

The Main Idea's PD Suggestions for *Making Thinking Visible*

PD Ideas to Help Teachers Develop Student Thinking

A. Help teachers focus on student “thinking” in their instruction

1. *What do we mean by “thinking”?* – We all say that we want our students to develop their “thinking” – but what does this mean? Have teachers discuss the following in pairs or groups. You may even want teachers to create a concept map with THINKING written in an oval in the center, and then fill in a web of what skills and actions they associate with THINKING.

Discuss: When we use the word *think*, what do we mean? When you tell someone you are thinking, what is it you are actually doing? When you ask your students to think, what exactly do you want your students to be doing? What kinds of thinking do you promote in your own classroom?

2. *What types of thinking should teachers focus on?* – There are many different types of thinking, but the authors of the book, based on their research, have outlined *six* types of thinking that develop understanding in all grades and subjects. This list does *not* include every type of thinking; this is just a short list of the highest-leverage thinking moves.

Discuss: Discuss the six types of thinking below. Do you agree that these are the most essential thinking skills needed to develop understanding? Do you think you could help your students develop understanding without employing all six below? What are some *specific* examples of how these thinking skills might look in your own classroom?

1. Observing closely and describing what's there
2. Building explanations and interpretations
3. Reasoning with evidence
4. Making connections
5. Considering different viewpoints and perspectives
6. Capturing the heart and forming conclusions

3. *Did teachers focus on thinking in today's lesson plan?* -- Have teachers bring in a lesson plan from today. Discuss how many of us fall into the trap of thinking about covering material or having students complete activities. Ask teachers to *individually reflect*: Which parts of your lesson focused on coverage or activity completion? Which parts of the lesson got students to think? What types of thinking did this lesson get the students to do? If time, plan your next lesson now to incorporate more of these 6 types of thinking.

4. *How might teachers use the list of 6 thinking skills to assess student thinking?* – The list of 6 thinking skills is useful to help teachers plan units. It is also useful in helping teachers to *assess* student thinking. *Brainstorm:* In pairs, have teachers brainstorm what “proficient” for each thinking skill might look like in their own classes.

Thinking Skill	What might Level 3 (Proficient) for this skill look like in a rubric (1 to 4)?
1. Observing closely and describing what's there	
2. Building explanations and interpretations	
3. Reasoning with evidence	
4. Making connections	
5. Considering different viewpoints and perspectives	
6. Capturing the heart and forming conclusions	

B. Help teachers make thinking “visible” in their classrooms

1. *How can teachers make their students aware of their own thinking?* -- The first step in helping students to strengthen their thinking skills is making them aware of their thinking – in other words, making their thinking *visible* to them. *Brainstorm:* Do a large group brainstorm – What are some ways we can make our students aware of their own thinking? Then have teachers follow up in smaller groups to create a concrete plan to begin to make students more aware of their own thinking (often referred to as *metacognition*). Give them the following suggestions and then have them work in groups to come up with their own ideas:

Ideas to help students become aware of their own thinking

One way to begin to develop your students' awareness of thinking is by doing a poll of your students to see how much they know about thinking. Ask them, “What is thinking? When you tell someone you are thinking, what kinds of things might actually be going on in your head?” Provide students with a few examples: “Making a mental picture of things” and “Comparing one thing with another.” You can have students draw a concept map with THINKING written in the center and then create branches off of it for what they consider to be the different components of thinking. You can also have a discussion about the importance of thinking skills in developing their understanding and independence as learners.

2. *Help teachers develop their abilities to “name” and “notice” student thinking* -- In order for teachers to “make thinking visible” in their classrooms, they must first be able to identify, or as it says in the book, “name” and “notice” examples and types of student thinking that occur in the classroom. In pairs, have teachers find 10-15 minutes to view each other's classrooms. Observers should record examples they believe demonstrate thinking. After, the pair should discuss and compare notes – are these examples of student thinking? What kinds of student thinking did each observe? Were any of the 6 high-leverage thinking skills used?

3. *Have teachers analyze student thinking with colleagues* -- Another way to make student thinking visible is to document it – through notes, audiotapes of class discussions, or simply through student writing. To help improve teacher understanding of student thinking, have teachers bring in copies of student work that reflects student thinking. Teachers can follow a step-by-step protocol for analyzing the piece of work (see p.263 for the Looking At Students’ Thinking (LAST) Protocol). However, you can also have more informal discussions about student thinking by having teachers, in pairs or groups, look at the student work and discuss:

- Where in the work do you see student thinking?*
- What types of thinking do you observe?*
- What aspects of the assignment provide insight into student thinking?*
- How could the assignment have been structured differently to extend and build on student thinking?*
- At this point, how can you encourage students to reflect on their thinking and monitor their progress?*

C. Help teachers experience the “Thinking Routines” firsthand

In order for schools to become places of thinking and learning for students, they must also be places of thinking and learning for the *adults*, too. As a school leader, you can use the 21 Thinking Routines introduced in the book to structure PD activities that help teachers *think* about their practice and examine student learning.

The *best* way to introduce the Thinking Routines from the book to your teachers so they will begin to use them in their classrooms is to have teachers *actively participate in going through the steps of the routines* the same way their students will. Rather than practicing using the Thinking Routines with useless content, take the opportunity to engage teachers in meaningful staff development topics. Briefly introduce the steps of a particular routine, then dive in! Below are a few examples:

ROUTINE: See-Think-Wonder

Use this routine as a way to promote peer observations and discussions about practice. Have pairs of teachers observe each other’s classes and go through the 3 steps in the routine:

- What do you see?
- What do you think is going on?
- What does it make you wonder?

Remind teachers that they should spend a good deal of time simply recording what they *see* before jumping to interpretation (e.g. very few students were engaged). The last step should address a larger question about teaching, “I wonder if breaking up students into heterogeneously mixed groups is the best way to meet all students’ needs?”

ROUTINE: Chalk Talk

Remember this routine consists of a silent conversation on paper. It’s a great way to make sure every voice is heard. One idea for a PD activity using this routine would be to have teachers examine a newly worded mission statement you would like to introduce. You can place several copies of the newly proposed mission statement on large pieces of butcher paper throughout a room and have groups of staff write comments about the mission right on each paper. Then have staff move to other tables and write new responses to other staff members’ written comments. At the end, discuss the following: What were the common issues? What questions arose? How did everyone’s thinking develop and/or change as they went from table to table?

ROUTINE: Headlines

As a way to quickly check what your staff has gotten out of a professional development discussion, after the discussion ask everyone to write a headline for the topic of discussion that summarizes or captures a key aspect that they think is significant. For example, after introducing the importance of making student thinking visible and several of the routines, ask teachers to write a headline summarizing the following: *Why it is important to make student thinking visible* or *How “thinking routines” will impact teaching and learning.*

D. Help teachers self-assess their ability to create a “Culture of Thinking” in their classrooms

The goal is to develop “Cultures of Thinking” at your school, by using the Thinking Routines, over time. Have teachers discuss the following definition of “Cultures of Thinking” which can be defined as “places where a group’s collective as well as individual thinking is valued, visible, and actively promoted as part of the regular, day-to-day experience of all group members.” Then choose several times throughout the year when the leader can assess whether there is a “culture of thinking” among staff and when teachers can assess if there is a “culture of thinking” in their classrooms. The chart below can help with that self-assessment:

Aspects of a “culture of thinking”	How are we doing? (Rate from 0 to 5)
There are substantial opportunities for <i>group</i> as well as <i>individual</i> thinking.	
Deep thinking is valued here.	
Thinking is frequently made visible here – through questioning, speaking, and writing.	
Thinking is promoted on a daily basis.	