WHAT ARE YOU THINKING?

✓ How is your mood this morning?
✓ What are the sights and sounds around you?
✓ How are your appetites? (food, drink, need for sleep, etc.)
✓ Where might your mind wander during this session?
✓ What is your purpose for attending this session?
✓ What do you think you might learn?
✓ How will you remember info from this session?

Thanks to: Kristine Kelly
ATLAS Literacy Coordinator
ABE Teaching and Learning Advancement System
FOSTERING METACOGNITIVE SKILLS AND CRITICAL THINKING IN YOUR CLASSROOM

Sarah Goldammer
Southern Illinois Professional Development Center
The function of education is to teach one to think intensively and to think critically.

-Martin Luther King Jr.
“A great deal of research in the past two decades has identified metacognition as key to deep learning and flexible use of knowledge.”

(Schoenbach, Greenleaf, Czikes & Hurwitz, 1999)
Logic will get you from A to B.

IMAGINATION will take you EVERYWHERE.

A. Einstein
WHAT IS METACOGNITION?

meta = more than or beyond

cognition = mental processes
Metacognition is a process of going beyond what they are currently thinking and doing while reading and learning.
Knowledge of cognition

• Knowledge of factors that influence performance
• Knowing different types of strategies to use for learning
• Knowing what strategy to use for a specific learning situation
Regulation of cognition

- Setting goals and planning
- Monitoring and controlling learning
- Evaluating one’s own regulation
EXAMPLES OF METACOGNITION

- Comprehension monitoring
- Cognitive awareness
- Cognitive reflection
- Self-monitoring
- Self-regulation
- Metacognitive conversation
POSSIBLE CAUSES OF LOW METACOGNITIVE SKILLS

- Slow decoding skills
- Low background knowledge
- Low vocabulary knowledge
- Limited working-memory capacity
- Not knowing comprehension strategies
- Knowing strategies but not knowing how and when to use them
“Proficient readers listen to their voices as they read, make ongoing corrections or adjustments and are aware of how meaning evolves.”

(Keene & Zimmerman, 2007)
“I don’t hear any voices inside my head. There’s nothing going on up there when I read. I just say the words.”

- An 18-year-old student
NEUROPLASTICITY – CHANGE YOUR BRAIN

https://www.youtube.com/watch?v=ELpfYCZa87g
“Metacognitive conversations are especially critical for students who struggle with learning.”

(Buehl, 2009)
“Students who are self-regulating – who set goals, make plans for reaching their goals, and then monitor and regulate their cognitions and behavior – are more likely to do well on academic tasks.”

(National Reading Research Council, 2009)
METACOGNITIVE KNOWLEDGE

Person variables
Task variables
Strategy variables
"Whoa! OK, it’s not your inability to judge a fly ball. ... Here’s your problem."
WHAT DO YOU THINK?

Share with a partner what you think metacognition is.

How can you help your students increase their metacognition skills?
WHAT ARE WE ALREADY DOING?

Metacognitive strategies are already in teachers' repertoires. We must become alert to these strategies, and consciously model them for students.
MODELING – CONNECTING THE DOTS
MODELING – CONNECTING THE DOTS

THINK ALOUD
• Did I get the correct change?
• It’s not spicy enough. What should I add?
• Does this repair estimate seem fair?
• Is this note to my child’s school clear enough?
• I don’t want to go to work today. What will my boss do if I call in sick?
• I didn’t get what happened in that part of the movie. Should I replay the scene?
LESSON PLANNING

• Frequent recaps
• Multiple Modalities (aim for 3 per lesson) - e.g. lecturing, demonstration, small group application, silent writing, visual illustration
• Frequent explanations
• Regular example exercises - students write examples to illustrate a skill or idea you’re teaching
• Tie each learning activity to each other and to homework
Metacognition

Thinking Stems

I’m Wondering...
I’m Thinking...
I’m Noticing...
I’m Seeing...
I’m Feeling...
It Reminds Me of...
I’m figuring out...
Next Steps

Please add comments to SLN Blog
http://speciallearningneeds.blogspot.com/
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