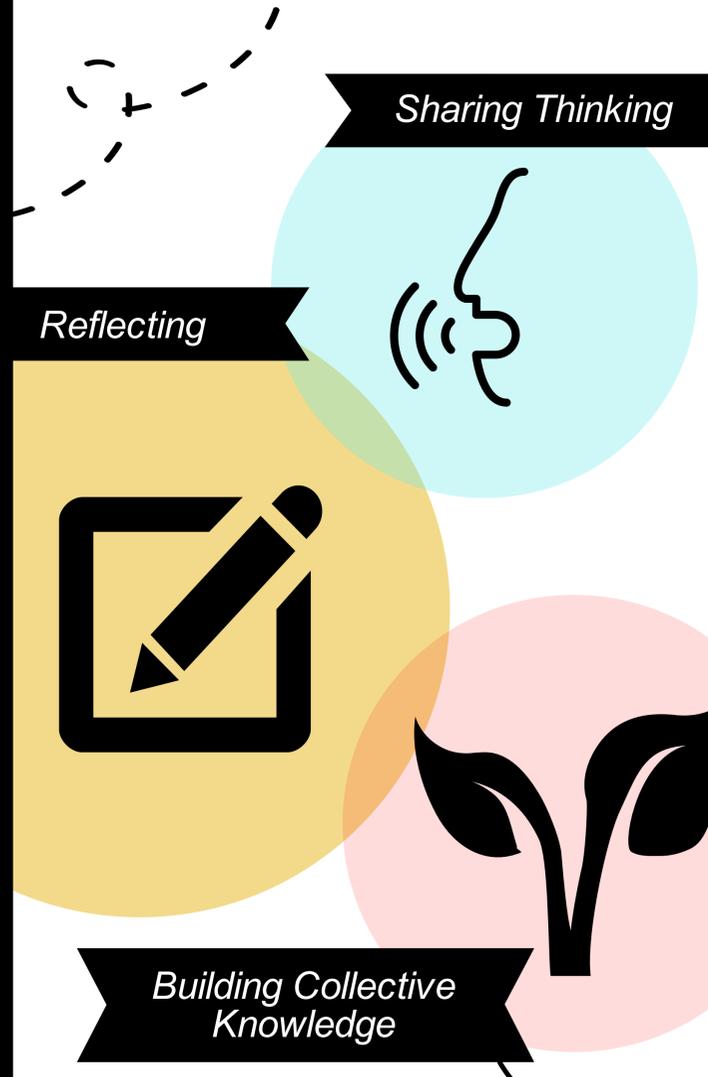


Using Routines To MAKE THINKING VISIBLE

Thinking routines are short, easy-to-learn strategies that extend and deepen students' thinking and become part of the fabric of everyday classroom life. They can be used regularly, across a variety of content and grade levels, and help students develop ways of thinking about their own thinking. When a student uses a *Thinking Routine* to make his/her thinking visible, all students benefit from the shared thinking as collective knowledge is built.

The resources and thinking routines in this document are sourced from Ron Ritchhart and Harvard Project Zero's research and are available at www.visiblethinkingpz.org



"Learning is a consequence of thinking, not something extra we tack on for good measure but something in which we must actively engage to promote our own and other's learning." - Ron Ritchhart, *Creating Cultures of Thinking* (2015)

CRITICAL

Critical thinking is a mode of thinking that involves making judgments based on reasoning. To think critically about your own thinking and that of others, you must analyze with criteria, draw conclusions and make judgments.

CREATIVE

Creative thinking is a mode of thinking that involves the generation of new ideas and concepts that add value to the individual or others. Creative thinkers develop these ideas and concepts from thought to reality.

COMPASSIONATE

Compassionate thinking is a mode of thinking that involves building empathy for others. This is thinking from the heart. Learners can work together to think deeply about how to take action to make the world a better place.

Types of Thinking

COLLABORATIVE

Collaborative thinking is a mode of thinking that involves learners thinking together, making their thinking visible, disagreeing respectfully, and building on each others' ideas while valuing others' perspectives. This builds the collective knowledge of the group.

REFLECTIVE

Reflective thinking is a mode of thinking that involves thinking about one's own thinking and learning. Reflective thinking allows learners to reflect on experiences and learn from them. This type of metacognition helps learners understand how they learn best.

"Education is not the learning of facts, but the training of the mind to think." - Albert Einstein

Why Use Thinking Routines?

As educators, we want students to become proficient in the types of thinking they can use to develop their own understanding. For example, we want students to:

- Ask **questions**, identify puzzles, and wonder about the mysteries and implications of objects and ideas.
- Make **connections**, comparisons, and contrasts between and among concepts - including connections across disciplines as well as to one's own prior knowledge.
- Build ongoing and evolving **explanations**, interpretations, and theories based on one's growing knowledge and understanding.
- Examine issues, ideas, and events from different **perspectives** and alternative points of view in order to discern bias, develop balanced views, and build empathy for others.
- Notice, observe, identify, and **closely examine** in order to fully perceive details, nuances, and hidden aspects.
- **Reason with evidence** to justify and support interpretations, predictions, theories, arguments, and explanations.
- Delve deeper to **uncover the complexities** and challenges of a topic and go beyond surface understanding.
- Be able to **capture the core** or essence of a concept.

3 Types of Thinking Routines

Thinking routines are tools for thinking, and it is important for educators to choose the right tool for the job. Educators can identify the types of thinking they are wanting to elicit and then select the particular thinking routine to support that thinking.

Routines for Introducing
& Exploring Ideas



Routines for Synthesizing
& Organizing Ideas



Routines for Digging
Deeper into Ideas



CULTURE MATTERS

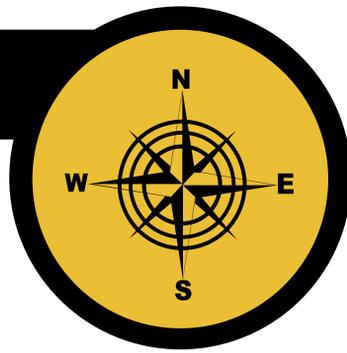
Thinking routines promote development of students' thinking and build classroom culture because each routine:

- Is goal oriented and targets specific types of thinking.
- Gets used repeatedly with different content and ideas.
- Consists of a few steps.
- Is easy to learn and teach.
- Can be used across a variety of subjects in different contexts.
- Can be used by groups or by individuals.
- Aims to have students process and analyze their own thinking.
- Provides a structure for students to make their thinking visible and build collective knowledge.



"For classrooms to be cultures of thinking for students, schools must be cultures of thinking for teachers." ~ Ron Ritchhart

Routines for Introducing and Exploring Ideas

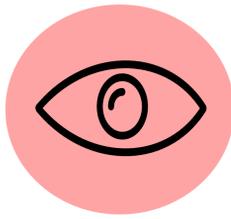


Choose a few routines and have students practice them so it is about engaging in the thinking and not about completing a task.



a few of our

FAVOURITES



See-Think-Wonder

Students make observations like scientists as they record what they see, what they think or think they know, and then what they are wondering.



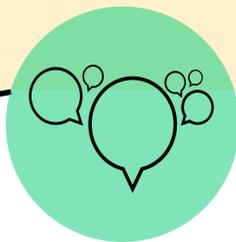
Chalk Talk

Students engage in a silent 'conversation' as they add their thinking about a concept or question to a large piece of paper without speaking. Students connect and build on each others' ideas using connecting lines and other symbols.



Zoom In

Students notice small details, wonder, and make inferences about what they are seeing when viewing an image a little bit at a time. Students discover their thinking can change over time based on new information.



The Explanation Game

Students examine an object carefully (ie: piece of art, leaf from a tree, an image, etc.) and propose multiple ideas to explain what the object is, why it is the way it is, and what purpose it might serve.

For more thinking routines, visit the website:
www.rcsthinkfromthemiddle.com

Routines for Synthesizing and Organizing Ideas



Colour-Word-Image

Students choose a colour to symbolize, a word to summarize, and draw a picture to represent their thinking about something they have seen, heard, or experienced. It is important that they explain their reasoning about their choices.



I Used to Think... and Now I Think...

Students describe how and why their thinking has shifted after learning, discussing, or experiencing.



Headlines

Students capture the key message or main idea as they summarize their thinking in a headline. This thinking routine might be used after reading a book, watching a video, exploring questions, and engaging in an experience.

FAVOURITES

"I used to not know much about children's rights, even human rights, I never even used to think about how other children and adults lived. Now I've thought less about myself and more about others."

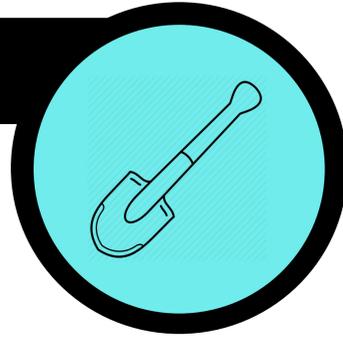
~ A student from the Central Okanagan



Microlab Protocol

Students discuss their thinking in groups of three. Each student has a chance to share their thinking, then there is a 30 sec pause for reflection. This is followed by an open discussion among the group. This routine allows students to practice active listening and provides the opportunity to build on and connect to each others' thinking.

Routines for Digging Deeper Into Ideas



a few of our

FAVOURITES



What Makes You Say That?

Students elaborate on the thinking behind their responses so they can identify why they are thinking what they are thinking, and defend with reasoning.



Sentence-Phrase-Word

Students unpack their thinking after reading an article, book, poem, etc. Students identify a word that summarizes their thinking, a phrase that moved, engaged or provoked them, and a sentence that was meaningful to them from the reading. These thoughts are shared with others.



Circle of Viewpoints

Students identify and consider different and diverse perspectives. This helps students attain greater awareness of how others are thinking and feeling. This leads to greater understanding of any issue being explored.



Claim-Support-Question

Students identify and test claims they encounter while exploring their questions. Students then scrutinize the claims as they search for support or conflicting evidence. This routine helps students to identify bias.

For more thinking routines, visit the website:
www.rcsthinkfromthemiddle.com

Knowledge Building Circles - A Thinking Routine to Honour First Peoples

Knowledge Building Circles are powerful when used regularly throughout the learning cycle.

The goal of knowledge building circles is collective 'idea improvement' with a focus on deepening students' understandings through increased exposure to the diverse perspectives and ideas.

"The Knowledge Building Circle is not a novel idea. It aligns with the wisdom of a time-honoured tradition of Indigenous cultures, the Talking Circle, in which individuals take turns sharing ideas." *Natural Curiosity* (2011)

All students enjoy an equal place in a circle. No one takes precedence over another. The teacher takes his or her place within the circle as a co-learner. As members of this knowledge building community, students both learn from, and contribute to, each other's understanding. *Natural Curiosity* (2011)

Sitting in a circle promotes attentive listening and communication as students engage in face-to-face dialogue, share their thinking, connect to and build on each others' ideas, disagree respectfully, and improve the thinking "beyond the level of the most knowledgeable individual." ~ *Scardamalia* (2002)

All ideas are improvable!



Sentence Stems

- "I would like to build onto what you said..."
- "I agree with..."
- "To add to what you said..."
- "Something that I have tried is..."
- "I have a matching idea..." or "I have a tag idea..."
- "I need to understand..."
- "I have a different idea..." or "Another idea I had..."
- "My theory is..."

Documenting Thinking FOR and AS Learning

Documenting can include capturing:

- Conversations
 - Wise words
 - Students' thoughts & questions
 - Misconceptions
 - Images to capture learning
 - Videos to capture learning
 - Products of learning
 - Samples to show learning & growth
- * All of these types of documentation can be used to collect and share the whole learning journey over time.*

When students are making their thinking visible in various ways, educators can capture the thinking and learning in order to making it visible for all.

Many educators are using Google docs to capture conversations, questions, misconceptions, images, video clips/actions in order to create a culture in their classrooms where students and teachers are co-learners, and everyone is welcome to connect to, build on, and respectfully disagree with the thinking of others.

Educators can reflect on the evidence gathered each day to discover student interests, find misconceptions, and hunt for 'wise words' and questions to bring back to the class to continue to nudge thinking.

Students can also document their own learning and the learning of others by collecting evidence of learning. It is especially powerful when students capture two samples of thinking - one from the beginning of the learning and one at the end. This allows students to see how much they have grown and learned over time.

The process of documenting must serve to advance learning (over time) not just capture it. When teachers capture students' ideas, they are signalling that those ideas and thoughts have value and are worthy of continued exploration and examination. Documenting learning is a process that makes thinking and learning processes visible, meaningful, shareable, and amplified. It also facilitates student-driven learning by helping students reflect on and articulate their own learning processes.
~ Rosenthal, Tolisano, and Hale (2018)

For more ideas on documenting learning, see our ILT created visual: <http://bit.ly/PedagogicalDocumentationILT>



Created by Central Okanagan Public School's Instructional Leadership Team

SOURCES:

Making Thinking Visible (2011), R.Ritchhart
Natural Curiosity: A Resource for Teachers (2011), 1st ed.
A Guide to Documenting Learning (2018), Tolisano & Hale
BC's Redesigned Curriculum <https://curriculum.gov.bc.ca/competencies>
<https://thinkingpathwayz.weebly.com/>
www.rcsthinkfromthemiddle.com
<https://thelearningexchange.ca/projects/knowledge-building/>

