



Key Ideas from Theory and Research

Standard 4: Students Engage in Metacognitive Activity to Increase Understanding of and Responsibility for Their Own Learning

*Directions: Read the excerpts from the research base for Standard 4.
As you read each paragraph, highlight key words.*

- Metacognition is a foundational cognitive process for effective learning in all disciplines. At its most basic, it is “thinking about thinking” (Flavell, 1979).
- Students who monitor their own thinking and take action are more successful than their peers in academic activities (e.g., Bransford et al., 1982; Slife, Weiss, & Bell, 1985; Zimmerman & Martinez-Pons, 1992).
- The 21st Century skill of adaptability, including the ability to respond effectively to feedback, is what the learner does in the monitoring and reflection phase of self-regulated learning (e.g., National Research Council, 2012).
- Affective self-regulation (the ability to properly regulate one’s emotions) is related to academic success through motivation, a state supported by metacognition (Bandura, 1986; Eisenberg, Valiente, & Eggum, 2010; Ray & Smith, 2010).
- A learning goal orientation supports adaptive motivational patterns that promote the establishment, maintenance, and attainment of personally challenging and valued learning goals (e.g., Dweck & Leggett, 1988; Elliott & Dweck, 1988).
- Instructional strategies for teaching metacognition and encouraging motivation to use metacognitive strategies need to occur at a meta-level instead of at a performance level (Kuhn, 2000).

YOUR TURN
STANDARD 4
MODULE