Metacognition

Overview

Metacognition is thinking about thinking. Metacognitive practices, such as planning how to approach a given learning task, monitoring comprehension, and evaluating progress toward the completion of a task, help students learn how to gain active control over the cognitive processes engaged in learning.

> *"When students are metacognitive, they understand themselves as learners, a given task, a variety of strategies, and how to use them in a variety of situations."*
>
> (Nokes & Dole, 2004)

Impact of Metacognition

- Facilitates active rather than passive learning
- Gives students a greater awareness of their learning
- Promotes "deeper learning"
- Makes students aware of their own thinking

(McElwee, 2009)

Teachers

When presenting students with a task, the teacher promotes a metacognitive environment.

Comprehension

What questions are you asking yourself about...?

Connection

How is this problem like one we have already solved?

Strategic

Why is this strategy the best way to solve the problem?

Reflection

What worked well? What didn't work? What could I do differently next time?

Students

Students presented with a task engage in metacognative thinking.

Comprehension

What makes me wonder?

Connection

How does this connect to what I already know?

Strategic

What is the first step I should take to solve this problem?

Reflection

Which answers did I get correct? Which were incorrect? Is anything still confusing?

Missouri Department of Elementary & Secondary Education
MO EDU-SAIL Educational Systems and Instruction for Learning
Effective teaching and learning for ALL students
Missouri District Continuous Improvement (DCI)
NAU Northern Arizona University
Institute for Human Development