

## Overview of Collaborative Learning Techniques:

### Graphic Information Organizers CoLTs

*Source: Collaborative Learning Techniques by Barkley, Major and Cross (Jossey-Bass, 2014)  
With additional adaptations from George Washington University Teaching & Learning Center*

#### 19 Affinity Grouping

Students generate ideas, identify common themes and then sort and organize the ideas accordingly. This technique is useful when attempting to break down or unpack a complicated topic and identify and classify its constituent parts. In this activity students individually generate ideas about a topic and groups organize these into categories and themes. The ideas are placed on sticky notes and placed on a common board to be organized. Since the groups identify clusters of ideas and information already shared by some of the students the activity helps to build a group consensus. This activity can often be used as preparation for other collaborative activities. Students might want to post several ideas but there should only be one idea on each sticky note. Mutually exclusive categories are easier since the note will appear only one category. Modifications are needed if this is not the case. It can be useful for students to color code or in some other way mark their notes to indicate how important they think the idea is.

##### *Group size*

2 to 4

##### *Time on task*

15 to 45 minutes

##### *Preparation*

Determine the topic and try the exercise yourself. Determine the medium (sticky notes, index cards and so on) the students will use and how the students will be physically arranged. Determine what additional materials will be needed (white board space, flip chart, large pieces of paper and so on). Determine a time limit for the whole activity as well as the students' activity.

##### *Procedure*

1. Distribute the cards or stick notes.
2. State the issue or problem to be explored.
3. Explain what the activity will be and indicate the time limit.
4. Arrange students in groups.
5. Ask each student to separately and silently generate ideas on pieces of paper.
6. When time is called, have a student collect the idea cards or stick notes, mix them up and place in a common area so that all group members can see them.
7. Ask the group to arrange the cards into related groupings.
8. Have the groups pick titles (a word or phrase for each grouping).
9. Record the results and report out.

#### 20 Group grid

Students are given pieces of information and asked to place them in the blank cells of a grid according to category rubrics. This activity can be used to clarify conceptual categories and

develop sorting skills. This activity is most useful in lower level courses where students are learning many new terms and their relations. In the activity the students sort the information by placing the cards or sticky notes holding them into the cells of a grid. Alternatively the students can write the terms they are given into the cells. More than one level of categorization is possible. The activity can be adapted for decision issues by identifying pro and con reasons or confirming and disconfirming information. The grid and the items should be sufficiently complex to be challenging.

*Group size*

2 to 4

*Time on task*

15 to 45 minutes

*Preparation*

Determine the categories and the information items. In assembling the grid the columns will be used for the category identification. Prepare sufficient information items and grids so that each group has access to their information items and grids. Alternatively the list of information items can be presented to the whole class at one time. Make sure that you can complete the grid before the activity.

*Procedure*

1. Form groups.
2. Distribute the grids.
3. Explain the instructions for the activity and the time limit.
4. Give the students the randomized list of information items.
5. Allow students to discuss the items and categories. Students place the information into the cell of the grid.
6. Students submit the grids for assessment and evaluation.

**21 Team matrix**

Students discriminate between similar concepts by noticing and marking on a chart the presence or absence of important, defining features. The technique is helpful for learning to distinguish between closely related concepts. The activity is focused on making the differences between concepts or categories evident. Activity can be modified so as to have grid columns for requiring two or more features and a column for forbidding features. Note that the distinctions to be marked in the column. Simple binary distinctions are often ineffective.

*Group size*

Pairs

*Time on task*

10 to 20 minutes

*Preparation*

Select several related concepts and make a list of the features that differentiate the concepts. You might also make a list of features that are common and forbidden. Create a sufficient supply the matrix presentations that are to be filled. Determine how to report out.

*Procedure*

1. Form teams.
2. Distribute the blank matrix.
3. Present the procedure and the time limit.
4. Have partners come to a consensus and complete the matrix.

5. Call time and report out.

## **22 Sequence chains**

Students analyze and depict graphically a series of events, actions, roles, or decisions. The technique can be used to understand processes, cause and effect, and chronological series, and organize information in an orderly, coherent progression. The activity requires the students to create a visual map of some sequence. Depending on the topic to which it is applied the product can be used to aid memory or plan activities. It is often good to identify the kind of sequence in advance. For example the sequence may be temporal, logical pre and post conditions, responsibilities, interactions, or cause and effect. The technique can be expanded to identify two different sequences and the connections between them. Note that this technique focuses on linear series or progressions.

### *Group size*

2 or 3

### *Time on task*

15 to 45 minutes

### *Preparation*

Determine the topic and select the kind of series. Choose the information items that are to be organized in the chain. Determine how the students will report out.

### *Procedure*

1. Organize students into groups.
2. Present the instructions for the activity and the time limit.
3. Distribute the information items.
4. Allow students the time to discuss the item and build the sequence.
5. Call time and report-out.

## **23 Word webs**

Students generate a list of related ideas and organize them in a graphic with relationships indicated by lines or arrows. This activity can be useful for figuring out and representing relationships. Like maps, they can indicate a starting point, a destination and information acquired along the way. The activity uses a shared writing space that is started with a word, phrase or question. Students add and organize ideas related to the central items lines and arrows show relations. The technique can be effective where a topic need to be broken-down into parts or where new information is being related to old information. Many different diagraming techniques can be used. Students with weaker visualization skills can find the activity frustrating. Students may need to preparation in how to do the exercise and how to specify relations. This activity can be used to prepare for another activity.

### *Group size*

2 or 4

### *Time on task*

30 to 45 minutes

### *Preparation*

Chose a concept and build a map yourself. Decide what to use as a writing space and what the students will need to use it. Decide how the groups will report out.

### *Procedure*

1. Describe and demonstrate the process
2. Form teams and distribute supplies
3. Present the central concept
4. Allow time for the students to generate the related concepts as words or phrases

5. Allow time for the students to build the diagram using the common writing space
6. When time is over report-out.