TEN TIPS FOR TRANSFORMING ANY CLASSROOM FOR ACTIVE, STUDENT-CENTERED LEARNING

Quoted from Cathy N. Davidson, *The New Education: How to Revolutionize the University to Prepare Students for a World in Flux* (New York: Basic Books, 2017, pp. 263-266). Permission to post for *Center for Speech and Effective Advocacy* granted by the author. *Please do not duplicate without permission*.

Whether you teach in a radically innovation program or at a traditional institution in a course with a prescribed syllabus, you can immediately transform your classroom into an active, student-centered learning space where your students learn how to learn. These methods are all designed to offer students the opportunity to take responsibility for and creative leadership of their own learning.

- 1. **Think-Pair-Share**. This works best with index cards (optional) and a timer. I like to do T-P-S in a formal way to ensure that everyone has a chance to speak and everyone has a chance to sit quietly and listen. (a) Think: Set a timer for 90 seconds. Each student jots out a quick, low-stakes answer to an open-ended question the prof asks (ex: What was the single most provocative/ disagreeable/ brilliant/ inspiring comment you read in this week's assignment?). (b) Pair: Everyone, even the introverts, should have a chance to be heard in the classroom. When the timer sounds, set it for another 90 seconds and, this time, have the students pair up and take turns reading and listening to one another's answers. Then they can discuss and come up with one synthesized item to read to the class. (c) Share: Go around the room (if less than forty students) and have one person from each pair share their pair's comment with the group. Whatever you do next in class, this method ensures that everyone is involved, alert, and already thinking across a range of ideas. If you have more than forty students, use an online collaborative tool (such as Google Docs) and have pairs record their comments. You can project and start your lecture from the list students compiled. (d) Communicate: I like to add a public component and have students share these comments on a public blog.
- 2. **Question Stacking**. Ask students to raise their hands in response to a question and write down the name of everyone with a hand up. Have everyone put their hands down and call on people in order. No one asks a second question until each person responds or withdraws the question because someone else answered it already. We know seminars can replicate inequality even more than lectures, by seeming to be open but privileging those who are best at mimicking or mirroring the intellectual style, language, or even demographic characteristics (race, gender, sexuality, region, religion, etc.) of the professor. (Admit it: we've all been to a lecture where we know in advance who will be waving a hand and dominating the Q and A. That happens in class too.)
- 3. **Everybody Raise Your Hand**. This is the method used by the polymath, self-taught speculative fiction writer Samuel Delany. Whenever you ask a question, have every student raise a hand. You call on anyone. They can answer or say, "I don't understand the question" (in which case you ask "Why?" and start a discussion there) or say, "I don't know the answer—but I bet Derek/ Dahlia does." This simple technique asserts that "I don't know" is a starting place, not a source of shame. (Your students will also prepare more if they know they are responsible for every question, every class, even if they don't know the answer.)
- 4. **Interview**. Have students work in pairs and interview one another. I like to have them ask, "What three things are you most worried will be hard about this class?" and "What three things can you contribute to our class that we don't know about?" and do a skill pairing on the first day of class. You can also use the technique throughout the semester to ask about the assignment or problem sets or whatever is on the syllabus for the day. Example: "What did you find hardest to understand about the assignment for today? What are you sure you have down cold and can teach someone else about today's assignment?" Have them together prepare what they think will be an interesting question, challenge, or problem to present to the whole class to address or solve. In a large lecture, you can sort out the kinds of questions by groups and have them work in a group on the topic.

- 5. Class Constitution. On the first day of class, set up a collaborative online tool and have students write a collective "class constitution" and "terms of service" agreement for the class. This is ideal in a class of fewer than fifty, but we did it for eighteen thousand in our MOOC. I typically get students started by offering a document written by others that they can edit or by putting up bullet points of all the minimal class requirements and letting them determine everything else. I encourage students to begin with their loftiest principles ("life, liberty, and the pursuit of happiness" is one model) and then think about how they want one another to participate and contribute to those goals. I even have students create assessment systems, such as contract grading and student peer review and analysis of one another's work.
- 6. **Collective Syllabus Design**. Also on the first day, I like to leave the room and have the students design all or part of a syllabus. I've done this for entering freshmen and for doctoral students, with equal success, in a range of courses across the humanities, social sciences, and computational sciences. Sometimes I create the first half of the syllabus and challenge the students to create the last half; other times, I might have one required text in each unit and have them add the rest. Students have consistently been ambitious and rigorous—sometimes more than I would want to be. One time, in Mapping the Futures of Higher Education (https:// futuresinitiative.org/ about-mapping-futures/), my co-teacher and I literally left the room on the first day of class and had students structure, organize, and design the course. We were not disappointed.
- 7. **Collaborative Note Taking**. Set up a Google Doc or other collaborative tool and have students take notes together in class, including with a back channel for conversation during class, where they also add links and other items they find in web searches. This puts a twist on the "laptop or no laptop" question. You can also create extra-credit reward systems for those who contribute most, require that everyone contribute something, have students vote up and down ideas, and find other ways that the laptop becomes an instrument of learning, not—like the school newspaper of old—a form of diversion and escape.
- 8. Collaborative Projects with Peer Assessment. It is now commonplace to assign group collaborative projects. Almost everyone hates them because the diligent end up doing the work for the whole group. (Note: This is also true in the business world.) I begin collaborative projects by having the group come up with a list of six to ten contributions that need to happen for the collaboration to work. These can be "fire starter" (coming up with great ideas), "implementer," "budget master," "technology maven," "design guru," or anything else deemed central to the success of the project. Before each class session, students work privately, read over the list, and award no more than one peer badge in each category to one member of their team. The group reassembles and everyone looks at the list. The prof circulates and looks at these too. It's easy to see who is and isn't collaborating, what needs to happen next to rectify any problems, and how.
- 9. **Exit Tickets**. Whether for six or six hundred students, at the end of each class have students write out one thing that they don't understand/ want to discuss more/ disagree with, and the like. Have students sign their cards. It's a substitute for taking roll or giving pop quizzes, allows for reflection (the single most important element of learning), and is a great way to start the next class.
- 10. **Public Contribution to Knowledge**. Students work best when they know their work is for their future beyond school, not just for the test, and when they realize their work contributes. For the last decade, I've refused to assign students any term or research project that they do only for me for the purpose of a grade. I ask students to find a way for their work to have a bigger impact and value beyond the course, whether that is posting on a class blog or editing or augmenting Wikipedia entries or tutoring local kids (or first-year students) in what they have mastered or in actually using their knowledge to effect some kind of change in the world. The best part of student-centered learning designed to prepare students for a complex world outside the classroom and after graduation is that, once you let students begin, they will lead you to many different ideas, solutions, and applications. *Let's get started*.