DRAFT VERSION

Please write to the following email with any questions or comments:

studentsforstudents.uschina@gmail.com

Supporting

International Inquiry, Holistic Language Development and Student Engagement in Real Time Learning Environments Online

With Teaching Strategies for:

Building Personalized, Meaningful and Fun Learning Groups Online

Supporting Students' International Curiosity, Inquiry and Understanding

Supporting Students' Holistic Language Development and Interdisciplinary Learning

Teaching, Unit Design and Writing by:

Devon Wilson, Codi Caton, Tanya Kant, Sarah Koehler and Maxwell Smith

October 2020

What if our classrooms become 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?"

Ron Ritchhart
Senior Research Associate, Project Zero
Author of Making Thinking Visible

Chapter 3: Utilizing Thinking Routines to Deepen Thinking and Understanding in Real-Time Learning Groups Online

"You get to learn different things and talk with other students. . . . this program is good because you actually learn it yourself, it's not just others putting stuff in your head."

-9th Grade Student

Thinking Routines are a core methodology the Students for Students program relies on in creating student centered, inquiry-based learning groups online. "*Thinking Routines* loosely guide learners' thought processes. They are short, easy-to-learn mini-strategies that extend and deepen students' *thinking*," (Project Zero Thinking Routines Website https://pz.harvard.edu/thinking-routines). At a recent talk, Ron Ritchhart, author of the foundational text on Thinking Routines, *Making Thinking Visible* (2011), was asked 'Which routines are best for supporting online learning in real-time learning groups?" Ritchhart responded that his research has suggested that the most successful routines are those that become "well established" in learning communities, supporting students' long-term thinking dispositions. In the Students for Students program, we consistently seek to design learning opportunities where students can use and cultivate inquiry-based thinking skills related to ***questioning***, ***connection-making***, ***reasoning with evidence*** and ***perspective taking***. By practicing and honing these thinking skills, rather than focusing purely on delivering facts and specific content, overtime students are better equipped to develop authentic understanding about international contexts on their own.

In this chapter, we will explore the thinking routines we consistently use to support student inquiry, deeper understanding and to go beyond the surface of many of the topics and themes we explore. These routines have become well-established in our online learning communities and in the way that approaches the meaningful international topics within our units.

Thinking Routines Explored in This Chapter:

- **Think Puzzle Explore**
- **Sentence, Phrase, Word**
- **Think Pair Share**
- **Connect Extend Challenge**
- **What Makes You Say That**

1. Think Puzzle Explore

A routine that sets the stage for deeper inquiry.

1. What do you **think** you know about this topic?

2. What questions or **puzzles** do you have?

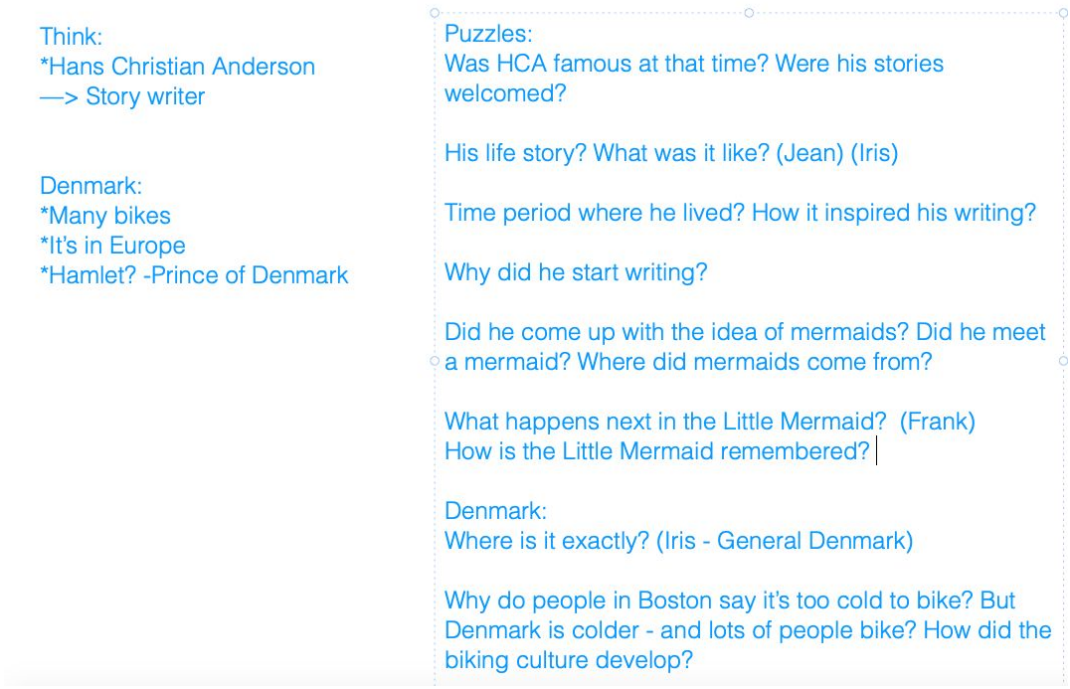
3. What does the topic make you want to **explore**?

Purpose: What kind of thinking does this routine encourage?
This routine activates prior knowledge, generates ideas and curiosity, and sets the stage for deeper inquiry.

(Visible Thinking Project/Project Zero Thinking Routines Website, 2020)

Think Puzzle Explore is a great routine for activating student's prior knowledge on a topic and generating puzzles which students may explore further. Consistently using Think Puzzle Explore has potential to help students recognize their current understanding or perspective on a topic and cultivate student's ability to question and proactively research topics. In online settings, this routine can be especially useful for connecting two separate class periods. Here is an example.

Picture of Practice:
In a recent 6th grade lesson, students and I were exploring fairy tales and folktales around the world and I hoped that after reading *The Little Mermaid*, students could learn about Hans Christian Anderson and how his personal background influenced the raw emotional nature of his stories. In addition, I wanted students to learn about the context surrounding the authors home, Copenhagen. In this case, I used the Think and Puzzle steps of the routine on two topics simultaneously so that, in the end, students could explore the topic and puzzle that they were most interested in. In our discussion, I recorded students' responses to the Think step on the left side of the Zoom whiteboard, and their responses to the Puzzle step on the right. Then, students each picked the question that they were most interested (names added next to the puzzles on the right). At the start of the next class, rather than me lecturing about the Hans Christian Anderson's life, students presented their findings and I had a few additional excerpts prepared in case there were some areas that I could share to deepen the exploration (if they weren't shared within students findings).



2. Making Sense of Text

A thinking routine to study and inquire through close reading of texts

Select one passage, one sentence, and one word that you feel are important in connection to the question or topic under study. **Read** one passage you have selected aloud to the group. **Explain** what you think about the selected passage (interpretation, connections, etc.) **Invite** group to respond to the selection adding ideas and new connections

(Project Zero Educating Global Citizens through a US and China Lens Project, 2020)

I particularly enjoy using this routine with students in our classes because I enjoy using this routine as a learner. In college and university settings, after going through mass amounts of readings prior to class, around the start of class teachers often ask students to meet briefly in small groups and discuss general impressions of the readings. This type of conversation tends to either remain very surface level or is sometimes hard to follow if one group member goes on an in-depth tangent that may be very different than other group members interpretations or focus.

Rather, starting with the "Making Sense of Text" routine, gives a student the opportunity to begin by selecting and reading aloud a sentence that they feel "captures a core idea of the text" or a phrase "that moved, engaged or provoked them", before explaining why they selected the passage. This process is generally easier to follow and engage with for all students participating

in the discussion. This applies especially to English as a Second Language students or visual learners who may benefit from seeing the quote (or hearing a quote repeated) that will be discussed. As students share, they are learning to **"reason with evidence**" and base their opinions in relation to quotes.

Picture of Practice:
In reading *A Long Walk to Water*, a book written by Linda Sue Parker that explores life in South Sudan across two time periods, Codi Caton wanted students to develop a disposition to "reason with evidence" when exploring this topic, so he would often give them opportunities to select a sentence to contribute to discussions. Codi asked students:
"What about Salva's uncle? Do you like him? Find a sentence that supports why or why you don't like him."
"Why does the group decide to cross the river? Find sentences that give us a clue."
"Look through Chapter 10 and write down examples of how the men and women act differently or seem to be assigned different roles in the desert. Share these sentences on the white board." (Codi's International Inquiry Unit using this *A Long Walk to Water* is explored further in Chapter 6).

Additional Picture of Practice:
In another portion of the Fairy Tale unit described in the example above, students split up reading sections of a biography on the Brothers Grimm, detailing how the pair of aspiring German Lawyers became engrossed in fairy tales and cultural preservation. As students gave summaries of the sections they were assigned, they were asked first to share a "**sentence**" that they thought to be representative of this time period in the brothers' lives.

In our online learning groups, we'll sometimes use the "read one passage" step either as a class (eliciting 2-4 quotes) or in small groups, allowing a student to read their quote and explain their interpretation for approximately 1 minute, before allowing 1-2 minutes for response and discussion from other student in the group/class (taking approximately 3 minutes in total). After an initial round of sharing discussion has happened, another student will read the passage they selected, share their interpretation before discussing as a group. (A group of 3 students would ideally take 9 minutes in total to finish this process).

Technology Tips:
When sharing the sentence as a whole group, it can be helpful for certain learners if teachers have an electronic version of the text. Teachers can ask students to cite the page or do a screen share to show the actual text as they begin to read their selected passages.

Teachers can also set up break out rooms on Zoom for students to discuss in groups of 2-4 students.

3. Think Pair Share

A routine for active reasoning and explanation.

> Think ,Pair, Share involves posing a question to students, asking them to take a few minutes of thinking time and then turning to a nearby student to share their thoughts.

Purpose: What kind of thinking does this routine encourage?
This routine encourages students to think about something, such as a problem, question or topic, and then articulate their thoughts. The *Think, Pair, Share* routine promotes understanding through active reasoning and explanation. Because students are listening to and sharing ideas, *Think, Pair, Share* encourages students to understand multiple perspectives.

(Project Zero Thinking Routines Website, 2020)

Think Pair Share is a useful three-step strategy that helps students first think individually, then think together in small groups or pairs, and finally think together as a whole group. The individual and pair think time can provide an opportunity to slow the pace of real-time online environments, so students can think more deeply about the topic at hand. Here is an example:

Picture of Practice:
In reading *I Am Malala*, a book written by Malala Yousafzai about her experience fighting for girls' education in Afghanistan, Sarah Koehler wanted students to better understand Malala's intentions for social action. She pushed students to consider issues their local communities face as well as issues facing us all on a global scale.

Sarah asked students first to consider the question, "What does it mean to be a dreamer? What are the most pressing/urgent issues in your community? In the world?" After taking some individual time to consider this question, students were sorted into pairs via the breakout rooms and after 3-4 minutes of discussion, students returned to share some of the thinking that was generated with the whole class.
(Sarah's International Inquiry Unit using this I Am Malala is explored further in Chapter 5).

In online settings, students can **think** individually in the shared online learning room as the teacher sets up pairs or small groups using the breakout function. Students can **pair** and discuss for a few minutes in individual breakout rooms (the teacher has the option to join break out rooms and listen in on the discussions), and after the breakout rooms are closed, a few students can **share** some of the thinking from their group with the whole class. Many of these observations may be useful to come back to over time, so it is often advantageous to activate the whiteboard feature and document students thinking on the topic, taking a screen shot, or saving the whiteboard at the end for future use.

Note: Think Pair Share is adapted from Frank Lyman: Lyman, F. T. (1981). The responsive classroom discussion: The inclusion of all students. In A. Anderson (Ed.), Mainstreaming Digest (pp. 109-113). College Park: University of Maryland Press. For more information on this specific routine,

visit:http://www.visiblethinkingpz.org/VisibleThinking_html_files/03_ThinkingRoutines/03d_UnderstandingRoutines/ThinkPairShare/ThinkPairShare_Routine.html

4. Connect Extend Challenge

A routine for drawing connections between new ideas and prior knowledge.

How is the artwork or object **connected** to something you know about?

What new ideas or impressions do you have that **extended** your thinking in new directions?

What is **challenging** or confusing? What do you wonder about?

Purpose: What kind of thinking does this routine encourage?
The routine helps students make connections between new ideas and prior knowledge. It also encourages them to take stock of ongoing questions, puzzles and difficulties as they reflect on what they are learning.

(Visible Thinking Project/Project Zero Thinking Routines Website, 2020)

In exploring a central theme for several lessons or weeks, we hope that students will **make connections** between the central book we are reading, news articles, their own lives, local or global phenomena, weaving these resources to create a more nuanced understanding of the context being explored.

To help facilitate these opportunities for connection-making, during class we will often send students an additional article, video (via screen share) or provocation that relates to the themes in the book/topics being discussed during class. Ideally these provocations will take approximately 4-8 minutes to explore (otherwise we will typically have students view the resource before class.) After exploring a new resource, we invite students to discuss: the **connections** they see to the central book being read and other resources in our larger exploration and international inquiries, how this resource may have **extended** their thinking on the topic, and any **challenges** or questions that were raised in exploring the topic.

Picture of Practice:
In designing a unit around *Swami and Friends*, a book written R. K. Narayan about a fictional village in India that is meant to be representative of life in many parts of India in the 1920's and 1930's, Murali Mallikarjunan wanted students to make connections between the way the fictional village in the story was protesting British occupation by burning British factory produced clothing, and the larger historical context in India at the time (referenced in Chapter 2). During class, students were asked to read an additional piece or writing on the Salt March and were shown a short documentary on Gandhi's role during this period. In examining and discussing these new pieces, students were asked to consider "What **connections** do you see

with the book *Swami and Friends*?", "How do these new resources **extend** your thinking about this topic", as well as sharing "What questions or **challenges** emerged in examining these new resources?"

Abbreviating this routine to just "connections" and "extensions" can also be a useful protocol for students to use when responding to presentations or sharing from other students in the course of the learning experience.

5. What Makes You Say That?

"What Makes You Say That?" (WMYST) or "Say More About That" are considered to be magic sentences by many professors and scholars at the Harvard Education school. It is the perfect balance of respectful curiosity without communicating any sort of prior judgement (good or bad), about the student's thinking. When used effectively, WMYST challenges students to **reason with evidence** behind their thinking, supporting deeper reflection and understanding of topics being explored. Ritchhart explains: "It sends a message to students that simply giving the correct answer or guessing what's in the teacher's head is not the game we are playing. When teachers' press students for thinking, students feel more engaged, challenged, and motivated. They also develop a greater sense of initiative and feel like their teachers expect more out of them." (Ritchhart, 2016)

Picture of Practice:
In designing a unit around *Dunger*, a book written Joy Cowley about an unexpected intergenerational summer vacation based on the South Island of New Zealand, Debbie Kwan wanted students to develop a norm referencing text and resources to support their thinking and opinions on pertinent topics. When the book referenced the 1960's folk and Vietnam War era protest music the main character's grandparents enjoyed, students were asked to look closely at one of the songs and state what the song revealed about the era in which the grandparents were teenagers. To support their interpretations and reasoning, at certain moments the teacher asked students "What makes you say that?", encouraging them to share more about their thinking or link the conversation back to the key resources being discussed.

A Tip for Thinking Together in Online Settings with ESL Learners

For most routines in the first step, similar to the "Think" stage of "Think-Pair-Share", it can be beneficial to start by sharing with students "I'm going to give you a moment to consider (the question or step of a thinking routine to be discussed). . . ." The term "moment" is advantageous to "30 seconds" or "a minute" because it doesn't put a specific time pressure on our thinking and reflection time. For some students who are not used to this idle time or may be tempted by other distractions on their computer or elsewhere, I'll sometimes add, "If you have a piece of paper, jot down a few ideas that come to mind before we discuss together." Giving this time not only contributes to the depth of thinking and discussion around a topic, it can help ESL learners formulate in their mind a response within the less familiar language. For students with higher English proficiency or a faster "shot clock" (time students tend to want to

answer after a question is posed), who may want to share immediately, I'll sometimes share, "That's great - hold onto that for just a moment and we'll discuss together."

Additionally, when an educator is not in the same room with the student, sometimes it's hard to judge whether or not the student is ready to move on and discuss or needs some additional thinking time. Another move I have found helpful is to have students demonstrate with our fingers where we are at in our process. "If you're all set - give me a thumbs up, if you need one more minute, show me a one, if you need two more minutes show me a two." After using this move with students for a period of time, they'll seamlessly keep working or thinking while also giving a hand signal with how much more time they'd like. I'll share a general response based upon how they answered, sometimes sharing "Great - I'll give you all a couple more minutes" or "Excellent, just wrap up what you're doing and we'll share in a just a bit".

A Final Word:
In reflecting about the experience of participating in our online learning group, one 7th grade student shared, "This is the first time I feel a teacher has cared about my ideas, and not just the answer."

Students generally echo this sentiment about the benefits of being a part of a learning community where participants thinking is central and valued. The use of routines shared above has been central to decreasing our teacher talk time and increasing students' individual and collaborative thinking in online settings. Thinking Routines have long been a powerful tool for deepening students' thinking and understanding in physical classrooms; with a few adaptations using digital tools, we've have found them to be just as effective in real-time online settings.

For More Information on Thinking Routines: Check out the book *Making Thinking Visible*, The *Power of Visible Thinking*, or visit the Project Zero Website's Thinking Routines Toolbox.