

# Thinking About Thinking Improves Learning

## Metacognition and Student Learning

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**Think effectively! Monitor thinking! Reflect on the quality of your thinking! These are all metacognitive actions that can develop lifelong learners capable of participating thoughtfully in society. Metacognition is “thinking about thinking.” Teachers must guide students to value the importance of what goes on in their heads when they are thinking. Metacognitive thinkers evaluate their own ideas and actions for quality and work toward improvement. Metacognitive thinking begins in the early years and gives insight, revealing the gaps in knowledge, thinking, and actions. Metacognition helps students become aware of how, why, and what they learn.**

**SELF**  
**REGULATED**  
DISCIPLINED  
**MONITORED**  
**DIRECTED**

Incorporating the use of metacognitive strategies and activities in classrooms helps students become educated thinkers. Direct instruction or explicit teaching methods help students acquire these thinking behaviors. The Think Aloud strategy makes thinking visible and helps students observe what is expected. Thinking journals and reflective conversations allow teachers to observe student thinking. Questions can nurture the development of behaviors and skills of quality thinking. The following questions are examples students may use to question themselves and to produce evidence about learning.

### **SELF-REGULATED**

What do I need to learn and to be able to do? Do I establish goals for my learning? Do I commit to goals? What evidence shows I am meeting my expectations? Do I remain on task or give up? Do I monitor my learning? Am I willing to accept the ideas of others?

### **SELF-DISCIPLINED**

Am I responsible for my learning? Am I asking quality questions? How do I make personal meaning of the content/learning? Am I connecting what I learn to my life? Can I give examples of what I learn? Have I effectively planned how to evaluate the content/task? Is anything missing? Do I interrupt while someone is speaking? Do I listen to the ideas of others before I make a decision? Do I consider the outcomes of my actions? How might the consequences affect others? How do I use this information to be a better student?

## SELF-MONITORED

Do I know what I understand as compared to what I do not understand? Am I reaching my learning target? What have I learned? Is what I have learned accurate? Am I well informed? Am I asking questions as I read or about what I am learning? Do I understand the content? What are my strengths/weaknesses? What strategies am I using? Are the strategies helping me achieve success? Do I accurately interpret information? Am I using feedback to improve?

## SELF-DIRECTED

How can I take my learning to a higher level? What action do I need to take to improve myself? What are other ways I could arrive at a better conclusion? How can I better evaluate the accuracy of the information? What causes me difficulty when I think about solutions or make decisions? What strategies might I use to improve myself as a developing critical thinker? What strategies are more useful to me? What might I do to perform better? What do I not understand?

**Providing a risk-free atmosphere where students are encouraged to voice their thoughts through reflection, discussion, and sharing is important in developing thinking abilities.**

Skillful thinkers learn to think critically and problem solve when they focus on their own thinking and become more reflective about thinking and learning processes. When students demonstrate metacognitive behaviors at high levels and these behaviors become routine, levels of learning and achievement can increase.

## References

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