Classroom Dialogue Thinking Routine

Background: According to Harvard's Project Zero, A thinking routine is a series of questions or steps to frame, scaffold, and support your thinking process, individually and collaboratively. These questions are intended to deepen your immersion in the case studies and spark dialogue. Through this dialogue, you and your peers will "communicate across difference, listen generously, and share courageously" (Mansilla 2016) in the "spirit of openness, curiosity, and commitment to collective learning" (Maxwell et al 2011). This process is of equal importance to the content in the case studies and will help you unpack the meaning and connect on a personal level.

Before you begin: Your first group action is to complete the following steps together with the goal of making this document your own: Review the questions below, and (1) select three questions to prioritize in your dialogue, (2) revise two questions, and (3) create one new question.

Directions for Case Study Dialogue: As you are collaborating with your group to complete the case study, physically highlight passages with the color categories below, and discuss your selections with your peers. Add notes in the margins as needed. Red light example: the last sentence on page 2 stops me in my tracks because it is different from my own experience...



Red Light (stop): What stops you in your tracks?

- What is in opposition to your previous thinking?
- What is different from your own experience?
- As students in your group or the Maijuna express different ideas, what do you think accounts for the different experiences and perspectives?
 - Are the issues ones that seem distantly connected to your personal life?



Yellow Light (pause): What gives you pause?

- What leaves you wondering and questioning?
- What makes you want to slow down and reflect further?
- What do you need to know or do to move forward?
- What insights and new questions emerge as you listen to and consider different perspectives?



Green Light (go): What moves you?

- What resonates with you from your own experience?
- Are the issues ones you can relate to?
- What connects to your personal life or things you already know?
- What does it remind you of?
- How can you connect today's dialogue to action? Based on what you have learned, what actions could you take to bring about change?
- How might these actions impact you, the Maijuna, other people, and other places?

Empathy Thinking Routines

Teacher Background: To allow the three case studies to be completed individually each begins by asking students to read a background article on the Maijuna and answer the same empathy reflection prompts. If students are doing all three case studies, these supplements will provide necessary variety.

Teacher Directions: Teachers should select any of the supplements below and replace them with elements in the case studies that may become redundant if the entire series is completed.

Step-in Step-out Step-back: "A routine for nurturing a disposition to take social/cultural perspective responsibly". Developed by Project Zero, a research center at the Harvard Graduate School of Education.

Student Introduction: Taking on another's perspective without stereotyping is a challenging skill that takes practice and care. Yet, there are many insights to be gained from remaining open and curious to this skill— as much about yourself as another. After reading the article, "Along the Sucusari River" by Wingfield and Gilmore (2021), take a different perspective by completing the following prompts:

- "Choose: Identify a person or agent in the situation you are examining.
- Step In: Given what you see and know at this time, what do you think this person might feel, believe, know, or experience?
- Step out: What else would you like or need to learn to understand this person's perspective better?
- Step back: Given your exploration of this perspective so far, what do you notice about your own perspective and what it takes to take somebody else's?"

Case study application: This thinking routine could be used after reading the following article as a replacement for the background article linked at the beginning of the case study: Wingfield, A. & Gilmore, M. (2021). "Along the Sucusari River", *Places Journal*, July 2021.

What Can Be & Projecting Across Distance: "A routine for considering how complexities unfold. Developed by Project Zero", a research center at the Harvard Graduate School of Education.

Student Introduction: The only constant in our complex world is change. Change can elicit uncertainty and fear, yet change can also provide new opportunities. This routine is designed to encourage exploration of possibilities and to build agency in imagining and creating how things could change and what can be. This routine is also intended to support your ability to consider different perspectives.

- "Review: How did it get to be the way it is now? Who/what might have caused or influenced these changes?
- How are the topics and themes in this article playing out or viewed in... your community? a nearby community? a nearby country? a distant country?
- Predict: How else might this change in the future?
- Imagine and Create:
 - o Change always comes with challenges. If you could turn the challenges of these predicted changes into opportunities, what do you imagine could be? What could be created?
 - Oconsider how things that have been the same or similar for a long time are changing rapidly in our complex world and despite the unknown, how might we plan to positively shape changes ahead?"

Case study application: This thinking routine could be used to review the background article on the Maijuna's conservation story that is already provided with the case study.

Stories and Unveiling Stories: "A routine to support students' ability in revealing multiple layers of meaning." Developed by Project Zero, a research center at the Harvard Graduate School of Education.

Student Introduction: Stories are powerful. Yet, there is danger in a single story as <u>Chimamanda Ngozi Adichie</u> tells us. She continues, "Stories matter... *many* stories matter." After viewing the photographs taken by the Maijuna, how might we open ourselves in recognition that "human lives can never be fully captured by a single story?" The questions below are intended to support your ability to reveal multiple layers of meaning from these images.

- "What is the story? This could entail the central or most visible story.
- What is the human story? How do the images help you understand the lives of fellow humans? What is the bigger story that is connected and related to these images?
- What is the world story? How do the images speak to systemic global issues?
- What is the new story? What is new and instructive about the images and the issues explored?
- What is the untold story? This could entail aspects that are absent or unreported. Are there different perspectives, dimensions, or angles?"

Now that you have articulated the many stories captured in these images, consider:

- "Why does the story matter to me?
- Why does it matter to people in my community?
- Why does it matter to the world?" (Krechevsky et al., 2020)

Case study application: This thinking routine could be used after viewing photographs taken by the Maijuna with the purpose of sharing aspects of their community that are important to them. Photos and project background are available upon request. This activity could be done in place of reading the background article at the beginning of the case study.

Listen-Think-Me-We: "A routine for making connections and understanding complexity." Developed by Project Zero, a research center at the Harvard Graduate School of Education.

- "Listen: Listen closely to the story. What do you notice? What do you observe?
- Think: What thoughts do you have about the story?
- Me: What connections can you make between you and the story?
- We: How might the story be connected to bigger stories—about the world and our place in it?"

Case study application: Students and teachers are encouraged to share personal stories about their own lived experiences that relate to the case studies and the Maijuna's stories. Teachers are especially encouraged to share stories about their own experiences as global citizens and environmental stewards. This thinking routine could be used after such storytelling moments, whether formal or informal.

Capstone Project Overviews

Teacher Background: Given the complex learning environment that may unfold from the case studies, students need to demonstrate their knowledge, competencies, and dispositions through authentic and differentiated assessments. These assessments would allow students to apply their skills as empathetic learners, reflect on their own lived experiences within the case studies, and communicate their skills in perspective taking beyond our classroom (Tichnor-Wagner and Cain, 2016).

Teacher Directions: Teachers can select from any of the following capstone project overviews. These projects could be used at the end of each case study or as a choice board for a final culminating project at the end of the series.

Global Conversation Project (Modified from Tichnor-Wagner and Cain, 2016)

The Maijuna have shared a great deal with you through the case studies, and you have created an in-depth portfolio in response to their stories, as well as your own experiences learning and living in our part of the world. To move the case studies from a cultural exchange to intergroup dialogue, please use your case study responses to craft a letter to the Maijuna that I will deliver on my next trip. To do this, first consider how you want to respond to the Maijuna— What do you want to say back to them after learning their story? What do you want them to know about you, your school, and your community? What questions do you still have for them? Start by selecting passages from the writing you have already created. Then modify and add so your document reads as a conversation from here to there. For example, you could share how you learned about the impacts of overextraction in their forest and share what you learned about a similar pattern near your home. You could share what inspired you about their story and how you might follow their example in your community. You can take this project in many directions— just consider what you want your message to be after connecting to them through the case studies.

Facilitation Assignment (Maxwell et al., 2011)

Through your group work in the case studies, you have developed dialogue and facilitation skills. These communication skills you have developed are essential in understanding complexity, building relationships, and considering multiple perspectives. In this project you will select a theme or intersection of multiple themes from the case studies that resonates with you and facilitate a group dialogue.

- Create a 30-minute agenda, including your goals and a series of dialogue questions that serves as a flexible guide for your dialogue.
- Invite a group of 3-5 people to engage in a dialogue about the issue you've selected. This could be peers, teachers, advisory group, and even people off campus. Try to create a group with diverse perspectives, experiences, and/or identities.
- Create an audio recording of your dialogue.
- Answer these post-dialogue questions:
 - o How do you think the facilitation went?
 - o What went well? What was something you did that was useful?
 - o What could have been done differently? What was something that was less useful?
 - o What was your experience as a facilitator?
 - o Describe your observations of group members?
 - How did your facilitation style, including your identity and viewpoint, interact or detract from the dialogue?
 - o How might you use your facilitation and group dialogue skills in the future for collaboration and coalition building?

Generalizable Statements (inspired by Krechevsky et al., 2020)

After diving into a specific story, case studies are meant to be generalized. In other words, the principles or themes in a good case study can be applied more broadly. What are those generalizable principles or themes

from the Maijuna case studies? Based on what you learned from the case studies, craft 15 generalizable statements that extrapolate the Maijuna's story to a wider context. Here is an example statement: Indigenous knowledge and western scientific knowledge can be complementary. Support your statement by connecting the case study to a larger context, using outside research to back up and add depth to your claims, in 3-5 sentences.

Write your own Case Study project (Krechevsky et al., 2020)

Overview: Now that you've participated in several case studies, it is your turn to write your own, using the examples from class as a guide. Your case study will be set in your own home community, at Millbrook School, or another place that is important to you, inviting the reader to understand your place and their own in greater depth. Your case study will explore issues in socio-ecological systems, environmental stewardship, global citizenship, biocultural diversity, and local/contemporary ecological knowledge and western science in partnership.

Length: 3 pages, single spaced, font size 12

Goal: To create a case study that explores topics in field biology through a biocultural lens to be shared with your classmates and at the spring Science Symposium. Write your own story around these themes in order to teach your reader about who you are and aspects of your identity that would be instructive to others.

Components: In addition to the specific components below, consider your big picture message—why does this story matter to you, to the people in your community, and to the world?

The following components should be mixed throughout your case study to create a seamless storyline. The quantities in parenthesis are a flexible guideline.

- Work in a google doc to facilitate peer feedback.
- Title: A descriptive title and subtitle that is concise and informative.
- Vignettes (3): Include descriptive and informative text that tells a story and is interspersed amongst other text. Write in the 2nd person perspective (Ex: You walk into a forest). These should be about your home or Millbrook School. These vignettes should incorporate the following themes around a central topic: socio-ecological systems, biocultural diversity, and local/contemporary ecological knowledge in partnership with western science.
- Actions (3): Include directions and outside resources for the reader to explore issues further and learn more about the reader's home community. These resources could include videos, articles, interactives, and citizen science projects.
- Interrupted Questions (5): Questions interspersed amongst other text. Question types include, reflective, probing, research-based, and/or systems thinking/synthesis. Please do not place all of your questions at the end of your case study. Please do not repeat questions from my case studies.
- Scientific literacy: You should have at least one section that uses experimental design, graph interpretation, data analysis, taxonomy, or other key skills in scientific reasoning and literacy.
- Visuals: Include at least one photo or diagram that intentionally supports your case study topic and theme. Photos do not count toward the page total. Include a photo credit and citation.
- Organization: Organize your case study into sections or parts. Use icons to organize your vignettes, actions, and questions
- References (5): Provide APA citations, using this guide.

Process: You will be partnered with a peer to provide feedback as your work is in progress. Class time will be provided for peer reading and feedback prompts.