

# Making Metacognition Transparent

## Through a “Gallery Walk”

We work in a world of quick transitions and immediate gratification, and we seldom take the time to stop, look inward, and take stock. If we do, we often don't use that “stock” to make changes or plans for the future. This is where *metacognition* plays a key role. Simply put, metacognition is thinking about thinking. It includes:

**awareness**

**monitoring**

**adaptation**

**Have students use sticky notes to reflect on their success and failures.**

### Successes

**Think about  
a time when...**

...a writing  
assignment was  
successful.  
What did  
you do?

...you  
learned a lot.  
What did  
you do?

...you did  
well on a  
test. How did  
you prepare?

### Failures

**Think about  
a time when...**

...you failed  
a test. How  
did you  
prepare?

...you just  
didn't get it.  
What were you  
doing at that  
moment?

...a writing  
assignment  
failed. How did  
you work through  
the assignment?

**Based on students' answer patterns, what will they learn about metacognition, and how can they plan differently for the next assignment?**

**For sources on metacognitive research and a description  
of the full gallery walk activity, visit**

**[oakland.edu/teachingtips](http://oakland.edu/teachingtips)**

## **The “Gallery Walk” as a Means to Making Metacognition Transparent**

You turn a test back to your students. They look at their papers, and you span the room. Your students’ visages are telling – some look shocked, others proud, and still others are hurt or even bored. Perhaps one or two students ask to meet with you after class to “talk about their grade” or ask for the dreaded extra credit assignment. But, how often do they ask themselves how their studying approach (other than perhaps amount of time spent studying) affected their performance? Do they analyze their feedback to see if there were particular content areas they struggled with? Particular test item types?

In other words, do your students ever stop and take stock, whether of a test, an in-class activity, an assignment, or a conversation?

We work in a world of quick transitions and immediate gratification, and we seldom take the time to stop, look inward, and take stock. If we do, we often don’t use that “stock” to make changes or plans for the future. This is where metacognition plays a key role. Simply put, metacognition is thinking about thinking. It includes:

- becoming aware of how we learn (cognitive awareness),
- monitoring our learning strategies and evaluating how well those learning strategies work (self-regulation), and
- adapting our learning strategies when and if needed (Flavell, 1979).

In general, students who use metacognitive strategies (i.e., plans or techniques used to help students become more aware of what and how they know) tend to have higher performance than students who do not use metacognitive strategies (e.g., Ertmer & Newby, 1996; Lovett, 2008; Nett, Goetz, Hall, & Frenzel, 2012). One way to help students take stock and learn about metacognitive strategies is through a variation on the gallery walk, wherein you ask students to reflect on both their academic successes and failures.

First, introduce the concept of metacognition (including awareness, monitoring, and adaptation), and ask students to think about their academic successes and failures. Ask students to write responses to the following prompts on sticky notes:

Think about a time when...

- you learned a lot. What did you do?
- a writing assignment was particularly successful. What did you do to make it successful?
- you performed particularly well on a test. How did you prepare?

- you just didn't "get it." What were you doing at that moment?
- a writing assignment failed. How did you work through the assignment?
- you failed a test. How did you prepare?

Students place their responses to each prompt on separate charts (one chart per prompt) placed around the room. You (the instructor) facilitate a whole group conversation, walking from chart to chart (in essence, you're taking a "gallery walk" with each chart a work of art). What are common characteristics across students' successes? Their failures? What were the students doing in each of those situations? How are the characteristics related to awareness, monitoring, and adaptation? Through this process, students see a pattern in their collective academic successes and struggles.

Then, ask students, "Based on the gallery walk and what we've learned about metacognition, how will you plan differently for your next assignment/project/exam?" This final question could be addressed through a minute paper, a take-home assignment, or another chart in the gallery walk.

#### **Resources:**

Ertmer, P.A. & Newby, T.J., (1996). The expert learner: Strategic, self-regulated, and reflective. *Instructional Science*, 24, 1-24.

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *American Psychologist*, 34, 906-911.

Lovett, M.C. (2008). Teaching metacognition. Paper presented at the annual EDUCAUSE meeting, Orlando, FL.

Nett, U. E., Goetz, T., Hall, N. C., & Frenzel, A. C. (2012). Metacognition and test performance: An experience sampling analysis of students' learning behavior. *Education Research International*, 1-16.

#### **Submitted by:**

Freya Kinner, Instructional Developer

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