Making Thinking Visible

Developing Powerful Mindsets for Thinking

Slides at ronritchhart.com
Unpacking Thinking: Our Own and Our students

Metacognition: More than thinking about thinking

Growing Thinking Mindsets

Making Thinking Visible
What is thinking?

What IS thinking?
What is thinking?

When you tell someone you are thinking, what kinds of things might be going on in your head? For instance, you might be making a mental picture of things, or you might be comparing one thing with another. What other things might be going on in your head when you are thinking? Make a map or list of your ideas.
What additional ideas about thinking might you add to your map? To help you come up with more ideas about what thinking is and what is involved in thinking:

1. Think of a time when it was difficult or hard for you to think. What kinds of things did you do then? **Add your new ideas on your map.**

2. Think about times when you knew you were doing some good thinking. What were you doing then? **Add your new ideas on your map.**

3. Think of someone you consider to be a good thinker. What kinds of things does this person do that makes him or her a good thinker? **Add your new ideas on your map.**
Talk your partner through your map

Make any additions to your map you feel are important

Look for commonalities and differences
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Some other things to consider and to put on your map might be: When does thinking get hard or difficult? When it does, what kinds of things do you do? How do you know when you have been thinking well?
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What is thinking? When you tell someone you are thinking, what kinds of things might actually be going on in your head? For instance, you might be making a mental picture of things, or you might be comparing one thing with another. What other things might be going on in your head when you are thinking? Make a map of your ideas.

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- Understanding words and sentences
- Storing things in different sections of my mind
- Logic
- Thinking logically
- Pictures
- Detail
- I ask myself questions.
- Concentrate
- Try to answer the questions
- Don’t get caught up with things that aren’t relevant
What is thinking? When you tell someone you are thinking, what kinds of things might actually be going on in your head? For instance, you might be making a mental picture of things, or you might be comparing one thing with another. What other things might be going on in your head when you are thinking? Make a map of your ideas.
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Do students in CoT classrooms develop richer thinking mindsets?
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General strategy = 1

Thinking strategy = 3

Self-Regulation strategy = 2

Strategy Score = 17
Increases in Student's Understanding of What it Means to Think (Meta-Strategic Knowledge)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Pre-test sophistication score</th>
<th>Post-test sophistication score</th>
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<tr>
<td>Grades 3 &amp; 4 (N=141)</td>
<td>4.02</td>
<td>8.85</td>
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<td>Grades 5 &amp; 6 (N=145)</td>
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<td>Across grades</td>
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<td>12.63</td>
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</table>
Growing Thinking Mindsets

- The Understanding Map
- Thinking Routines
What Kinds of Thinking Do We Value?

Understanding Map

- Consider Different Viewpoints
  - What's another angle on this?
- Reason with Evidence
  - Why do you think so?
- Make Connections
  - How does this fit what you already know?
- Wondering
  - What are you curious about here?
- Describe What’s There
  - What do you see and notice?
- Uncovering Complexity
  - What lies beneath the surface of this?
- Capture the Heart & Form Conclusions
  - What's at the core or centre of this?
- Build Explanations
  - What's really going on here?

Sourced from: The Cultures of Thinking project at Project Zero, Harvard Graduate School of Education.
What Kinds of Thinking Do We Value?

- What does this remind you of?
- Where else have you seen something like this?
- How does this connect to the topic you’ve been studying?
- Where does this fit within the grand scheme of things?
- What is it like? What is it not like?
- If you were to group these things, what would go together?
- What’s a metaphor that might fit this?
Who are our students becoming as thinkers and learners as a result of their time with us?
Preparation for the Conferences

Students choose 8 examples of activities (artifacts) from across their different subjects.

The artifacts represent activities which help them to develop different kinds of thinking.

The kinds of thinking focused upon include reasoning with evidence, making connections, capturing the heart, describing carefully, and building explanations.

Students create an abstract representation of themselves as thinkers for the cover of their Student Led Conference box.
How Do We Make Thinking Visible?

Thinking Routines
Simple **Tools**, used in one’s learning to support specific thinking moves.

**Structures and scaffolds** through which we explore, discuss, document, and direct our thinking and learning.

**Patterns of behavior** that we adopt to help us use our minds well in new situations.
What is your Headline?