## Brandeis LIBRARY Center for Teaching and Learning

## **Examples of Active Learning Techniques**

- 1. **Anonymous Cards** Each student writes a question about course material on index cards, which are distributed to other students. Each student researches the question that they received, and then shares what they have learned with the rest of the class.
- 2. **Brainstorm** Multiple students call out answers to an open-ended, creative question for which many potential correct answers exist. The instructor or another student records the ideas on the board.
- 3. **Concept map** This activity prompts students to formally describe the relationship between concepts. Typically, students working in groups are provided with a list of terms. They are asked to arrange the terms on paper and draw arrows between related concepts, *labeling* each arrow to verbally explain the relationship between the two terms connected by the arrow. Concept maps are particularly useful to help students make connections between seemingly abstract concepts or concepts learned at different times during the semester.
- 4. **Debate** Students are assigned to two groups, where each is responsible for researching and defending a position contrary to the other group.
- 5. **Gallery Walk** The instructor writes several different questions or prompts on large pieces of paper at different locations around the room. Groups of students write down responses to a particular question, then rotate to the next question and add responses. At the end of the activity, each group summarizes and shares the responses to their last question.
- 6. **Graffiti Board** Using pictures, words, or phrases, groups of students respond to prompts that the instructor wrote on large pieces of paper. Instructor prompts might be to approve or critique an experimental approach or a math proof or to find the error in a computer code. Students might rotate to new "graffiti boards" and contribute additional responses. Provide enough time for students to each rotate to multiple graffiti boards, so that each prompt receives multiple student replies.
- 7. **Doing practice problems in small groups** After teaching students about a particular skill or concept, ask them to spend five minutes working to solve a practice problem, or a question from last year's problem set, in groups of two-three students. Students can work at their tables or up at blackboards, and you can collect their answers through a multiple-choice poll or by asking for a volunteer to be ready to share the answers from each group.
- 8. Jigsaw Small groups of students each discuss different, but related topics. Students are then shuffled such that new groups are composed of one student from each of the original groups. In these new groups, each student is responsible for sharing key aspects of their original discussion. The second group must synthesize and use all of the ideas from the first set of discussions in order to complete a new or more advanced task. A nice feature of a jigsaw is that every student in the original group must fully understand the key ideas so that they can teach their classmates in the second group.
- 9. **Minute paper, or quick write** All students are asked to spend a minute quietly writing a short answer in response to a question or prompt during class, requiring students to articulate their knowledge or apply it to a new situation.
- 10. **Panel Discussion** Individuals or small groups research a particular topic, and then participate in a panel discussion in which they briefly present their key findings and answer questions on that topic generated by the rest of the class.

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- 11. **Anonymous Polling** During class, the instructor asks a multiple-choice question. Students can respond in a variety of ways (including PollEverywhere or Echo360.) Rather than using technology, students can respond to a multiple-choice question by raising the appropriate number of fingers or by holding up a colored card, where colors correspond to the different answers. A particularly effective strategy is to ask each student to first respond to the poll independently, then discuss the question with a neighbor, and then re-vote.
- 12. **Responsive lecture** Students work in groups to generate, and rank, questions based on course material (perhaps from lecture, a reading, or an out-of-class activity) for the instructor to answer. Each group submits their questions. After class, the instructor reviews and organizes the questions, and then responds to the top-ranked question at the next class.
- 13. **Statement correction, or intentional mistakes** The instructor provides statements, readings, proofs, or other material that contains errors. The students are charged with finding and correcting the errors. Concepts that students commonly misunderstand are well suited for this activity.
- 14. **Strip sequence, or sequence reconstruction** The goal of this activity is for students to order a set of items that have a logical order, such as steps in a biological process, a series of historical events, or logical steps in an argument. As one strategy, the instructor provides students with a list of items written on strips of paper for the students to sort. An instructor can also leave one step "blank" and require that students fill it in. Removable labels with printed items also work well for this activity.
- 15. **Think-pair-share** 1) Students are asked to think about a question on their own, and perhaps respond in writing. 2) Students discuss their thoughts in pairs or small groups. 3) Individuals share their answers or ideas with the full class.
- 16. **Interpreted lecture** The instructor pauses during lecture, gives students 30 seconds to reflect on the recent content, and then asks a student to rephrase the content that was just discussed. Other students can be invited to contribute additional or clarifying ideas.
- 17. **Taboo game** Students are broken into two teams, each with a stack of "Taboo" cards that have either a key term or concept they need to prompt their teammates to guess. Each card also has "taboo" (forbidden) words listed which may not be spoken as the student is prompting their teammates to guess their key term or concept. Teams compete to guess as many words as possible within a few minutes. Key words can come from a text or a specific topic, and concepts can include cultural concepts (e.g., folkloric beliefs).
- 18. Information gap activities Students are asked to complete a task (or solve a problem) in pairs, but one student is given half the information necessary to complete the task while their partner is given the other half of the information necessary to complete the task. The students have to talk and exchange the information given in order to collaboratively complete the task. This can also be done with pictures (e.g., if the students are prompted to find 3 differences).
- 19. **Statement carousel** A set of statements (e.g., from a text we are reading) or questions are posted to the wall at different points in the classroom. Students in pairs or in small groups gather around a statement and discuss it. After a few minutes, they rotate to the next statement/question, and this action is repeated until the groups have discussed all the statements/questions.
- 20. Working with texts Ask students to:
  - a. arrange statements into correct chronological order according to the story.
  - b. turn some descriptive portion of the text into a dialogue and vice versa
  - c. restore dialogue lines into a correct/logical order