

BOX 4.7

Using a Metacognitive Bookmark

PURPOSE

When teachers first model metacognitive conversation with a Think Aloud, many give students a bookmark for keeping track of the common kinds of thinking processes the teacher will be demonstrating.

Students can use this same bookmark as a scaffold for their own metacognitive conversations when practicing with a partner.

As a scaffold, its use should fade as students become more comfortable with metacognitive conversation routines.

PROCEDURE

- Give each student a copy of the bookmark and briefly review students' understanding of the various categories and examples.
- Explain that as you Think Aloud, you will model many of these. Ask students to listen for examples.
- Think Aloud, modeling metacognitive conversation.
- Invite students to describe some of the thinking processes you used.

Let students know that they can use the bookmark whenever they practice metacognitive conversation on their own and with classmates.

Note: The bookmark is a sample only. Please adapt and revise it according to your subject area and student needs.

Sample Metacognitive Bookmark

Predicting

I predict . . .
In the next part I think . . .
I think this is . . .

Visualizing

I picture . . .
I can see . . .

Questioning

A question I have is . . .
I wonder about . . .
Could this mean . . .

Making connections

This is like . . .
This reminds me of . . .

Identifying a problem

I got confused when . . .
I'm not sure of . . .
I didn't expect . . .

Using fix-ups

I'll reread this part . . .
I'll read on and check back . . .

Summarizing

The big idea is . . .
I think the point is . . .
So what it's saying is . . .

English teacher Doug Green³ reverted to literature instruction instead of thinking aloud—more than he is happy remembering:

I found myself falling into explaining the short story to them rather than talking about my thinking as I read the short story. It was really hard for me to discipline myself to do that because one of the thinking strategies is making connections to other things. And as soon as I start making connections to other things, I lead myself very quickly into explaining the short story instead of talking about my thinking techniques. That was hard to resist.

The idea of modeling a Think Aloud for her adult GED students gave technical college instructor Michele Lesmeister the jitters. As she explains in

Planning to Introduce Think Aloud

Think Aloud refers to the practice of making one's thinking visible by making it audible; a reader literally speaks out thoughts as they occur in interaction with a text. Instructors strategically model Think Aloud to help students see, hear, and practice the mental activities engaged in by good readers. As a classroom routine, Think Aloud helps students focus on comprehension and helps the instructor know when and how students' comprehension goes awry, giving instructors the opportunity to consider when and how to intervene.

Engaging students in strategic metacognitive conversation serves several purposes:

- Engages all four dimensions of classroom life (personal, social, cognitive, and knowledge-building);
- Provides practice putting names to cognitive activities that help students figure out what they are thinking;
- Encourages students to notice and say when they are confused and use each other to brainstorm meaning through thinking aloud;
- Helps students notice text structures and how to navigate various genres, which builds confidence and stamina. Many instructors feel very comfortable with the theory of Think Aloud, but nervous about the process of “Making it Real”! Here are some guidelines to keep in mind as you scaffold the activity:
 - **Choose a relevant course text** that will engage students in predicting, visualizing, making connections, identifying problems, using fix-ups, and/or asking questions. Of course, students may not engage in all of these reading processes at any one time. The goal is to support students' development in knowing when, why, and how to engage a text.
 - **Model for the students** how you, as an expert reader, would read the text, remembering that what you choose to model will depend on what you want students to glean from the text and activity.
 - **Be authentic.** Even though you are choosing to model Think Aloud with a particular text for a particular purpose, you should still share the contents of your thinking in a spontaneous way. Do not turn your model Think Aloud into a lecture in disguise!

Planning to Introduce Think Aloud

- **Keep it short.** When you model Think Aloud, cut yourself off after two minutes at the absolute most. When students work together in pairs, they might be able to sustain the Think Aloud for longer stretches. For example, a student might practice Thinking Aloud while reading one full paragraph while his or her partner takes notes, and then the pair will switch roles; this process could take more time, but it should still be focused and limited in scope.
- **Build the metacognitive conversation.** Be sure to provide students with thinking time, time to work with partners or small groups, and time to share out, and be sure to try Think Aloud with different texts and in different contexts. Model for your students your own faith that the metacognitive conversation will build and will become richer with time.

Think Aloud in Pairs for Problem Solving (TAPPS) • Role Cards (front side)

The Problem Solver

Think Aloud Pairs Problem Solving Protocol

- Read and solve the problem as much as you can on your own.
- Whenever you read or write say aloud the thoughts you are thinking to understand and solve the problem.
- Afterwards listen to your partner's report. Then discuss your processes and solution approaches with your partner.
- Finally, discuss the problem and finish the solution.

Metacognitive Starters

- I am looking for ...
- I notice ...
- What's important is ...
- This reminds me of ...
- I am thinking about ...
- What I know is ...
- A picture/graph I can draw is ...
- I wonder ...
- A question I have is ...
- I am confused by ...
- What might be true is ...
- I predict ...
- I could try ...
- An equation I could write is ...
- The big idea is ...
- What I now know is ...
- What is interesting is ...

The Listener

Think Aloud Pairs Problem Solving Protocol

- Listen to your partner's Think Aloud comments and watch your partner's solution work.
- Make notes about your partner's reading and problem solving processes.
- Prompt your partner to say aloud his/her thoughts whenever they stop thinking aloud.
- Afterwards tell your partner what you noticed about their reading and problems solving processes.
- Finally, discuss the problem and help finish the solution.

Metacognitive Coaching Prompts

- What are you focusing on?
- What are you thinking now?
- Could you tell me more?
- What are you doing (or writing) now?
- Please elaborate.
- I can't follow that.
- Run that by me again.

A great discovery solves a great problem but there is a grain of discovery in the solution of any problem. Your problem may be modest; but if it challenges your curiosity and brings into play your inventive facilities, and if you solve it by your own means, you may experience the tension and enjoy the triumph of discovery

George Polya (How to Solve It)

Solving problems is a practical art, like swimming, or skiing, or playing the piano: you can learn it only by imitation and practice. . . . If you wish to learn swimming you have to go in the water, and if you wish to become a problem solver you have to solve problems

George Polya (Mathematical Discovery)