

# Jigsaw

## Susan Ledlow's Version of Jigsaw

Jigsaw was originally developed by Elliot Aronson (1978). It has since been adapted by a number of researchers and practitioners in a variety of ways. Essentially, it is a cooperative learning lesson design that takes the place of a lecture. Each student within a team has a piece of the information to be learned by all students and each student is responsible for teaching their section to the other students on the team. When all the pieces are put together, the students should have the whole picture - hence the name, Jigsaw. I love Jigsaw; it's the way I often "cover" the content in my classes. Teaching each other helps students to understand the material in a way that's far deeper than when they listen to me explain it or when they simply discuss it.

### GETTING STARTED

I use teams of four in my class and students are numbered off within teams, so the following steps reflect that. If you use teams of three, you would have to divide your material differently. The basic steps are as follows:

### BEFORE CLASS

- ✚ Divide the material needed to cover a topic into four roughly equal parts.

In upper division or graduate classes, you might assign four different articles. In introductory level classes you might need to assign four different sections of a chapter or four abridged articles. Finding four equal parts is sometimes tougher than it seems.

- ✦ Assign a different topic to each team member.

You make the assignment: for example, all #1's will read the article by Johnson & Johnson, all the #2's will read the article by Kagan, all the #3's will read the article by Millis, and all the #4's will read the article by Davidson.

- ✦ Develop and assign homework questions or essays over the material. These should probably be turned in for points or a grade in undergraduate classes.

Jigsaw falls apart if students are not prepared. Assigning questions, reading logs, study guides or reaction papers helps to ensure preparation. You may write different questions for each article or you may simply ask for a summary. In small classes some faculty just check off students' work as they come in. Other faculty grade and/or respond to the assignment.

## IN CLASS

- ✦ Students consult with experts from other teams.

When students arrive in class, they turn in their homework and then meet in expert groups. If you have a large class, you will have to have more than one expert group for each article: you don't want eight people in one expert group. Give the expert groups instructions on their task. If you simply asked your students to read a chapter and write a summary for homework, you might give them instructions like these:

- Introduce yourselves to the other expert group members.
- Discuss the reading with the group, coming to consensus on the main points you will teach your teammates. Make sure everyone participates.

- Try to think of at least two examples from your personal experiences to illustrate the main point(s).
- Plan how you will check your respective teammates for understanding without asking, "Do you understand?"
- Thank your expert group members for their help.

If you had them answer focus questions for homework, your instructions might look like this:

- Introduce yourselves.
- Take turns leading the discussion to compare your responses to the questions. Try to come to consensus on the most important points. If there are things you can't agree on, make note of them to share with your teammates. Also note any interesting or useful examples from any of your expert group members. Check for understanding before moving on to the next question.
- Plan your strategy for teaching your teammates in the limited amount of time that you will have.
- Thank your expert group members for their help.

Other ideas you could add to the instructions include:

- Reminders about social and cooperative skills: "The cooperative expectation for this assignment is that all group members will participate fairly equally in the discussion. It is each person's responsibility to ask for the opinions and ideas of quieter group members. The individual accountability expectation is that any group member, if randomly called upon, could summarize the group discussion."

- Instructions to promote critical thinking: "Try to come to any criticisms of the author's work - is it biased, unsubstantiated, overly narrow in applicability, etc." or "How might this article call in to question Smith's theory that we discussed last week?"

#### ↓ Experts return to their teams and teach.

When students return to their base teams, have each team teach in the same order. This way, if a team's #2 is absent, team members can disperse and sit with the teams next to them when it's time for the #2's to teach. If they all teach on their own schedule, you can't compensate for absences.

#### ↓ Team synthesis activity.

Try to design an activity which will synthesize the information that students learned in the four articles. They might analyze a case, write a team essay or position paper or solve a problem.

## VARIATIONS

There are many variations on Jigsaw (see, for example, Kagan, 1992). As with any cooperative learning activity, make sure that you structure for positive interdependence and individual accountability when you modify the basic design. Some examples of modifications are:

- ↓ Assign only two articles and have students work with a partner on their team to teach the other partners.
- ↓ Have students read the same material but react to it from a different perspective. After reading an article about a program for teaching English as a second language, Student #1 would write a critique from the perspective of a teacher,

Student #2 would write a critique from the perspective of an administrator, Student #3 would write a critique from the perspective of a parent, and Student #4 would write a critique from the perspective of an ESL student.

- ✚ Jigsaw a video and ask students within a team to take notes on different parts or to watch for different things.
- ✚ Brenda Larson at Chandler Gilbert Community College has all her students read the same chapter and take notes. When they get to class, each team member is assigned different part of the chapter on which to write quiz questions. Experts quiz their teammates in preparation for a team competition over the material.

## REFERENCES

Aronson, E., N. Blaney, C. Stephin, J. Sikes & M. Snapp. The jigsaw classroom. (1978). Beverly Hills, CA: Sage Publishing Company.

Johnson, D. W., R. T. Johnson, and K. A. Smith. (1991). Active learning: Cooperation in the college classroom. Edina, MN: Interaction Book Company.

Kagan, S. (1992). Cooperative learning. San Juan Capistrano, CA: Kagan Cooperative Learning, Inc.

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