Student-Student Classroom Interaction

Jump down to: Characteristics/examples of classes with low and high student-student interaction | Considerations for structuring your class | Tips and examples for improving student-student interaction



Students in jigsaw groups

What is student-student classroom interaction and how does it affect learning?

This theme addresses how well students communicate with one another in class. Classes where students have opportunities to communicate with each other help students effectively construct their knowledge. By emphasizing the collaborative and cooperative nature of scientific work, students share responsibility for learning with each other, discuss divergent understandings, and shape the direction of the class. The Pedagogy in Action module on Cooperative Learning is a great place to learn more about structuring student-student interactions both in and out of the classroom. The Cutting Edge teaching method module on using ConcepTests in the classroom also has tips for integrating think-pair-share activities into even large classrooms.

Characteristics/examples of classes with low and high student-student classroom interaction

Classes that have low interaction among students are more lecture-focused, often well-organized, and tend to present material clearly, with minimal text and well-chosen images. The instructor is usually well-versed in the content, but teaches in a way that does not provide an opportunity for interactions among students.

In contrast, a more student-focused class provides multiple opportunities for students to discuss ideas in small groups and may support a whole class discussion. One simple measure of this is the proportion of the class dedicated to students talking to one another. The quality of the discussion is also important: tasks that have the potential for more than one answer can generate deeper thinking processes and may also shift the direction of the lesson. (Note the connection here with aspects of the Lesson Design and Procedural Knowledge themes.) Successful discussions are characterized by small group conversations that seek to give voice to all students and to provide sufficient time and opportunity to listen and consider the ideas of others.

Consider structuring your class so that it:

- Provides opportunities for students to work in pairs and small groups and use multiple modes of communication (e.g., discussions, making presentations, brainstorming).
- Encourages students to work together as a class to contribute to a comprehensive answer to an open-ended problem.
- Devotes a significant proportion of class time (15-30%) to student interactions.
- Encourages in-depth conversations among students (and between students and instructor).
- Features several students explaining their ideas to a respectful class that listens well.

Tips and examples for improving student-student classroom interaction

- I want students to interact at different scales and engage in discussion my classroom. Consider using...
  - In-class assignments where students think individually about a question, talk to their peers about an idea, and then report their findings back to the class. These think-pair-share exercises work best when there are multiple answers to a question (nurturing and valuing divergent thinking).
  - Conceptual multiple-choice questions (ConcepTests) about themes from the lesson mingled with peer instruction. The use of clickers can facilitate this technique.
  - More structured discussion exercises such as jigsaw activities where students become experts in some facet of a topic and then work as teams of mixed experts to further explore a topic.
  - One or more cooperative learning techniques that encompasses a variety of methods to encourage student-student interactions within your classroom.

- I want students to work on open-ended problems to encourage in-depth conversations with each other and with me. Consider using...
  - Open-ended questions. These are questions with more than one right answer and encourage students to make a judgment call. Sometimes such questions can foster in-class debates.
  - Structured academic controversies in which small teams of students learn about a controversial issue from multiple perspectives and attempt to come to consensus.
  - Explorations of data in your classroom. Encourage students to delve into the real data to decide how best to use/interpret/display it.

- I want students to present their ideas to others and to have all ideas respected. Consider...
  - Professional communication projects that involve students in the presentation of their ideas as oral or poster presentations.
  - Incorporating gallery walks to encourage groups of students to build a class response to an instructional prompt. Students are actively involved in synthesizing important concepts, consensus building, writing, and public speaking to share their findings. This technique works best in small to medium-sized classes.