17 Collaborative Learning Methods:  
Encouraging Student Engagement & Participation

Many of the following activities are adapted from
• *Active Learning: 101 Strategies to Teach Any Subject* by M. Silberman (1996) and

I. Team-Building & Discovering Class Concerns
Class dynamics depend in large part on whether each student perceives that he or she matters. If instructors allow time up front for students to get to know one another, and for the instructor to get to know students, this effort can contribute to a class that feels “bonded.” Here are ideas that provide information about the students themselves or address the subject of the class through team-building.

1) Questions Students Have (Silberman)
After students review the syllabus, they may have further questions about the class. This activity allows them to ask these questions anonymously. It could be used anytime you would like to know how students are thinking about class content.

Procedure:
• Give each student a blank index card on which to write down any questions they have about the class. To model, you can ask for a few questions from the group. Tell students they can do the writing anonymously to ensure free expression.
• Form groups of 5-6 students. Ask members to sit together and pass their cards to the persons next to them. Each student reads the questions and puts a check next to those that he or she also has.
  
Afterward: Collect and review the cards and prepare responses to the most frequently “checked” questions. Invite students with other questions to talk with you outside of class.

Variation: You could ask students to write down their hopes and concerns about the class.

2) Survey for Class Ground Rules (Silberman)
This activity allows students to participate in the creation of classroom norms, building an environment that may foster dialogue.

Groups: Divide the class into groups of 4 or 5 students.

Procedure:
• Each team discusses what they think would be good class “ground rules” to keep engagement and mutual respect strong. They can also list what behaviors members feel interfere with these goals.
• To facilitate, you can provide teams with easel-sized sheets on which they to record the rules they have generated with markers. They can then post the lists on the wall.
• Either you or volunteers can consolidate this information into a list of class ground rules, emphasizing positive statements. Here is an example:
  1. Come to class on time and prepared.
  2. All members participate when in small groups and teams.
  3. Let others complete thoughts without interrupting.
  4. Ask questions to draw out others’ ideas.
  5. Address each other with respect.

Afterward: Prepare a handout from the list of class rules.
II. Generating Curiosity About the Course Subject

3) Class Commercial or Ad
This activity may ignite students’ interest and allow them to demonstrate their creativity.

Groups: Up to 6 members.
Procedure:
- Ask teams to create a 30-minute commercial OR a print advertisement promoting the subject of the class: its value, utility, appeal, well-known people connected with it, etc.
- The ad should offer a general concept, slogan, and visuals in outline form—although the team could act out, or even film, a commercial, or use cut-outs from magazines to make a prototype ad.
- Before the teams proceed, you could ask them to brainstorm about the qualities of an effective ad and show some commercials or print ads—both effective and not.

Class Discussion: Each team presents its ideas to the class. Ask what students learned from thinking about the subject in terms of marketing it.

Variations: Ads are a fine way to examine the elements of visual argument and graphic design, and can be used in association with any topic: e.g. students in an ecology class participating in a “social advertising” campaign to promote environmental awareness.

4) Lightening the Learning Climate (Silberman)
This activity allows students to use humor and creativity to parody a topic, concept, or criterion related to the subject of the course. Interesting insights may result from thinking in opposites. Students are also encouraged to reflect on standards and criteria for work in that field.

Group Formation: 3-6 members.
Procedure:
- Tell students that they are going to have a chance to have fun with the subject matter of the course before “getting down to business.” Give them an issue, topic, or concept related to the subject matter of the course that they will then “spof.” You could model the activity by presenting a topic, then inviting responses from the class. Here are a few examples:
  - Industrial Design/Engineering: Propose a design for the most earth-unfriendly car.
  - Health: Create a diet totally lacking in nutrition.
  - Writing: Write a short course description in the most unappealing style possible.
- After they have generated their “creation,” ask students to pause and reflect on how it violates standards or criteria in the field, and what these are. Students can then make any changes to their “creation” and prepare to explain their choices to the class.

Class discussion: Each team presents their “creations.” Then students can reflect on what they learned from thinking about the subject in this fashion.

5) Interview the Teacher-Professional
Often students want to know what it is like to practice in the profession related to the course. You might supply information about your profession, although with the caveat that you are providing your individual perspective, which may be quite different from that of other practitioners.

Group Formation: 3-6 members.
Procedure:
- Provide each group with one aspect of a job in your field. Examples might be:
  - Daily routine.
  - Necessary skills.
  - Creative process with colleagues.
- Ask the groups to generate on paper statements of what they imagine happens in relation to that aspect, and questions about the aspect.
Each group shares a few of their statements and questions with you, the Interviewee, and you respond. **Variation:** Consider their statements & questions outside of class and then be interviewed during the next class.

**Class Discussion:** Ask the group what they learned about the profession that surprised or interested them.

**Alternative Contexts:** You could use a similar activity with **Guest Speakers.**

- Prior to the visit, students meet in groups to prepare questions for the Speaker. As in a Press Conference, the Speaker will give an opening statement, and then the class will become the questioning “Press.”
- Students who took the class before may be invited as guest experts.
- Students can also prepare questions for experts they will meet on field trips, such as museum docents or heads of design studios.

### III. Active Learning & Reciprocal Teaching

#### 6) Question-Response (Silberman)
You can generate interest in a topic through questions that engages students, acting on the premise that we engage, digest, recall, and use information and ideas that interest us.

**Groups:** 2-4 members.

**Procedure:**
- Pose a question that is both intriguing and **not easily answerable** about the subject you will be discussing. Think in terms of question categories:
  - **How to:** How might you devise an experiment for . . . ?
  - **Cause/Effect:** How do you think new discoveries in physics affected modern painting or sculpture?
  - **Interpretation:** How would you interpret . . . ?
  - **Personal Relevance:** Have you experienced or observed gender-based discrimination?
- Allow students to reflect on the question individually and make notes before sharing.
- Encourage students in pairs or small groups to allow free speculation—without critiquing individual responses. Premature critiquing suppresses creativity.
- Rather than launch into an answer, allow time to generate curiosity.

**Class Discussion:** Pairs or groups share their speculations; then you respond to the question as a transition into your lesson.

#### 7) Student Inquiry (Barkley, Cross, and Major)
This activity is similar to “Question Response,” but the students do the questioning. In fact, in my experience, the most creative teachers are often those who allow students to learn by inquiry rather than supplying “the answers.”

**Groups:** 2-4 members.

**Procedure:**
- Students generate questions about the topic under consideration. For example, students compose two questions about a movement in 19th-20th century Western art (Impressionism, Futurism, Surrealism, Cubism, etc.)—writing them on an index card. One question is about a “defining feature” of the movement, and the other about an aspect of the movement that particularly interests the student.
- Students trade cards, and provide answers to the questions—even tentative ones.
- After teams have considered a few questions and recorded responses, you can have them share some, as well as their responses. You can check students understanding and perhaps use some of the questions for study guides or on exams.
8) **Listening or Reading Teams (Silberman)**
This technique focuses students’ attention on course reading or lecture and allows them to contribute perspectives in discussion.

**Groups:** Designate a team per role, depending on the roles you choose to use.

**Procedure:**
- Divide the class into teams and give them the following roles *(or create your own, depending on your teaching purposes)*:
  - **Team Role** | **Assignment**
    - **Key idea seekers** | Identify several key ideas, arguments, or concepts addressed in the reading or lecture and explain them.
    - **Example givers** | Identify examples and assess how well they reinforce significant points.
    - **Summarizers** | Create an abstract (show examples of one) that captures the essentials of the reading or lecture in a few sentences.
    - **Questioners** | Create at least two questions to be asked about the material.
- If you are using this technique with readings, you may want to give the students their roles before they read out of class.
- Give teams time in class to discuss the lecture or reading and complete their task.

**Class Discussion:** Each group shares its responses. Other students may want to question, clarify, or challenge others’ responses. See how far students go before you intervene.

**Variation:** Organize a jigsaw discussion where students met in initial expert teams to share observations of the reading or lecture from their assigned angle and then join mixed groups comprised of one student from each team; in these jigsaw groups students then share their findings with their peers from different teams—putting together all the pieces of the puzzle, ultimately.

9) **‘Video Critic’ (Silberman)**
This technique encourages students to watch films or video actively.

**Groups:** Divide the class into groups that correspond to the number of aspects you choose to consider.

**Procedure:**
- Ask each team to attend to an aspect of the film while watching. **Examples:**
  - Realism
  - Depth of characterization
  - Significant scenes
  - Structure/organization
  - Relevance to their lives or society
- Show the video. Then give groups time to discuss the particular aspect, raise any questions, and prepare for the larger class discussion.

**Class discussion:** Groups share their most interesting insights and pose questions, allowing for a wide-ranging discussion of the film or video.

**Writing Option:** Ask students to write a review of that or another film, after providing and discussing the features of sample reviews.
10) **Group Learning in Leadership Teams**
This technique allows students to research and present topics, and can ensure their investment and excitement in the course. It constitutes true collaborative learning.

**Procedure:**
- Assign a topic that can be broken down into distinct subtopics, issues, events, or approaches. Examples: *The elements of artistic composition, theories of human nature, different computer operating systems, the campaigns of the Civil Rights Movement.* You might use this activity to inspire students to discuss the *content of a book, with a team per chapter.*
- Allow students to choose the particular subtopic or chapter that attracts them, and form groups based on their choices.
- Teams will need time in class and out of class to learn about their topic or chapter, and to discuss it. **You will serve as a consultant,** responding to questions that arise.
- Ask students to prepare a Prezi, PowerPoint, or Mind Map that captures, in conceptual terms, the essentials of their topic or chapter. Ask them to prepare a few thoughtful questions to stimulate class discussion. (You will likely need to provide guidance in posing **interpretive and analytic questions**.)
- **If all the class has read the book, teams will orchestrate discussion.** If only the team has considering a subtopic, they will need to provide an overview to the class, along with discussion questions.
- In any case, the teams serve as **Class Leaders.** For their leadership session, they can plan a few-minute “hook” activity to set the stage for discussion.
- To best engage the entire class, the team will provide small groups with a particular question to consider, and at the end of class, have groups report their responses.
- If the group is informing the class, they can field questions after their presentation.

**Note:** Depending on the topic, students may be able to share their *cultural knowledge* as they teach one another. For instance, re: the Elements of Visual Art, Chinese or Japanese students may inform Western students of their artistic traditions, in relation to the subtopic (e.g. “viewpoint” or “pattern”). The same could be true for presentations on musical or written traditions, socio-political topics, etc.

V. **Problem Solving**

11) **Structured Problem-Solving (Barkley, Cross, & Major)**
Students work together as a team to apply knowledge and skills to a practical problem.

**Groups:** 4-6 members.

**Procedure:**
- Present students with a complex problem to solve. It may require background reading or Internet or other research.
- Provide steps they can use to solve the problem, such as the Dewey Six-Step Technique: “a. Identify the problem. b. Generate possible solutions. c. Evaluate and test the various solutions. d. Decide on a mutually acceptable solution. e. Implement the solution. f. Evaluate the solution.”
- Teams work to solve the problem.

**Class Discussion:** Teams present the solutions to the class, describing their process, including obstacles or missteps required to resolve the problem.

**Writing Option:** As teams proceed, ask each to submit responses to these questions: “What do you know? What do you need to know? And where can you find out?” so you can keep track of their progress and help them troubleshoot.

**Variation:** In a variation called “Discovery Method” students “identify problems, generate hypotheses, test hypotheses, and apply conclusions to new situations” (Millis & Cottell in *Cooperative Learning for College Teaching*, 1993). In other words, students learn how to **employ the scientific or empirical method**—essential in many professions.
12) “Send-A-Problem”  
This is an active way to let groups consider other groups’ solutions to a problem.

Groups: 3-5 members, depending on how many problems you are providing.

Procedure:
- Explain to the class how the activity will proceed, with each group discussing, solving, and then passing their solution to a problem onto the next group. For example, students in an architecture class may be asked to consider a set of zoning or design problems.
- Provide each group with a problem—clipped to the front of a file folder (or large envelope). Also include a number of large index cards (4 if there are 4 groups) on which teams will write their solution or, in the last round, their evaluation of a solution.
- Ask the groups to discuss the problem, generate possible solutions, choose the ‘best’ one by majority vote, and put their written response in the folder.
- Groups then pass the folders in one direction to the next team, who considers the problem, offers a solution, and passes it on.
- After the final exchange, each group analyzes the problem and the solutions provided by other groups. This final group considers and compares solutions, evaluates their strengths and weaknesses, and synthesizes the information.

Class discussion: Teams present their assessment of others’ solutions as well as defend their own proposed solutions. You can make observations, question or reinforce ideas, encourage experimentation, etc.

VI. Promoting Intensive Discussion & Critical Thinking

13) Case Study
Case studies “help bridge the gap between theory and practice and between the academy and the workplace. [They] engage students in critical reflection, and because they typically involve multiple alternatives to solving problems, they can help students develop analysis, synthesis, and decision-making skills” (Barkley, Cross, and Major).

Groups: 3-6 members.

Procedure:
- Find or create a case study that you find intriguing, inspired by a current controversy or a historical one (although students may respond more readily to a current one). Decide how you want students to approach the case, and prepare study questions to aid their efforts.
- Distribute handouts of the case to each group.
- Allow students to review the materials and ask questions about the analytic process and objectives. You may ask them to consider the case from the position of the protagonist, while also considering other actors’ points of view.
- An example: A young sculptor gets a commission to do a sculpture of an 18th century California missionary for a town square. But soon the locals hear about the commission and begin to protest the plan, arguing that the missionary was active in the brutalization of a Native American tribe. Others claim that he helped to “assimilate” members of the tribe, preventing their annihilation. The commission may be cancelled unless the young sculpture can “move the project forward.”
- Group members prepare to serve on an advisory panel as the city debates the controversy.

Class discussion: Panelists state their solutions to the case and discuss alternatives.
Writing Option: Students write up their position prior to serving as a panelist.

Variations:
- Use a video case study instead of a written one.
- With complex cases, break the case into stages in which you reveal information in progressive segments. As in the ‘discovery’ phase of a trial, groups may adapt their views to emerging information.
- Work with colleagues to construct case studies based on actual experiences in your field and, if possible, invite a person involved in the original case to visit the class.
Effective case studies have a lively narrative and significant core issue, do not have an obvious “right” answer, elicit empathy for central characters, are not too long or involved, and call out for a decision.

14) Mock Jury Trial
If a case is designed as a trial, students can engage in arguing and defending a position as well as in role play, which encourages empathetic learning. Cases can draw from actual ones (as Law and Order does), or be imaginary: e.g. the trial of a literary character.

**Procedure:**
- Put forward an indictment.
- Students adopt roles: defendant and accuser, defense and prosecuting attorneys, witnesses, friends of the court, a judge and jury members.
- Allow students to prepare for the trial, which usually requires research.
- Stage the trial, with as many students presenting arguments as possible. Follow usual courtroom procedure: opening arguments, cases made by the attorneys and testimony by witnesses, friends of the court briefs, and closing arguments.
- Make the jury deliberations public so students practice weighing evidence.
- Invite a guest “judge” to hear the case or share the role with you. A guest raises the stakes for team performance.

**Writing Option:** Students write legal briefs to prepare for the trial—choosing one of the two sides, regardless of their role in the trial.

**Notes:** Films like The Music Box or the original Twelve Angry Men illustrate trial and jury processes in ways that could inspire the class. This activity is a kind of simulation, in which students not only consider a case, but also take on active roles in modeling and enacting a potential situation. Instructors in many fields have created impressive simulations that others can use, made available through the web.

15) Active Debate (Silberman)
“Debates can increase motivation, enhance research skills, promote critical thinking, and develop communication proficiency. Debates expose the class to a focused, in-depth, multiple-perspective analysis of issues” (Barkley, Cross, & Major).

The following strategy for debate involves every class member:

**Procedure:**
- Identify a proposition related to your subject matter that will spark plenty of controversy.
- The class can divide into the ‘pro’ and ‘con’ sides—either by taking the position opposite to their own (which stimulates exceptional learning) or arbitrarily.
- The two sides can then break into 3-4 subgroups to formulate distinct arguments in relation to the proposition. Allow students time to struggle with the issues and find support for their claims.
- Format: Set up two rows of chairs facing one another (3 or 4 on each side, corresponding to the number of subgroups). Behind these chairs should sit, in more chairs, the rest of the teammates.
- A spokesperson from each subgroup makes an opening argument.
- After all opening arguments are heard, stop the debate and allow subgroups to meet and consider how to respond to arguments made by the opposition. The subgroups should choose new spokespersons to occupy each “hot seat.”
- Resume the debate, with each spokesperson providing counterarguments. Teammates can pass the spokesperson notes of advice for effective arguments or rebuttals.
- When arguing concludes, form a discussion circle in which members of each side mix. Have them reflect on the experience and on which arguments impressed them.

**Writing option:** Students can prepare an argument in written form to prepare for the debate.
Variation: Put vacant chairs next to the spokespeople where teammates can move into the debate, if they have a pressing argument.

VII. Active Assessment & Review


Allows students to reflect on the learning process—often called “debriefing” in professional life.

Groups: Pairs or 3-4 members.

Procedure:

- Prior to this exercise, students will have gone through experiential learning of some kind: a simulation exercise, such as a mock trial or debate or other role play; a group learning exchange; a field trip; the creation of a project.
- In the first round, students meet in teams and share what happened to them: “What did they do? What did they observe? Think about? Feel?”
- For the second round, students can break into new teams, answering “So what?” questions: “What benefits did they gain from the experience? What did they learn? How did it relate to the world outside the classroom (if a simulation)?”
- For the final round, students can join new groups again, and consider “Now what?” questions: How might the experience affect the way you do things? How might you extend the learning, and in what concrete ways?” (You can limit this to the first two rounds)

Writing option: Consider having students keep an informal Learning Journal throughout the course, in which they can record and explore what is happening to them in relation to class materials, activities, and learning. Suggest they write in it once or twice a week, recording

- Responses to readings/handouts, lectures, projects--what’s been unclear or disturbing, what’s working.
- Observations about how class work relates to their personal lives, or connects with things they’ve been seeing, reading, or doing outside of class.
- Reflections on their own attitudes or behavior.
- Creative ideas they have.

They may use graphic devices: drawings, mind maps, etc.
17) Topical Review
This review strategy requires deeper thought and synthetic learning, and could be used at the end of a unit, at midterm, or at the end of a class. It is designed as a comfortable and non-threatening review.

Groups: 4-5
Procedure:
- Give student a list of the topics covered in that unit or segment of the course.
- Divide the topics among groups.
- Ask groups to recall what they can about the topic in answer to questions such as:
  - What are the significant concepts, learning points, or processes related to the topic?
  - How and why are these concepts, points, or processes important?
  - What are examples that best illustrate these elements?
  - What are the values attached to the topic?
  - (How do you, as a student value it? How do professionals value it?)
  - What learning activities were particularly useful (or not) in learning the topic?
- Groups could make notes with key words, mind maps, or other graphics on large sheets of paper to post and refer to in the larger class discussion.

Class discussion: Have each group review their responses vis-à-vis the topic, with other students asking questions or extending the discussion. As the conversation proceeds, reinforce ideas and essential material and clarify lingering misunderstandings.

Sources


