Interactive Techniques
Adapted from Kevin Yee
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MT Engage Institute Summer 2019

Adapted in part from:

Angelo, Thomas/K. Patricia Cross, *Classroom Assessment Techniques*. 2nd Edition. Jossey-Bass: San Francisco, 1993.

Morrison-Shetlar, Alison/Mary Marwitz, *Teaching Creatively: Ideas in Action*. Outernet: Eden Prairie, 2001.

McGlynn, Angela, *Successful Beginnings for College Teaching*. Atwood: Madison, 2001.

Silberman, Mel. *Active Learning: 101 Strategies to Teach Any Subject*. Allyn and Bacon: Boston, 1996.

VanGundy, Arthur. *101 Activities for Teaching Creativity and Problem Solving*. Pfeiffer: San Francisco, 2005.

Watkins, Ryan. *75 e-Learning Activities: Making Online Learning Interactive*. San Francisco: Pfeiffer, 2005.

These techniques have multiple benefits: the instructor can easily and quickly assess if students have really mastered the material (and plan to dedicate more time to it, if necessary), and the process of measuring student understanding in many cases is also practice for the material—often students do not actually learn the material until asked to make use of it in assessments such as these. Finally, the very nature of these assessments drives interactivity and brings several benefits. Students are revived from their passivity of merely listening to a lecture and instead become attentive and engaged, two prerequisites for effective learning. These techniques are often perceived as "fun", yet they are frequently more effective than lectures at enabling student learning.

Not all techniques listed here will have universal appeal, with factors such as your teaching style and personality influencing which choices may be right for you.

Student Action: Individual (many of these can be used as partnerwork or groupwork instead; or may escalate to that after some individual effort)

43. **One-Minute Papers** – Students write for one minute on a specific question (which might be generalized to "what was the most important thing you learned today"). Best used at the end of the class session.
44. **Muddiest Point** – Like the Minute Paper, but asks for the "most confusing" point instead. Best used at the end of the class session.
45. **Misconception Check** – Discover class's preconceptions. Useful for starting new chapters.
46. **Drawing for Understanding** – Students illustrate an abstract concept or idea. Comparing drawings around the room can clear up misconceptions.
47. **Turn Taking Reading** – Instead of the instructor reading a paragraph on screen (or leaving silence for students to do it), instruct them we will sit in silence until someone is moved to read ONE sentence, then someone else – anyone – will start the next sentence. Adds "good" tension and raises energy.
48. **Haiku** – Students write a haiku (a three-line poem: 5-syllables, then 7, then 5) on a given topic or concept, and then share it with others.
49. **Media Break** – Designate a two minute break in the middle of class for students to check their electronic devices, with the understanding they won't use them otherwise in the entire class period.
50. **Photo Homework** – Students are assigned to use a smartphone to snap a picture of something at home (or out in the city) that captures a specific concept from the class, as assigned by the teacher.
51. **Board of Artwork** – Post publicly the collected drawings / abstract concepts that students turned in for a previous activity and create an opportunity for discussion and debrief.
52. **Video Selfie** – Ask students to make a video of themselves performing the homework (or lab), as they will take it more seriously and be more likely to avoid mistakes.
53. **Gallery Walk** – Provide colored dot stickers to students and ask them to "vote" on statements they agree with the most, by using up their limited dot supply on the pre-written topics displayed around the room on poster boards.
54. **Circle the Questions** – Pre-make a handout that has a few dozen likely student questions (make them specific) on your topic for that day and ask students to circle the ones they don't know the answers to, then turn in the paper.
55. **Ask the Winner** – Ask students to silently solve a problem on the board. After revealing the answer, instruct those who got it right to raise their hands (and keep them raised); then, all other students are to talk to someone with a raised hand to better understand the question and how to solve it next time.
56. **What's the Principle** – After recognizing the problem, students assess what principle to apply in order to solve it. Helps focus on problem TYPES rather than individual specific problems. Principle(s) should be listed out.
57. **Infographic** – Students use online services (visual.ly, infogr.am) to create an infographic that combines flowchart logic and visual presentation
58. **Bookmark Notes** - Distribute full-length paper to be used as a bookmark for the current chapter. On it, record prompts and other "reading questions", and require students to record their notes, observations, and objections while reading onto these bookmarks for collection and discussion in class.
59. **True or False?** – Distribute index cards (one to each student) on which is written a statement. Half of the cards will contain statements that are true, half false. Students decide if theirs is one of the true statements or not, using whatever means they desire. Variation: designate half the room a space for those who think their statements are true, and the other half for false.
60. **"Real-World"** – Have students discuss in class how a topic or concept relates to a real-world application or product. Then have students write about this topic for homework. Variation: ask them to record their answer on index cards.

61. **Concept Mapping** – Students write keywords onto sticky notes and then organize them into a flowchart. Could be less structured: students simply draw the connections they make between concepts.
62. **Advice Letter** – Students write a letter of advice to future students on how to be successful students in that course.
63. **Tabloid Titles** – Ask students to write a tabloid-style headline that would illustrate the concept currently being discussed. Share and choose the best.
64. **Bumper Stickers** – Ask students to write a slogan-like bumper sticker to illustrate a particular concept from lecture. Variation: can be used to ask them to sum up the entire course in one sentence.
65. **One-Sentence Summary** – Summarize the topic into one sentence that incorporates all of who/what/when/where/why/how creatively.
66. **Directed Paraphrasing** – Students asked to paraphrase part of a lesson for a specific audience (and a specific purpose).
67. **Word Journal** – First, summarize the entire topic on paper with a single word. Then use a paragraph to explain your word choice.
68. **Truth Statements** – Either to introduce a topic or check comprehension, ask individuals to list out "It is true that…" statements on the topic being discussed. The ensuing discussion might illustrate how ambiguous knowledge is sometimes.
69. **Objective Check** – Students write a brief essay in which they evaluate to what extent their work fulfills an assignment's objectives.
70. **Opposites** – Instructor lists out one or more concepts, for which students must come up with an antonym, and then defend their choice.
71. **Student Storytelling** – Students are given assignments that make use of a given concept in relation to something that seems personally relevant (such as requiring the topic to be someone in their family).
72. **Application to Major** – During last 15 minutes of class, ask students to write a short article about how the point applies to their major.
73. **Pro and Con Grid** – Students list out the pros and cons for a given subject.
74. **Harvesting** – After an experience/activity in class, ask students to reflect on "what" they learned, "so what" (why is it important and what are the implications), and "now what" (how to apply it or do things differently).
75. **Chain Notes** – Instructor pre-distributes index cards and passes around an envelope, on which is written a question relating to the learning environment (i.e., are the group discussions useful?) Students write a very brief answer, drop in their own card, and pass the envelope to the next student.
76. **Focused Autobiographical Sketches** – Focuses on a single successful learning experience, one relevant to the current course.
77. **Course-Related Self-Confidence Surveys** – Simple questions that measure how self-confident students are when it comes to a specific skill. Once they become aware they can do it, they focus on it more.
78. **Profiles of Admirable Individuals** – Students write a brief profile of an individual in a field related to the course. Students assess their own values and learn best practices for this field.
79. **Memory Matrix** – Identify a key taxonomy and then design a grid that represents those interrelationships. Keep it simple at first. Avoid trivial or ambiguous relationships, which tend to backfire by focusing students on superficial kinds of learning. Although probably most useful in introductory courses, this technique can also be used to help develop basic study skills for students who plan to continue in the field
80. **Categorizing Grid** – Hand out rectangles divided into cells and a jumbled listing of terms that need to be categorized by row and column.
81. **Defining Features Matrix** – Hand out a simple table where students decide if a defining feature is PRESENT or ABSENT. For instance, they might have to read through several descriptions of theories and decide if each refers to behaviorist or constructivist models of learning.
82. **What/How/Why Outlines** – Write brief notes answering the what / how / why questions when analyzing a message or text.

83. **Approximate Analogies** – Students provide the second half of an analogy (A is to B as X is to Y).
84. **Problem Recognition Tasks** – Offer case studies with different types of problems and ask students to identify the TYPE of problem (which is different from solving it)
85. **Switch it up!** – Ask students to work on one problem for a few minutes and intentionally move to a second problem without debriefing the first one, then solve the second one and only then return to the first one for more work. A carefully chosen second problem can shed light on the first problem, but this also works well if the problems are not directly related to each other.
86. **Reading Rating Sheets** – Students fill out a ratings sheet on the course readings, on how clear, useful, and interesting it was.
87. **Assignment Assessments** – Students give feedback on their homework assignments, and evaluate them as learning tools.
88. **Exam Evaluations** – Students explain what they are learning from exams, and evaluate the fairness, usefulness, and quality of tests.
89. **Group-Work Evaluations** – Questionnaires asking how effective groupwork has been in the class.
90. **Teacher-Designed Feedback Forms** – Rather than use standardized evaluation forms, teachers create ones tailored for their needs and their classes. Especially useful midway through the term.
91. **Writing Fables** – Students write an animal fable (or at least sketch its outline) that will lead to a one-sentence moral matching the current concept discussed in class. May be done verbally instead.

Student Action: Pairs

92. **Think-Pair-Share** – Students share and compare possible answers to a question with a partner before addressing the larger class.
93. **Pair-Share-Repeat** – After a pair-share experience, ask students to find a new partner and debrief the wisdom of the *old* partnership to this *new* partner.

Many individuals have assisted over the years by contributing ideas and their own teaching practices. They are listed below in alphabetical order:

- Melody Bowdon
- Tace Crouse
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