goals that focus on achievement scores and out-performing peers) are more likely to utilize surface level processing strategies. Students who set learning goals (e.g., goals that focus on developing competencies) are more likely to utilize strategies that would lead to a deeper understanding (Dweck, 2006).*

## WHAT ARE SOME CONSIDERATIONS AS YOU PLAN FOR IMPLEMENTATION?

As you consider how to embed metacognitive activities in the daily process of teaching, keep the following in mind:

- It is about “setting out to build adolescents’ cognitive tools” (Conley, 2008, p.91) and not about merely adopting strategies to teach reading and writing.
- Appreciate what is required to achieve effective strategy instruction.
- Do not treat metacognitive activities as separate or isolated activities.
- Draw on the experience and expertise of your colleagues by collaborating with others including your instructional coach and Learning Support Teacher.

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### MODELING

*When modeling teachers begin by naming the strategy, state the purpose of the strategy, explain when the strategy would be used, and demonstrate how the strategy was completed (Fisher & Frey, 2008).*

To further  
your  
knowledge...

To find out more about metacognition and strategy implementation, you may want to download and read the following documents:

Growing Success – Assessment, Evaluation, and Reporting in Ontario Schools – First Edition Covering Grades 1-12, Ministry of Education, 2010.

#### Metacognition Guide – Literacy GAINS

<http://www.edugains.ca/resourcesLIT/CoreResources/MetaGuide-June4%202009.pdf>

#### Strategy Implementation Continuum – Literacy GAINS

<http://www.edugains.ca/resourcesLIT/CoreResources/MetaGuide-June4%202009.pdf>

Student Self-Assessment – Special Edition #4, 2007. The Capacity Building Series built by the Literacy and Numeracy Secretariat to support leadership and instructional effectiveness in Ontario schools.

<http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/StudentSelfAssessment.pdf>

### References:

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- Conley, M. (2008). Cognitive strategy instruction for adolescents: what we know about the promise, what we don't know about the potential. Harvard Educational Review, 78(10), 84-106.
- Dweck, C. (2006). Mindset - The New Psychology of Success: How We Can Learn To Fulfill Our Potential. Ballantine Books, New York, N.Y.
- Fisher, D., & Frey, N. (2008b). Releasing responsibility. Educational Leadership, 66(3), 32-37.
- Jacobs, V. (2008). Adolescent literacy: putting the crisis in context. Harvard Educational Review, 78(1), 7-39.
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