

## Learning Biology While Constructing Cooperative Learning Groups:

## **THE FIRST 15 MINUTES**

BONNIE S. WOOD

On the first day of class, I want students to experience how the course is structured and what is expected of them. I also want them to learn some biology. So the first thing I do is organize the students into cooperative learning groups of four or five students with whom they will work on in-class and homework activities for the entire semester. Many science educators are proponents of cooperative learning, but struggle to find an equitable and effective way to build the groups. I designed a method to form heterogeneous cooperative learning groups that is impartial and requires learning some biology within the first 15 minutes of class.

After students are seated comfortably with their friends in the classroom location they prefer, and I have distributed a stack of topic schedules and syllabi, I warn them that they are going to have to move. I ask students to turn over the syllabus and look at the words I have written on the back-a different one for each student. In my 20-student General Biology I section (combined lecture and lab) at the University of Maine at Presque Isle, I instruct them to organize themselves into four groups based on what is written on the back of their syllabus. They then move around the room, communicating with the other students until they have determined how to sort themselves. I give no other hints except that they can use their textbooks, coursepacks, and brains. When a group thinks it discovered the "formula," I tell them if it is correct. Once one group has determined its classification, other groups generally, but not always, quickly form. For the rest of the semester, groups sit together in an arrangement that fosters communication.

There are endless possibilities for what an instructor writes on the back of the syllabus: I use a different set of terms for each course I teach. For my General Biology I class, I write the genus and species as well as the common name of organisms—all ones we will see or learn about during the semester. As we study them, I refer to the students who "represent" these life forms. Each cooperative learning group consists of four or five organisms that are members of a single eukaryotic kingdom. So at the end of this exercise, the groups are named for the four kingdoms: Protista, Fungi, Plantae, and Animalia.

BONNIE S. WOOD, Ph.D., is Professor of Biology, University of Maine at Presque Isle, Presque Isle, ME 04769; e-mail: <u>wood@umpi.</u> <u>maine.edu</u>.

Within the first 15 minutes of a course, I build the appropriate number of heterogeneous cooperative learning groups. Participating students have learned something about binomial nomenclature, are using the names of the eukaryotic kingdoms, and have been introduced to the organisms we will be studying throughout the semester.



Professional Development Conference.

Copyright of American Biology Teacher is the property of National Association of Biology Teachers and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.