

Cooperative Learning Structures

Three-step Interview

Three-step interviews can be used as an ice breaker for team members to get to know one another or can be used to get to know concepts in depth, by assigning roles to students.

- Faculty assigns roles or students can "play" themselves. Faculty may also give interview questions or information that should be "found."
- A interviews B for the specified number of minutes, listening attentively and asking probing questions.
- At a signal, students reverse roles and B interviews A for the same number of minutes.
- At another signal, each pair turns to another pair, forming a group of four. Each member of the group introduces his or her partner, highlighting the most interesting points.

Roundtable

Roundtable structures can be used to brainstorm ideas and to generate a large number of responses to a single question or a group of questions.

- Faculty poses question.
- One piece of paper and pen per group.
- First student writes one response, and says it out loud.
- First student passes paper to the left, second student writes response, etc.
- Continues around group until time elapses.
- Students may say "pass" at any time.
- Group stops when time is called.

The key here is the question or the problem you've asked the students to consider. It has to be one that has the potential for a number of different "right" answers. Relate the question to the course unit, but keep it simple so every student can have some input.

Once time is called, determine what you want to have the students do with the lists...they may want to discuss the multitude of answers or solutions or they may want to share the lists with the entire class.

Focused Listing

Focused listing can be used as a brainstorming technique or as a technique to generate descriptions and definitions for concepts. Focused listing asks the students to generate words to define or describe something. Once students have completed this activity, you can use these lists to facilitate group and class discussion.

Example: Ask students to list 5-7 words or phrases that describe or define what a motivated student does. From there, you might ask students to get together in small groups to discuss the

lists, or to select the one that they can all agree on. Combine this technique with a number of the other techniques and you can have a powerful cooperative learning structure.

Structured Problem-solving

Structured problem-solving can be used in conjunction with several other cooperative learning structures.

- Have the participants brainstorm or select a problem for them to consider.
- Assign numbers to members of each group (or use playing cards). Have each member of the group be a different number or suit.
- Discuss task as group.
- Each participant should be prepared to respond. Each member of the group needs to understand the response well enough to give the response with no help from the other members of the group.
- Ask an individual from each group to respond. Call on the individual by number (or suit).

One Minute Papers

Ask students to comment on the following questions. Give them one minute and time them. This activity focuses them on the content and can also provide feedback to you as a teacher.

- What was the most important or useful thing you learned today?
- What two important questions do you still have; what remains unclear?
- What would you like to know more about?

You can use these one minute papers to begin the next day's discussion, to facilitate discussion within a group, or to provide you with feedback on where the student is in his or her understanding of the material.

Paired Annotations

Students pair up to review/learn same article, chapter or content area and exchange double-entry journals for reading and reflection.

Students discuss key points and look for divergent and convergent thinking and ideas.

Together students prepare a composite annotation that summarizes the article, chapter, or concept.

Structured Learning Team Group Roles

When putting together groups, you may want to consider assigning (or having students select) their roles for the group. Students may also rotate group roles depending on the activity.

Potential group roles and their functions include:

- **Leader** - The leader is responsible for keeping the group on the assigned task at hand. S/he also makes sure that all members of the group have an opportunity to participate, learn and have the respect of their team members. The leader may also want to check to make sure that all of the group members have mastered the learning points of a group exercise.
- **Recorder** - The recorder picks and maintains the group files and folders on a daily basis and keeps records of all group activities including the material contributed by each group member. The recorder writes out the solutions to problems for the group to use as notes or to submit to the instructor. The recorder may also prepare presentation materials when the group makes oral presentations to the class.
- **Reporter** - The reporter gives oral responses to the class about the group's activities or conclusions.
- **Monitor** - The monitor is responsible for making sure that the group's work area is left the way it was found and acts as a timekeeper for timed activities.
- **Wildcard (in groups of five)** - The wildcard acts as an assistant to the group leader and assumes the role of any member that may be missing.

Send-A-Problem

Send-A-Problem can be used as a way to get groups to discuss and review material, or potential solutions to problems related to content information.

- Each member of a group generates a problem and writes it down on a card. Each member of the group then asks the question to other members.
- If the question can be answered and all members of the group agree on the answer, then that answer is written on the back of the card. If there is no consensus on the answer, the question is revised so that an answer can be agreed upon.
- The group puts a Q on the side of the card with the question on it, and an A on the side of the card with an answer on it.
- Each group sends its question cards to another group.
- Each group member takes one question from the stack of questions and reads one question at a time to the group. After reading the first question, the group discusses it.
- If the group agrees on the answer, they turn the card over to see if they agree with the first group's answer.
- If there again is consensus, they proceed to the next question.
- If they do not agree with the first group's answer, the second group writes their answer on the back of the card as an alternative answer.
- The second group reviews and answers each question in the stack of cards, repeating the procedure outlined above.
- The question cards can be sent to a third, fourth, or fifth group, if desired.
- Stacks of cards are then sent back to the originating group. The sending group can then discuss and clarify any question.

Variation: A variation on the send a problem is to use the process to get groups to discuss a real problem for which there may be no one set answer.

- Groups decide on one problem they will consider. It is best if each group considers a different problem.
- The same process is used, with the first group brainstorming solutions to a single problem. The problem is written on a piece of paper and attached to the outside of a folder. The solutions are listed and enclosed inside the folder.
- The folder is then passed to the next group. Each group brainstorms for 3-5 minutes on the problems they receive without reading the previous group's work and then place their solutions inside the folders.
- This process may continue to one or more groups. The last group reviews all the solutions posed by all of the previous groups and develops a prioritized list of possible solutions. This list is then presented to the group.

Value Line

One way to form heterogeneous groups, is to use a value line.

- Present an issue or topic to the group and ask each member to determine how they feel about the issue (could use a 1-10 scale; 1 being strong agreement, 10 being strong disagreement).
- Form a rank-ordered line and number the participants from 1 up (from strong agreement to strong disagreement, for example).
- Form your groups of four by pulling one person from each end of the value line and two people from the middle of the group (for example, if you had 20 people, one group might consist of persons 1, 10, 11, 20).

Uncommon Commonalities

Uncommon Commonalities can be used to foster a more cohesive group.

Uncommon Commonalities			
1	2	3	4
Team Name			

- Groups get together and first list individual things about themselves that define them as people).
- Groups then discussed each item, finding things that 1, 2, 3, or 4 of them have in common.

- When the group finds an item that all of them have in common, they list that item under 4; when they find something that 3 of them have in common, the list that item under 3, etc.

Team Expectations

- Some of the common fears about working with groups include student fears that each member will not pull their weight as a part of the group. Students are scared that their grade will be lower as a result of the group learning vs. learning they do individually. One way to address this issue is to use a group activity to allow the group to outline acceptable group behavior. Put together a form and ask groups to first list behaviors (expectations) they expect from each individual, each pair and as a group as a whole. Groups then can use this as a way to monitor individual contributions to the group and as a way to evaluate group participation.

Double Entry Journal

The Double Entry Journal can be used as a way for students to take notes on articles and other resources they read in preparation for class discussion.

- Students read and reflect on the assigned reading(s).
- Students prepare the double entry journal, listing critical points of the readings (as they see them) and any responses to the readings, in general, or specific critical points.
- Students bring their journal notes to class
- Once in class, students may use their double entry journal to begin discussion, to do a paired annotation, or for other classroom and group activity.

Double Entry Journal	
Critical Points	Response

Guided Reciprocal Peer Questioning

The goal of this activity is to generate discussion among student groups about a specific topic or content area.

- Faculty conducts a brief (10-15 minutes) lecture on a topic or content area. Faculty may assign a reading or written assignment as well.
- Instructor then gives the students a set of generic question stems.
- Students work individually to write their own questions based on the material being covered.
- Students do not have to be able to answer the questions they pose. This activity is designed to force students to think about ideas relevant to the content area.
- Students should use as many question stems as possible.
- Grouped into learning teams, each student offers a question for discussion, using the different stems.

Sample question stems:

- What is the main idea of...?
- What if...?
- How does...affect...?
- What is a new example of...?
- Explain why...?
- Explain how...?
- How does this relate to what I've learned before?
- What conclusions can I draw about...?
- What is the difference between... and...?
- How are...and...similar?
- How would I use...to...?
- What are the strengths and weaknesses of...?
- What is the best...and why?