

Turning The Answers Into A Discussion: Successful Teaching and Learning in Public Health

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Strategies for promoting discussion of the answers:

- Define clear role for the students as active participants in the learning process (do this on the first day and reinforce this role throughout the semester)
- Define clear role of instructor (teaching is more than a performance; it requires content knowledge and pedagogical preparation along with student reciprocity).
- Ask students “How did you work through this problem? What steps did you take?”
- Ask for a summary of facts of a question or problem set.
- Work with subject matter knowledge they likely have and student’s personal experiences (think about metaphors that activate prior knowledge with subject matter)
- Ask open-ended questions to students
- Wait at least 5 to 10 seconds after posing a question
- Brainstorm ideas about subject matter (record ALL ideas)

Caveats : students need to be prepared (see first bullet point); teaching assistant needs to have a plan for how the entire class time will be utilized; and classroom space needs to be conducive to discussion (do your best to optimize with chair/table arrangements)

A variation on the game show Jeopardy . . . promoting rather than jeopardizing the learning process

Students should break into groups of three to use the question stems as a guide for generating questions.

Question stems (adapted from King 1991)² . . .

- How are _____ and _____ alike?
- What is the main idea of _____?
- What would happen if _____?
- What are the strengths and weaknesses of _____?
- In what way is _____ related to _____?
- What values are assumed by _____?
- How does _____ affect _____?
- What is the function of _____?
- What principles is applied when _____?
- Compare _____ and _____ with regard to _____.
- What causes _____?
- How does _____ tie in with what we learned before?
- Which one is the best _____, and why?
- What are the possible solutions for the problem of _____?

Some approaches . . .

- Approach 1 – Students prepare three questions by inserting appropriate content from the lecture, lab, or homework assignment in the question stems. Groups submit their questions and teaching assistant then calls on or seeks volunteers from groups to answer questions.
- Approach 2 – Same procedure as first approach, however, students answer their own questions.
- Approach 3 – Instructor prepares questions using the question stems and the students in their groups develop answers. Include this additional stem: What do I still not understand about _____? Instructor then calls on or seeks volunteers from groups to answer questions.

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² King, A. 1992. “Facilitating Elaborative Learning Through Guided Student Generated Questioning.” *Educational Psychologist*. 27(1):111-126.

