

HANDOUTS FOR COLLABORATIVE LEARNING SESSION
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COLLABORATIVE
LEARNING
TECHNIQUE

20

Group Grid

Group Size	2-4
Time on Task	15-45 MINUTES
Duration of Groups	SINGLE SESSION
Online Transferability	LOW

DESCRIPTION AND PURPOSE

This CoLT is probably most useful in introductory-level courses where students are building basic schema, learning a large number of new terms, and trying to understand the categorization rules of the discipline. Organizing and classifying information helps students to clarify conceptual categories and to develop categorization skills. By making students' conceptual organization explicit and graphic, Group Grid also helps students remember the information. In this activity, students sort pieces of information by placing them in the blank cells of a grid. The grid's columns and rows consist of superordinate concepts, and student groups receive scrambled lists of subordinate terms, names, equations, images, or other items that belong in the categories. Teams sort the subordinate items into the correct grid categories.

PREPARATION

Select two or more related categories that organize course information. The simplest grid sorts information into two or three columns. More complex grids have more columns, or they may contain a second level of sorting where the top horizontal row identifies one level of organization and the far left vertical column identifies another level of organization. The item placed at the point of intersection must meet both column and row classification criteria. Write out a list of items that belong in each category.

Make a grid by drawing a large rectangle and dividing it into as many smaller rectangles as you have categories and items of information. Write the name of the categories in the top row and/or left column, leaving the remaining cells blank. Either write out the items that teams are to sort in a scrambled list on the side of the grid, or write the list on a separate piece of paper, an overhead transparency, or the chalkboard. Check to make sure you can fill out the grid yourself. You may use your grid to evaluate students' grids or to have students check the accuracy of their grids.

PROCEDURE

1. Form groups and distribute the blank grid as a handout, or have students copy it from one that you project in an overhead transparency or draw on the chalkboard.
2. Give students the list of scrambled items of information.
3. Have students fill in the blank cells of the grid. Groups can discuss and come to consensus about how the items should be sorted, and fill out the grid as a group project.

- Or individual students can take turns in a 'round robin' order filling in one cell per turn. Each person within the group, or each pair within a quad, can have their own writing style (cursive vs. printing) or colored markers to distinguish their contributions.
4. Students submit completed grids for assessment and evaluation, or you post a correctly completed grid for them to check for accuracy.

EXAMPLES

Introduction to Art

Professor Allie Gorical taught an introductory level art appreciation course that was a survey of the major visual arts from the ancient world to the present day. The list of artist and artwork names was extensive, and students had traditionally felt overwhelmed trying to understand and remember 'who' and 'what' went 'where.' Professor Gorical decided to use Group Grid as a technique to help students sort and remember the information. The course focused on four time frameworks: the Ancient World, the Middle Ages, the Renaissance, and the Modern World.

As a closing activity for each section of the course, she divided students into groups of 4 and gave each group a handout that contained a blank grid and each individual student a scrambled list of the most important artworks of that period. For example, for the Middle Ages, she gave students a list of 50 terms such as The Utrecht Psalter, the Gero Crucifix, the Bayeaux Tapestry, and so forth, and asked them to write the terms into a larger version of the following grid:

The Middle Ages			
	2-Dimensional (Painting, Mosaics, Tapestries...)	3-Dimensional (Sculpture, Bas Relief...)	Architecture
Early Medieval			
Romanesque			
Gothic			

After sufficient time had passed for teams to fill in the grids, she projected her own completed grid on an overhead transparency so that group's could check their grid for accuracy. The grids were one of several tools students used as study guides for examinations.

Physical Anthropology

This professor uses Group Grid periodically throughout the semester to help students organize critical units of information. For example, he wanted his students to be able to distinguish between important anthropological finds of Homo erectus fossils in China. He created a grid in which across the top row he wrote 5 categories of characteristics (the name of the site where the fossil was found, the estimated age of the fossil, the material of the fossil, the year that it was found, and any comments that further described the fossil). In the left column, he wrote the fossil designation (for example, Hexian, Zhoukoudian, Yunxian, and Lantian). Students formed teams, received a scrambled list of elements of information (such as "1980-81" or "mandible"), and worked together to fill in the grid, using the information provided and accessing their notes or text as needed.

Principles of Business

Managerial decision-making is one of the key topic areas in this introductory business course taught by Professor Owen Cash. Professor Cash uses mini-case studies throughout the term to provide his students with 'real world' scenarios that include problems teams must examine and for which they then propose a solution. To help students organize and evaluate the arguments for

different decisions, Professor Cash asks teams to construct and fill out a simple, 2-column “Pro” and “Con” grid for each course of action. (CAT 10, Angelo & Cross, pp. 168-171).

Online Implementation

Using synchronous tools such as teleconferencing or chat sessions that also have chalkboard tools offer one possibility for using this CoLT in the online environment. Or consider giving students blank grids as a word processing document as an e-mail attachment or to download. Either have each individual member of a group complete a grid to compare with their team mates and reach consensus on a single grid, or assign each individual member responsibility for specific columns or rows. Completed grids can be uploaded as web pages into forums that can be viewed by other students.

VARIATIONS AND EXTENSIONS

- Provide students with grids that include only the categories, and have them generate the items to write in the cells.
- Provide students with grids that include only the cell items and ask them to identify category names.
- Simple, 2-column grids can be very effective using a variety of superordinate categories. Consider using the following: pros and cons, costs and benefits, advantages and disadvantages, problems and solutions, or cause and effect (Angelo & Cross, pp. 168-171).
- Consider having students fill out a 2-column pro-con grid from different perspectives. For example, 3 separate grids can analyze the benefits and detriments of online course delivery from the student’s perspective, the teacher’s perspective, and the institution’s perspective.

OBSERVATIONS AND ADVICE

If the grid is not complex enough either in terms of the categories or the cell items, this activity will feel like busy work.

Group Grids are useful to help students prepare for more complex activities. For example, Pro-Con grids can be used to organize arguments for debates or to evaluate decisions in case studies.

Ask students to report out on their grids. Have them make comparisons between their grids, asking them to explain why they sorted the items as they did. Having groups report on their grids gives you immediate information about how clear students are on the organization of concepts.

When groups have been given both the categories and a scrambled list of terms to sort, their completed grids are easily scorable.

KEY RESOURCES

Angelo & Cross (1993). “Categorizing Grid.” *Classroom Assessment Techniques*. Pp. 160-163.

SELECTED ADDITIONAL RESOURCES

Barkley, E. & Cross, P., Major, C. (2005) *Collaborative Learning Techniques: A Handbook for College faculty*. San Francisco: Jossey-Bass.

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Fink, L.D. (2003). *Creating significant learning experiences: an integrated approach to designing college courses*. San Francisco: Jossey-Bass.

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Kagan, R.E. (1996). *Cooperative learning*. San Clemente, CA: Kagan Cooperative Learning.

Michaelsen, L.K., Fink, L.D., & Knight, A. (1997). Designing effective group activities: Lessons for classroom teaching and faculty development. In D. DeZure (Ed.), *To improve the academy: Resources for faculty*. *Instructional and organizational development*, 16 (pp. 373-397). Stillwater, OK: New Forums Press Co.

Millis, B.J. & Cottell, P.G. (1998). *Cooperative learning for higher education faculty*. American Council on Education. Phoenix, AZ: Oryx Press.

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