

# Jigsaw II

Effective cooperative learning is marked by five critical characteristics. If all five are present, there is collaboration; if any one attribute is missing, there may be group work, but not collaboration.

## Johnson's Five Elements of Cooperative Groups

1. *Face-to-Face Interaction* - The physical arrangement of students in small, heterogeneous groups encourages students to help, share and support each other's learning.
2. *Individual Accountability* - Each student is responsible for the success and collaboration of the group and for mastering the assigned task.
3. *Cooperative Social Skills* - Students are taught, coached and monitored in the use of the cooperative social skills which enhance the group work.
4. *Positive Interdependence* - Students are structured by a common goal, group rewards, role assignments and other means to assist each other in completing the learning task.
5. *Group Processing* - Students reflect on how well they work as a group to complete the task and how they can improve their teamwork.

(Students become experts on a part of the instructional material they are learning about. By becoming an expert, and then, in turn, teaching other members of their team, students are responsible for theirs & others learning.)

## Steps for Jigsaw

1. **Preparation of learning materials.** Develop an expert sheet and a quiz for each unit of teaching. If you are using a standard text series, this will be relatively easy. First, divide the content into topics for the expert sheets. The expert sheet should communicate what students should do--read, watch a video, do an activity--and an outline of the topic in the form of questions.
2. **Teams and Expert Groups.** Each student is a member of an expert group and a learning team. Distribute the expert sheets to each learning team and explain that each student will become an expert on some aspect of the topic everyone is studying. Assign each student to an expert group. Students should be given time to work on their topics prior to meeting in their expert groups. When the students are ready, have them move into their expert groups; assign different parts of the room for each group. The activity within the the expert groups will vary, encourage diversity. Your expert sheets will be important; they will direct the students to activities, materials, and questions, hands-on activities, read, or use a computer. In each case, the purpose of the expert group is to learn about the subtopic and prepare a brief presentation that they will use to teach the material to members of their respective teams.
3. **Reports and Quizzes.** When the expert groups have finished their work, students return to their learning teams. Each expert now has the responsibility of teaching the topic to the other members. Encourage students to use a variety of teaching methods. They can demonstrate an idea; read a report; use the computer; illustrate their ideas with photographs, diagrams, charts, and drawings. Encourage the team members to discuss the reports and ask questions; each member of the team is responsible for learning about all the subtopics. When the experts have reported to their groups, conduct a brief class discussion or hold a question-and answer session. Encourage the experts to answer the questions. A quiz should be administered to each individual; students cannot help each other during the quiz time.

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