## Collaborative Structures

Collaborative structures are effective methods to work together in a way that brings collaboration to life, especially for teachers and students who are new to a classroom environment in which students will come to own most of the talking and interactions. The following structures can be embedded into any lesson or content area to increase collaboration and student engagement—with both the content and the collaboration itself. The value and effectiveness of collaborative structures will increase throughout the year as teachers and students become more comfortable with collaboration and these structures, eventually allowing teachers to tweak or enhance the current collaborative structures to better meet the needs of the group or the task at hand.

### Preparing Collaborative Structures

Teachers can greatly increase the likelihood of success when using collaborative structures by providing students with clear instructions—including a time limit—before they move into their groups. Additionally, teachers should establish a specific routine for moving students into groups. Students may need to practice this routine until they master moving into their groups quickly, with the proper proximity and physical arrangement. If students do not understand the task and its desired outcome, the time frame, or how to efficiently move into groups, chances are that the efforts of the group will be unsuccessful.

### Conducting Collaborative Structures

It is natural for conflict to arise when conducting collaborative structures. In response, teachers often feel the need to intervene, oftentimes too early. Instead, students should be taught about properly dealing with conflict through conflict management styles. Additionally, students should be referred back to the Collaboration Social Contract to celebrate successes and guide missteps. At the end of the group task, time should be allotted for reflection and a debrief of the process. The main points from the reflection can be used as initial goals for the next collaborative activity.

## 3.7: Four Corners

### Student Objective

Students will deepen their knowledge about a topic by working collaboratively with others who possess similar baseline levels of understanding.

### Overview

This structure can be used as a tool for students to evaluate both ideas and products. Use Four Corners to check for comprehension, build expressive capacity and accountability, and build cohesion and community amongst classmates.

### Materials/Set-Up

- In advance of the activity, complete the following:
  - Set up the room by placing one of four topical posters in each of the four corners of the classroom. For example, if the purpose of the activity is to have students evaluate an idea, make four "posters" (e.g., Strongly Agree, Agree, Disagree, and Strongly Disagree) and post them in the four corners of the room.

ELL Integration: Consider providing a word bank, so students have the vocabulary to formulate why they feel the way that they do. Ensure that all words in the word bank have been defined as a group with the students.

### Instructional Steps

1. Read a statement aloud (e.g., "Failure is an important part of life"), and have the students **write down** whether they strongly agree, agree, disagree, or strongly disagree with the statement and why.
2. When finished writing, have the students move to the corner that most accurately represents their stance.
3. Students then engage in a group discussion justifying why they chose their corner.
4. Each group will need to identify a spokesperson who will summarize their group's position for the rest of **the groups**.
5. Allow each group to share and engage in a debate with each other, ensuring that before a group shares their next point, they summarize the point of the group that preceded them.

ELL Integration: Have students rehearse the summary with a partner, and then share out to the larger group.

### Extension

- To increase rigor, use this collaborative structure to evaluate a product (e.g., an anonymous Cornell notes sample) and replace the agreement posters with grades (e.g., A, B, C, and D/F instead of Strongly Agree, etc.). Pass out copies of the product in question and ask students to assign it a grade and explain why in writing. Have students move to the corner that matches their assigned grade and discuss their reasoning. After each group discusses why they chose that corner, have groups (or a group representative) debate their position with the other groups.
- To integrate technology, have each corner group (or small groups in each corner) use a social media or blogging platform to post their reasons justifying why they chose their corner, and then read the other corners' posts in lieu of a verbal share-out.

## 3.8: Carousel Brainstorm

### Student Objective

Students will contribute information and opinions in response to pre-determined questions/stimuli located on chart paper around the room.

### Overview

This structure is used to build background knowledge, review material, or generate opinions. Carousel Brainstorm encourages students to build upon one another's ideas, with maximum participation.

### Materials/Set-Up

- Chart paper
- Markers or other writing utensils
- In advance of the activity, complete the following:
  - Compile several stimuli (e.g., topic, question, image, quotation) based on a previous or upcoming lesson/unit.
  - Write a different stimulus at the top of each sheet of chart paper and post these around the classroom.

### Instructional Steps

1. Create as many groups as there are stimuli posted around the room (e.g., for seven stimuli, create seven groups of students).
2. Send each group to a different piece of chart paper. It may be helpful to assign each group a color of marker, to differentiate each group's contributions.
3. Give each group a short amount of time to brainstorm as many ideas as possible for the question/stimulus before them.
4. After the allotted time is up, have all groups rotate to the next poster. Each group will now review the ideas on the chart and add their own ideas and questions.
5. Repeat this process until all of the groups have recorded ideas for each question/stimulus.
6. Once all of the groups have been to all of the posters, have students complete a **Gallery Walk** to review all of the posters, discussing ideas that other groups added.

Gallery Walk is a structured activity for sharing group products. Have students/groups either post or place their products around the perimeter of the room. Then, have the students slowly circulate around the classroom and peruse each group's product.

Example: "Select one member from your group to take your one-pager about Costa's Levels of Thinking and stand against a wall of the classroom. Once they get there, the rest of us will Gallery Walk around the room. Make sure to pay attention to how they illustrated each Level of Thinking."

### Extension

- To increase rigor, use this collaborative structure as a technique for review the day after students complete Cornell notes. The topics on the posters could come from their notes, and students can then use their notes to generate ideas.
- To integrate technology, use a collaborative word processing tool, such as Google Docs, with one document for each prompt. For the Carousel Brainstorm, groups can "visit" each of the documents and add their own ideas—either with a new color/different font. For the Gallery Walk, they can review the documents and use the comments feature to layer on a discussion.

## 3.9: Fishbowl

### Student Objective

Students will model a process or concept for others, either in groups or for the whole class.

### Overview

This structure emphasizes the collaborative process as much as the content discussed. Fishbowl is typically used to model a process and for giving groups the opportunity to have a structured discussion, while others have an opportunity for structured listening.

### Materials/Set-Up

- In advance of the activity, complete the following:
  - Prepare the room for where the "fish"—or inner circle of students—will sit. This may include moving desks to create the circle.
  - Encourage those who aren't "fish" to have a writing utensil and paper ready to capture notes and thoughts.

### Instructional Steps

1. Identify a collaborative process or concept to be demonstrated (e.g., task completion, problem solving, group discussion, group brainstorm).
2. Select a group of students to demonstrate the process—the "fish" inside of the fishbowl.
3. Explain to the remaining students that they are on the outside of the fishbowl, looking inward. Their goal is to observe both the content and the process. Have this group of students form a circle or semicircle around the "fish."
4. Give a set of instructions to the "fish" and allow them to work through the assignment. As necessary, provide guidance to the fishbowl group.
5. As the "fish" work and communicate, the observers should take notes.
6. Debrief the activity with the entire class, relying on the student observers to share insights into the collaborative process used by the "fish" to complete their task.

### Extension

- To increase rigor, create an assessment sheet for observers to note, for example, how often the "fish" spoke, what level of questions or comments the "fish" shared, how the "fish" conducted themselves verbally and non-verbally, and whether the fish used proper tone and eye contact. Then, allow the observers to provide positive and constructive feedback.
- To increase scaffolding, use Fishbowl when a new collaborative strategy is introduced.
- To integrate technology, have students take their observation notes electronically and possibly keep a backchannel using TodaysMeet or a Twitter hashtag. The Fishbowl can also be videotaped, with the group then adding commentary and other features to analyze the collaborative process.

## 3.10: Give One, Get One

### Student Objective
Students will draw upon their own prior knowledge in order to share information with their peers.

### Overview
This structure is intended to foster critical thinking and collaboration. Give One, Get One is an interactive method for reviewing content, eliciting background knowledge, or processing newly taught information. It challenges students to go through their own metacognitive process as they build knowledge.

### Materials/Set-Up
- A sheet of paper for each student
- A writing utensil for each student

ELL Integration: Consider providing sentence frames with a word bank of possibilities to support this step.

### Instructional Steps
1. Give students a topic or question over which to brainstorm.
2. Have students **write down as many of their ideas as possible** in a given amount of time.
3. After students are finished writing, have them draw a line underneath the last item that they wrote down.
4. Tell students to find a partner.
5. Explain to students that they will each take a turn sharing one of their ideas.
6. Inform students that, below the line they drew, they should write down the idea that their partner shared with them, along with their partner's name.
7. Once both partners have shared and recorded each other's ideas, students should find new partners and continue to add new ideas to their notes. Students will continue this process until time is called.
8. If time permits, ask students to share what they "gave" and what they "got."

### Extension
- To increase rigor, challenge students to go deeper with their thinking and move past their "safe" ideas.
- To increase scaffolding, create a class list using the student-generated lists of ideas for all to see and learn from collectively.
- To integrate technology, have students post two or three of the ideas they "got" from other classmates to a class bulletin board or collective transcript, such as TodaysMeet, Padlet, or Popplet. On a later date, have students revisit online space to view postings of other classes and find a few new ideas to add to their lists.

## 3.11: Helping Trios

### Student Objective

Students will develop active listening and speaking skills, and will learn how to provide and receive feedback.

### Overview

This structure is used to provide students with the opportunity to develop speaking and listening skills while simultaneously learning how to provide and receive feedback. In order for students to learn how to engage in relevant and appropriate reciprocal conversations, they will need to be provided with both the time and space to do so.

### Materials/Set-Up

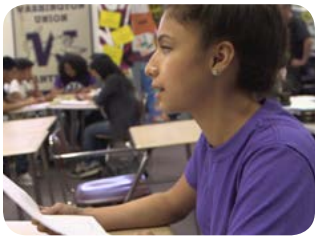
- In advance of the activity, complete the following:
  - Pre-determine the topic of discussion.

### Instructional Steps

1. Divide the class into groups of three.
2. Instruct groups to assign each member one of the following letters: A, B, and C.
3. Give groups a topic (e.g., "My challenges this semester," "My successes this year," etc.) to discuss as follows.
4. Student A is in the "hot seat," and should discuss the topic for two minutes while Students B and C silently employ active listening skills.
5. Next, Students B and C offer feedback for two minutes, while Student A remains silent.
6. All three students then engage in open dialogue for two minutes.
7. Repeat this process with Student B in the hot seat, and then with Student C in the hot seat.
8. If appropriate to the task/topic, consider having the active listening partners take notes about what the speaker has shared.

### Extension

- To increase rigor, this activity can be modified to provide evaluative feedback. Utilize this structure to rehearse a college or job interview. Student A will be the interviewee, and Student B will be the interviewer. Student C observes and takes notes. Student B interviews Student A for a set amount of time, while Student C remains silent. After the allotted time, Student C provides Student A with evaluative feedback. Switch the roles and repeat for all of the group members.



## 3.12: Jigsaw

### Student Objective

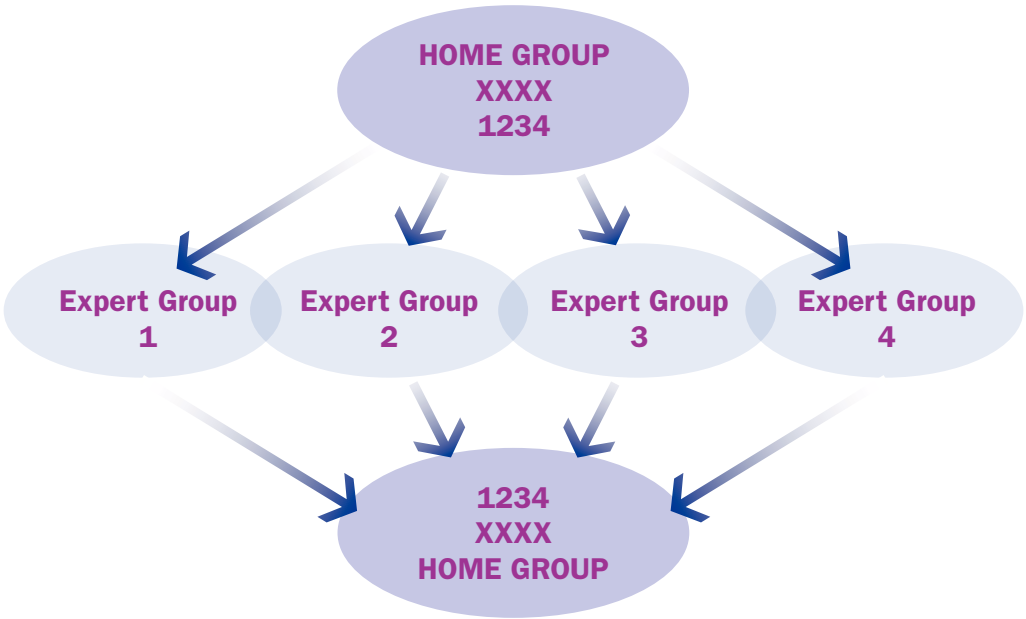
Students will share in the learning by deconstructing information into smaller parts and working together in order to learn about the whole.

### Overview

This structure is used to provide students with the opportunity to learn from one another. A given topic is divided into aspects/areas, and each student becomes an expert on one. They then present their learning to the other students so that, ultimately, all students achieve complete coverage of the topic. Allowing students to target one aspect of the larger topic will prevent them from feeling initially overwhelmed which, in turn, helps students to focus, continue forward progress, contribute to the group, and be held accountable for learning.

### Materials/Set-Up

- A topic or task, substantial enough to be broken down into smaller chunks for students to analyze (e.g., a reading, a project-based learning assignment, etc.)
- In advance of the activity, complete the following:
    - Determine where students will break into their expert groups to work.



## Instructional Steps

1. Divide students into small groups (home groups). The number and size of the home groups is determined by the number of sections of the text to be read or the number of concepts to be introduced/reviewed.
2. Assign each home group member a number that corresponds to the section of the text to be read or to the concept to be mastered. Each member of a given home group is responsible for reading one part of the whole text or for mastering one of the assigned concepts. Each home group should have a member assigned to "1," another member assigned to "2," and so on.
3. To start, ask students to leave their home groups and form expert groups with other students who have been assigned the same number.
4. Ask each expert group to read/review its assigned part of the larger topic. Expert group members assist each other with questions, clarifications, and summaries as they read/review information. Encourage students to take notes during this process. Ultimately, expert group members will return to their home groups as specialized experts. To prepare for that, each student should have an opportunity to rehearse and teach the lesson to their other expert group members.
5. Signal students to return to their home groups to teach other members about their specialization (i.e., to share what they learned in their expert groups).
6. Instruct home groups to synthesize the lessons from each expert group into a comprehensive understanding of the whole text or topic by summarizing the main ideas of each section/concept and identifying how all of the parts are related. (The synthesis of compartmentalized information into a bigger picture is analogous to assembling a jigsaw puzzle, hence the activity name.)
7. Students reassemble as a whole class and share their responses and thoughts.
8. Debrief after the Jigsaw to address both process and content.

### Extension

- To increase scaffolding:
  - Have two "experts" at each home group so that students can work together to gather and teach their expert information.
  - Use the Jigsaw collaborative structure with various texts, current events, social issues, etc.
- To integrate technology, have students apply their expert group learning to create a digital product. Depending on the content, this could be a drawing, a text box, a digital image with a caption, etc. Upon returning to their home groups, students will combine their expert learning pieces together using PicCollage, Microsoft Publisher, or other software platforms.

## 3.13: Numbered Heads Together

### Student Objective

Students will engage in discourse about a topic/question, and if called upon, represent the group in sharing a summary of the discussion/answer with the whole class.

### Overview

Numbered Heads Together is meant to be used for quick collaborative discussion with group and individual accountability.

### Materials/Set-Up

- In advance of the activity, complete the following:
  - Ensure that there is enough room in the classroom for students to be able to move around quickly, yet safely.

### Instructional Steps

1. Prior to utilizing this structure for the first time, explain to students that they will be working in groups to make sure that all of the students understand the material or know the correct answer. Take time to share ideas on how students can hold each other accountable for the information (e.g., quizzing each other, asking students to paraphrase the answer, asking group members to explain why an answer is correct, etc.).
2. Form groups of three to five students using any grouping strategy.
3. Have each student number off accordingly (e.g., in a group of four, students will number off from 1–4).
4. Verify that groups have completed this by asking all 1's, 2's, etc., to raise their hand when prompted.
5. Provide the students with a question or idea to discuss.
6. Students will put their "heads together" to discuss the answer to the question and ensure that all students in the group understand the correct answer.
7. Call out a number randomly and ask all of the students with that number to step forward—or if groups are seated, to stand up. **These students then share their answers with the class.**
8. Repeat this process with new questions or ideas to discuss.

ELL Integration: Consider providing sentence frames for students to formulate their answers.

### Extension

- To integrate technology:
  - Use a random number generator to decide which number will need to speak or which topic the students will discuss.
  - Have students share their answers digitally through a social media platform, such as Edmodo, Google Docs, Poll Everywhere, Twitter, or another technology tool that supports posting information.

## 3.14: Pairs Check

### Student Objective
Students will solve problems through inquiry and coaching.

### Overview
Pairs Check allows students to practice solving any type of problem, and this structure gives them the opportunity to get immediate feedback. The increased number of students who check the work ensures a higher degree of accuracy.

### Materials/Set-Up
- Handout:
  - 3.14a: Pairs Check Discussion Guide
- One copy of a teacher-created set of practice problems for each pair
- In advance of the activity, complete the following:
  - Configure the desks for collaboration.
  - Distribute a whiteboard, if readily available, to each pair.

### Instructional Steps
1. Divide students into groups of four. Direct each group to form two sets of partners.
2. Distribute one set of practice problems and a copy of the Pairs Check Discussion Guide to each pair. Use the Pairs Check Discussion Guide to explain that students will take turns solving and coaching. If time allows, model what this process will ultimately look like.
3. One student begins by solving the first problem. This student should think aloud while solving the problem so their partner can hear the thought processes at work.
4. While this student works to solve the problem, the other partner will check the work and coach using inquiry.
5. Have partners then switch roles and continue to solve the problems.
6. After completing all of the problems and agreeing on the answers, each pair should take turns presenting a problem to the other pair in the group.

### Extension
- To increase rigor, use this collaborative structure for more challenging content-area problems, such as calculating GPA, working out math questions, balancing chemical equations, or solving physics problems.

# Pairs Check Discussion Guide

Directions: Use this resource to guide your discussion during your Pairs Check activity.

1. In your group of four, split up into two pairs.
2. Within each pair, choose who will be the "solver" and who will be the "coach."
3. The "solver" begins by starting to work out the first problem while speaking the thought processes involved in the problem aloud.
4. The "coach" listens to the "solver" and helps out by asking questions.
5. After each problem, switch roles.
6. When all problems are complete, meet back in your group of four. Each group member must then present the solution to at least one of the problems. This will help you all check to see if you got the problems correct.

| | Solver | Coach |
|---|---|---|
| **Job Description** | • Solve the problem by utilizing all of the available resources.<br>• Think out loud so the "coach" can identify what is known and what might cause confusion.<br>• Ask questions. | • Carefully observe as the "solver" works through the problem.<br>• Listen as the "solver" shares thought processes.<br>• Ask questions. |
| **What It Might Sound Like** | • "As I look over my notes, I can see that I first must…."<br>• "When I multiply these two numbers together, I get…."<br>• "I know that _____ means…."<br>• "This is where I get stuck…."<br>• "I understand how to do the first three steps, but I need help when I get to the fourth step…."<br>• "May I look at your notes?" | • "Why don't you start by reviewing your notes to see if you can identify the first step in the problem?"<br>• "What other resources can you use to solve the problem?"<br>• "What do you think _____ means?"<br>• "Can you explain why you are supposed to do this?"<br>• "What else could you try?"<br>• "How can you check to see if you got it right?" |

## 3.15: Think–Pair–Share

### Student Objective

Students will think about a topic or question, and then discuss with a partner to come to a better understanding of the topic.

### Overview

This strategy can be used as a quick processing activity and/or a check for understanding. The thinking and writing steps are critical, as they provide time for students to process their understanding prior to sharing.

### Materials/Set-Up

- A writing utensil for each student
- A sheet of paper for each student
- In advance of the activity, complete the following:
    - Model for the students the concept of thinking about a topic first, until the allotted time has elapsed, and then sharing with a partner.

### Instructional Steps

1. Give students a topic or question.
2. Direct students to generate ideas or an answer, and then **write the ideas or answer down on paper.**
3. Have students find partners utilizing whichever grouping strategy is most appropriate for the class. Having students find the person closest to them is normally an efficient and convenient way to accomplish this.
4. Instruct one partner to share his or her answers and any evidence that supports the idea while the other partner listens.
5. Partners should then switch roles.
6. After adequate time has been allotted for discussion, elicit student responses for whole-class sharing.

ELL Integration: The addition of writing is especially important for English language learners, as it offers "rehearsal" time before creating final thoughts and speaking.

### Extension

- To increase scaffolding, use this collaborative structure independently within smaller groups to focus on generating ideas for an assignment. Also, when students are sharing their answers with the class, encourage them to share not only their own ideas, but also the ideas of their partner. Students may use sentence frames, as well (e.g., "During my conversation with Sheila, she said…," "Jalen had a great idea. He argued that…," etc.).
- To integrate technology, have students follow up with their partner via technology (e.g., texting, social media, etc.) to continue the conversation.

## 3.16: WICOR Partners

### Student Objective

Students will develop a group of collaborative partners for future projects.

### Overview

WICOR Partners is a structure that provides students with a variety of partners who can provide feedback over an extended period of time.

### Materials/Set-Up

- Handout:
  - 3.16a: WICOR Partners Log
- A writing utensil for each student
- In advance of the activity, complete the following:
  - Prepare several "Would you rather…?" statements (e.g., "Would you rather have a cat or a dog?" "Would you rather read the book or watch the movie?" "Would you rather call someone or text them?" "On a day off, would you rather stay inside or go outside?" "Would you rather go to college in-state or out-of-state?" "Would you rather give a presentation to the class or write an essay?").

### Instructional Steps

1. Distribute a copy of the WICOR Partners Log to each student.
2. Instruct students to move to a specific side of the room according to the statement chosen.
   - For example, "Would you rather have a cat or a dog? If you would prefer a cat, go to the front of the room, but if you would prefer a dog, go to the back of the room."
3. Once the students have made their selection and moved accordingly, direct them to find a partner and record their name—as well as a distinguishing feature if the students do not know everyone by name yet—next to the "W" on the paper.
4. Continue to call out more "Would you rather…?" statements and have students regroup and find new partners. As they find new partners, have each student record the new partner for each letter of WICOR on the WICOR Partners Log.
5. Subsequently, any time that students need a partner, call out one of the WICOR Partners options.
   - For example, the teacher might instruct students to work with their "W" partner on a day when they are revising their Cornell notes.

### Extension

- To increase rigor, provide further criteria for partner selection. For example, once students are on a side of the room according to their answer to the "Would you rather…?" question, have students try to find someone from the same math class—preferably from the same period, as well. Students can create partners for each academic class, and the teacher can leave one partner as a free choice at the end.
- To integrate technology, rather than having students physically meet during class, have students "meet" with their partner via a technology medium (e.g., texting, social media, Skype, FaceTime, etc.) either during or after class.

## WICOR Partners Log

Directions: For each partner that you find, write down her or his name next to the letter that the teacher gives. If you do not know your partner well, you may want to write down a distinguishing feature.