

Pairs and Squares: Engaging all students in class discussions

Idea

Class discussions don't always allow all voices to be heard, especially those of shy students. A few participants might dominate the conversation. On the other hand, dividing students into small groups and telling them to discuss a topic doesn't guarantee high-level learning or top-quality peer interactions.

This activity lays a foundation for students to be active, involved learners and thinkers during class discussions. Students prepare at home by answering thought-provoking questions that require reading, research and thinking. In class they share their ideas in pairs, then in squares (groups of four) and finally with all their classmates.

Goals

By engaging in cooperative learning that builds to a lively class discussion, students practice supporting their ideas with evidence and arriving at a consensus. They understand the material at a deeper level. In addition, they improve their skills in oral communication, problem solving and collaborative inquiry. Students enjoy this activity because it's interactive, engaging and intellectually stimulating.

Implementation

This simple but effective activity would work well in any class that discusses current events, ethical dilemmas or other thought-provoking topics. Here's how I use this technique in an Environmental Journalism class.

Homework preparation

I assign a chapter about the history of environmental reporting¹ and several chapters from *Silent Spring*, which is considered one of the most influential books of the 20th century. The students write down the answers to the following four questions, which requires them to dive into journalism history and winnow down a multitude of possible answers:

1. What do you consider the biggest environmental story **before** Rachel Carson? On what do you base this assessment?
2. What do you consider the biggest environmental story **since** Rachel Carson? On what do you base this assessment?

¹ Bob Wyss, *Covering the Environment: How Journalists Work the Green Beat* (New York: Routledge, 2007).

3. What was the major reason that *Silent Spring* was attacked when it was published in 1962? Consider the issues of the day, such as the Cold War, feminism, civil rights and the fledgling field of ecology.
4. What is the main reason that *Silent Spring* is still under attack almost 55 years after its publication?

Although the readings provide background information, the students have to conduct additional research, find evidence to back their conclusions and think about the connections between past and present. As one student wrote in a follow-up survey, “It allowed me to think deeper on those 4 questions.”

In class

1) 10 minutes (or more, if needed): To promote student interactions, divide the class into pairs. If possible, mix the pairs by gender, social status, ethnicity, and/or learning styles. Each time I do this activity, I try to pair up different students. As one student noted in a follow-up survey, “Working with new people is fun.”

In pairs, the students compare their answers, share their ideas and select or synthesize one answer for each of the four questions.

2) 15 minutes (or more, if needed): To develop collaborative skills in a more complex setting, each pair teams up with another pair to form a square (foursome). Each pair shares its answers to the four questions. The foursome then distills the answers down to one set. As one student wrote, “We were able to compare answers and pick our best.”

To ensure that each student has a chance to contribute, ask each one to put a pen on the table after speaking. No student can share another idea until four pens are on the table.

Depending on time and the size of the class, you could combine the foursomes into eightsomes to discuss their answers and distill them into one set. Some students, however, may feel left out in groups larger than four.

3) 20 minutes: To report to the class, one person from each foursome summarizes the group’s answer to the first question. The class then discusses all the answers to that question. As one student noted, “It was interesting to hear what others came up with.”

To involve everyone, a different student in each group answers the second question, another student the third question and yet another the fourth question. Like a good dinner party, the conversation begins to flow from student to student rather than from student to instructor. As one student put it, “People in other groups brought up things we had not thought of.”

4) To extend and apply knowledge gained during the class, students pick one of the current environmental issues discussed and write an evidence-based opinion piece.

Student Reaction

Before I tried this approach, class discussions often revolved around the same vocal students, or I randomly called on other students who were sometimes unprepared. Giving everyone an equal chance to talk helps avoid student misperceptions, such as “The instructor always calls on her” or “The instructor only calls on me when I don’t know the answer.”

As the semester progresses and students become used to this approach, everyone feels more comfortable engaging in lively discussions with little input from me. A shy student wrote this in an end-of-semester review: “Initially, I was so intimidated by my classmates. The small groups got me over my fear of sounding stupid. Later in the semester I was less shy, and I definitely reaped the benefits. I was treated with respect by everyone in the class and learned that my classmates actually valued my opinion.”

Here are reactions from other students:

- “I learned so much about different perspectives from conversations with my classmates.”
- “This is by far the best journalism class I have taken. Every week I was given the opportunity to participate in cool discussions. I am just completing my first semester as a journalism student. I have quite a bit to learn, and learn I did!”
- “I loved the discussions. Defending my views helped me learn more and absorb more than a power point (sic) ever could.”