

Using Active Learning to Energize the Psychology Classroom: Fifty Exercises That Take Five Minutes or Less

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Abstract:

If you are looking for a session where you can snooze or text in the back of the room, this is not the one for you! Audience members will not only have the chance to explore the use of micro-activities to promote student learning, they will get to experience some of these techniques first hand.

In the past few decades, educators have been encouraged to rethink the teaching and learning process, abandoning traditional lecture methods in exchange for participatory, interactive, and student-driven approaches. Data from studies in psychology, education, and neuroscience suggests that instructors should tailor their teaching to suit the way the brain naturally learns. Despite the compelling evidence for the effectiveness of brain-based techniques, faculty have been slow to incorporate them into their classes. Obstacles to using active learning include faculty concern over the potential loss of course content, resistance to giving up prized lectures, and the psychological risks associated with using new activities that may or may not “work”.

In an effort to address these common barriers, the presenter will introduce the concept of the *Mindful Moment*, and discuss how these micro-activities can be used quickly and easily to facilitate active learning in the classroom. 50 *Mindful Moments* will be presented, as well as specific guidelines for how to use these techniques. Not only will participants leave with a handout describing the 50 exercises, they will also gain the knowledge and skills needed to develop their own micro-activities.

Outline:

- I. Brain Based Learning
- II. Obstacles to Active Learning
- III. Introducing the Mindful Moment
- IV. Benefits of a Micro-Activity Approach
- V. Application of Mindful Moments

Suggested Readings on Brain-Based Learning:

Medina, J. (2008). *Brain Rules: 12 Principles for Surviving and Thriving at Work, Home, and School*. Pear Press.

Jensen, E. (2008). *Brain-Based Learning: The New Paradigm of Teaching*. San Diego, CA: Corwin Press.

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Bonwell, C. C., & Eisen, J. A. (1991). Active Learning: Creating excitement in the classroom. *ASHE-ERIC Higher Education Report, No. 1*. Washington, DC: The George Washington University, School of Education and Human Development.

Marin, A. (In Press). *The Art of the Mindful Moment: How to Use Micro-Activities to Promote Learning*. Accepted for Publication in *College Teaching*. Heldref Publications.

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Shieh, D. (2009). These lectures are gone in 60 seconds: Minute long talks find success at a community college. *The Chronicle of Higher Education*, 55(26), A13.

Stenberg, G. (2006). Conceptual and perceptual factors in the picture superiority effect. *Eur J. of Cog Psych*, 18(6), 813 – 847.

Watts, M., & Becker, W. E. (2008). A little more than chalk and talk: Results from a third national survey of teaching methods in undergraduate economics courses. *The Journal of Economic Education*, 39(3), 273-286.

Mindful Moments: 50 Micro-Activities for Energizing the College Classroom

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Guidelines for creating and using *mindful moments*:

- 1) *Mindful moments* should only last a couple of minutes
- 2) *Mindful moments* should require the student to actively process information
- 3) Students must be accountable for the end product of the *mindful moment*.

5-Minute Papers

1) Question of the Day – Start class with a question (e.g. Do you think intelligence is inherited?). Students have 3-5 minutes to write their answer. Answers can be used in a variety of ways including discussions and debates.

2) Definitions – Students are given 3-5 minutes to come up with a definition of the day's topic. The instructor can call on students to share their definitions, and the definitions can be compared with the textbook definition.

3) One-Minute Bio – After learning about the work of an important figure/theorist (e.g. Freud, Pavlov, Skinner), students are given 3-5 minutes to write an obituary, a toast, a book jacket bio, or a poem about that person.

4) Everyday Example – Students are given 3-5 minutes to come up with an everyday example of a course concept (e.g. write down an example of a sales tactic that you've experienced while shopping).

5) What do you want to know? -- Students are given 1-2 minutes to generate a question involving the day's topic. Instructors can use these in several ways. The instructor can call on students to read their question, and then answer the question. Or, they can be collected at the end of class and the instructor can use them to guide the lecture for the next class.

6) Bookends – At the beginning of class, students have one-minute to write down what they know about the day's topic. At the end of class, students have one-minute to write down new things they learned about that topic. Students turn in both their pre and post descriptions.

7) Where are we? At the beginning of class, students are given 3-5 minutes to look over their notes and summarize the main point from the previous class period.

Visual Learning

8) Graphic Organizers – Student have 3-5 minutes to take the information they learned in class that day and organize it visually. This can include the use of affinity diagrams, venn diagrams, concept maps, etc. The instructor will probably need to provide examples of how information can be organized using graphic organizers.

9) Cartoon Analysis – Show students a cartoon that illustrates a course concept. Students have 1 minute to identify the concept, and can then share/explain their analysis.

10) Visual Quiz – The instructor displays a picture that illustrates a psychological concept and then quizzes students. For example, the instructor could show a photograph of a person playing a slot machine at a casino and could ask "Is this person being rewarded on a fixed-ratio, variable-ratio, fixed-interval, or variable-interval reinforcement schedule?"

11) You Tube – Play a 30 second clip from youtube.com that illustrates a course concept (e.g. a pet that has been classically conditioned). Ask the student to explain the concept being illustrated.

12) Design a tattoo – Students have 5 minutes to design a tattoo that illustrates a psychological concept covered that day (e.g. monocular cues for determining depth). The

instructor can then display the student work (e.g. using a doc cam), and students can guess the concept and/or vote on the best tattoo.

13) Low-Tech Pictionary – Students pair-up and Student A draws a concept from the days lecture while Student B guesses. Students then switch roles. Students can be asked to turn in their "drawings".

14) Smart-Board Pictionary – An alternative to low-tech *Pictionary* is for the instructor to draw a concept using a smart-board or doc-cam set-up. If desired, the students can be divided into teams and points given for correct response.

15) Visualize it! – Ask students to close their eyes for one minute and visualize a course concept (e.g. "Picture a psychologist at work"). Students can then write or share their responses.

Critical Thinking

16) Solve It! – The instructor poses a problem to the class. Students try to solve the problem based on the information presented in the days lecture. The instructor can call on students to share their solutions, and ask students to turn in their written solution.

17) Dear Abby – A modified version of the Solve it exercise, the instructor reads a fictional scenario involving a personal dilemma (e.g. parenting or relationships issue). Students have 3 minutes to draft a response to the person using sound psychological principles.

18) Case Study – Students have 3 minutes to write a brief description of a person with a psychological disorder. The description should focus on the symptoms the person is experiencing. Afterwards, students trade their "case study" with another student and students try to "diagnose" the fictional person.

19) Mnemonics – Students are given 1-2 minutes to generate a mnemonic device that will help them remember a psychological concept from the days lecture. Students can then share their strategies with a partner, or the whole class.

20) Find the lie – Students write down 3 facts about the days lecture. Two are true, and one is a lie. Students partner with another student and read their facts. Their partner tries to guess which one is incorrect.

21) Making Connections: Students have 3-5 minutes to tie a concept they learned in class that day to a concept presented earlier in the semester.

22) Who could use it? Students have 3-5 minutes to think about and write down how a concept from the day's lecture could be useful to a particular person they know. For example, the topic of attachment styles might be useful information for their neighbors, who is a new parent.

22. Who could use it?

Assessment

23) Rose & Thorn – At the end of class, students have 1-2 minutes to write down their "rose" (the thing they most enjoyed or found interesting about class that day) and their "thorn" (the one thing they found most difficult or least enjoyable).

24) Minute Essay – Instructor presents an essay question. Students are given 3 minutes to write a short answer to the question. Instructor can call on students to read the answer, compare answers with a partner, or can collect the answers to assess mastery of course material.

25) Check your Notes – Students are given 3 minutes to compare their notes with the person next to them. Did they come away with the same important points as their neighbor? This is a great opportunity for peer teaching and review.

26) Muddiest Point – This is an easy assessment technique developed by Frederick Mosteller (1989), students are given a few minutes at the end of class to write down the most difficult or confusing material from the days class.

27) Quick Quiz – Instructor can quiz the class with True/False questions using a *Student Response System* (e.g. clicker devices). If instructor doesn't have access to this type of technology, students can hold up their hands for "true", or an object (e.g. pencil, cell-phone, ball-cap) for "false".

28) Main Point – At the end of the lecture, students are given two minutes to summarize the main point. These summaries enable instructors to assess how well students are understanding the material.

29) Sum-it-up – During a lecture there are usually natural breaks in material where instructors move from one topic to another. Try pausing for 3-5 minutes at these transition points and allow students to look over their notes and write a brief summary of that material in their notes. To maintain accountability, randomly call on several students to read their summaries.

Encouraging Student Interaction

30) Brainstorm Blitz – Students pair up and have 1-2 minutes to brainstorm as many examples of a concept as possible (e.g. List as many psychoactive drugs as you can).

31) Tea-Time – Instructors pose a question or topic to the class. Students partner and have 3 minutes to discuss the topic. Students are given a final minute to come to a conclusion or consensus from their conversation that can be shared with the class.

32) What's on my back? -- Using sticky-notes, tape a concept on each student's back (e.g. for a psychology class, the instructor could use different psychological disorders). Students have 5 minutes to guess what's on their back by asking questions of other students that can be answered with "yes" or "no" (e.g. do I have hallucinations? Do I have trouble sleeping?).

33) Test Prep – Students have 1-3 minutes to write a sample test question from the day's lecture. Students then quiz the person next to them. All students hand in their questions at the end of class.... and perhaps one or more appear on the actual exam?

34) Role Play – Students partner and act out or play a role assigned by the instructor (e.g. students could role play common gender differences in communication styles). Instructor's can then call on a couple of students to perform their role play for the entire class.

35) Active Listening – Students pair with a partner. Student A has one minute to speak on a topic while student B listens. Student B is given 1 minute to paraphrase what student A has said. Students then switch roles and repeat. Instructors can call on the "listeners" to paraphrase what their partner has said.

36) Show and Tell – Students turn to their partner and provide information related to the course concept being discussed (e.g. "According to the book, would you be considered a "short sleeper", an "average sleeper", or a "long sleeper"? Students share their answer with their partner).

Discussion and Debate

37) Classroom Vote – The instructor reads a controversial statement. Students who agree raise an object in the air (pencil, cell phone, hat, etc.). Those who disagree raise only their hand. Instructor can randomly call on people to explain/defend their position.

38) Beach Ball – Instructor starts by handing/throwing an object to a student (e.g. inflatable beach ball). That student contributes to the discussion (e.g. Are males more aggressive than females? Explain). That student then passes the ball to someone else, and they give their response. This exercise encourages equal participation throughout the class.

39) See it Both Ways – The instructor presents a controversial statement. Students are given one minute to write down as many arguments as possible for the "agree" side. Students are given a second minute to generate arguments for the "disagree" side. Responses can be used in a number of ways including comparisons, discussions and debates.

40) Let's Mingle – The instructor poses a controversial statement. Students are given 5 minutes to stand up and "mingle" with other students, as if at a party. They must interact

with at least 3 other students in the room, discussing their opinion and listening to those of others. The instructor can then call on students to recap the main points of their conversations.

41) The Great Divide – The instructor divides the class in half. The instructor assigns one half to argue the “pro” side of a controversial topic and the other half to argue the “con” side. Students are given one minute to write down one argument. The instructor can call on students to present their argument. This activity encourages students to think about topics from multiple perspectives.

42) Strongest Counterpoint – When given a controversial topic, students identify the strongest counterpoint to their position. Students have 2-3 minutes to write their answer.

43) Complete a Survey – Instructor presents several items from a survey for students to answer (e.g. items from an attachment styles questionnaire). Scoring and responses can then be discussed.

Pop-Culture

44) Twitter Talk – Students are given 1-2 minutes to summarize material (e.g. the definition of prejudice) using no more than 140 characters. You can call on people to read their “tweets”.

45) Google-It – Students are given 5 minutes to find out information on a specified topic using their cell-phone or laptop (e.g. hypnosis). The instructor can then call on students to share. This can lead to interesting discussions or comparisons between “lay” information and actual science.

46) American Idol – Students pretend to be a contestant on American Idol. The theme for the week is “psychology”. They must select a song that illustrates a psychological concept, and be ready to defend their song choice.

47) www.polleverywhere.com – This is an audience response system that uses mobile phones, twitter & the web to gather live responses and displays them in real time in *Powerpoint* graphs. This online service is free to classes with less than 30 students. In a minute or two, you can ask students a question, and display their responses in graph form.

48) Psychology in the News – Ask students to bring in a news clip or advertisement that illustrates a psychological concept (the instructor can be specific about what to look for – e.g. “Bring in an advertisement that uses one of the 6 compliance tactics in your textbook”). Students can be randomly selected to share their news clipping/ad in 1 minute or less. Students can switch clippings with a partner and read/write/identify the psychological concept in their partner’s ad.

49) My Facebook Wall – Students put their name at the top of a sheet of paper and have one minute to write an interesting question about the days topic. This sheet becomes their “wall”. Students pass the sheets to the right. Students have one minute to add answers, questions, or comments to the original poster. This process is repeated each minute for as long as the instructor cares to go. At the end, the papers are returned to the original authors, giving them a chance to see what other students wrote on their “wall”.

50) Text a friend – Imagine you are texting a classmate who missed today’s class. In just a sentence or two, describe the topic: What is the “take home message”? This is the one time you are allowed to use acronyms and emoticons to express yourself!

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- Mosteller, F. (1989). The “Muddiest Point in the Lecture” as a feedback device. *On Teaching and Learning: The Journal of the Harvard-Danforth Center*, 3, 10-21.