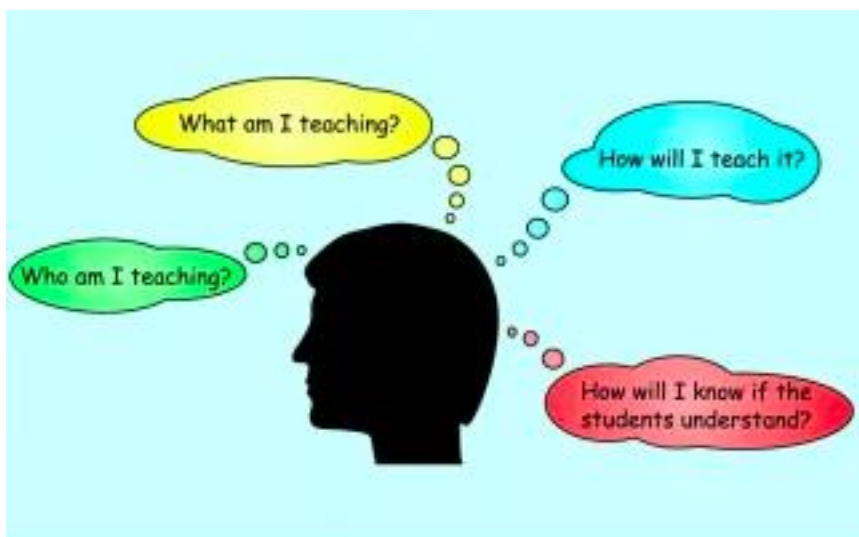


## Common opportunities for growth in teaching based on student feedback on Bowdoin Course Questionnaire's (BCQ)

Have you ever read your BCQs and wondered if other faculty have received similar comments? Or wondered how you might best make changes based on the comments you read? The patterns that emerge from Bowdoin students' responses offer possibilities for collectively fostering our development as teachers and for improving students' learning. Here are five types of constructive comments that are found across divisions, departments, and programs at Bowdoin.

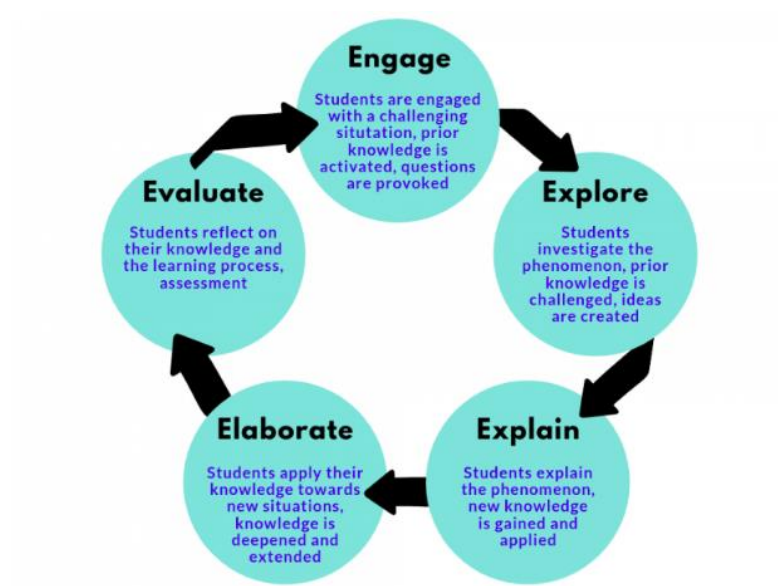
1. Students perceive a **lack of organization** related to overall course or class sessions.
2. Students express frustration and disappointment with **class discussions**.
3. Students share that the **feedback** they receive is not sufficient to advance their learning.
4. Students communicate that they weren't **clear** on what a professor wanted for an **assignment**.
5. The students' **expectations** do not correspond with the course.

These comments and others are good opportunities to reflect on our teaching. Discussions with a colleague, chair, BCLT staff, or associate dean might further help to gain new ideas for how to approach our teaching. Here are some questions and ideas to get started for each of the above themes:

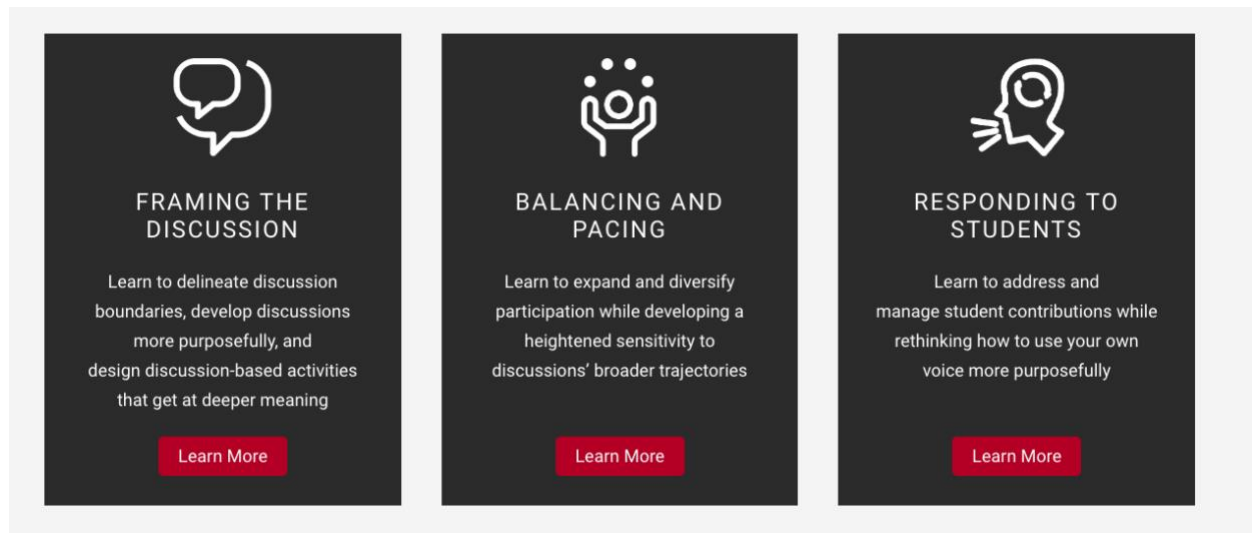


1. Communicate the organization of your course and class sessions to students by:
  - a. Writing course goals on the syllabus and discussing the first day of class.
  - b. Linking the course goals to assignments and individual class sessions.
  - c. Writing an agenda, or question of the day, on the “board” or in the “chat” at the start of class.
  - d. Consider how you structure class sessions.
    - i. Is there a clear framework?
    - ii. Do you use students’ prior knowledge?
    - iii. Do students interact with each other and reflect on their learning?
    - iv. Do you have opportunities to listen to and respond to students?
  - e. Consider trying a 5Es approach that initially was developed for the biological sciences and sequences a lesson to flow through five stages: 1) engagement, 2) exploration, 3) explanation, 4) elaboration, and 5) evaluation.

For more details see [Tanner, K. D. \(2010\). Order Matters: Using the 5E Model to Align Teaching with How People Learn. Life Sciences Education \(9\), pp. 159 –164.](#)



2. Consider how you facilitate class discussions and if you have student-led discussion how you prepare students for these.
  - a. <https://instructionalmoves.gse.harvard.edu/facilitating-discussions>
  - b. [Talkers & Listeners](#) Activity



### [Ask Good Questions](#)

Good questions are the key to a productive discussion. These include not only the questions you use to jump-start discussion but also the questions you use to probe for deeper analysis, ask for clarification or examples, explore implications, etc. It is helpful to think about the various kinds of questions you might ask and the cognitive skills they require to answer. Davis (1993) lists a range of question types, including:

- **Exploratory questions:** probe facts and basic knowledge
- **Challenge questions:** interrogate assumptions, conclusions or interpretations
- **Relational questions:** ask for comparisons of themes, ideas, or issues
- **Diagnostic questions:** probe motives or causes
- **Action questions:** call for a conclusion or action
- **Cause-and-effect questions:** ask for causal relationships between ideas, actions, or events
- **Extension questions:** expand the discussion
- **Hypothetical questions:** pose a change in the facts or issues
- **Priority questions:** seek to identify the most important issue(s)
- **Summary questions:** elicit synthesis

These question types can be mapped onto Bloom's taxonomy of learning objectives, which shows increasing levels of cognitive complexity as students move from fairly simple tasks (such as recall of information) to more complex tasks (such as synthesis, evaluation, or creation.) While you might frame the entire discussion in terms of a Big Question to grapple with, it is a good general strategy to move from relatively simple, convergent questions (i.e., questions with correct answers, such as "According to this treatise, what is Argentina's historical claim on the Falklands?" or "What kinds of tax cuts does this bill propose?") to more complex, divergent questions (i.e., questions with many valid answers, such as "Why did Argentina invade the Falklands?" or "To what extent would this bill's proposed tax increases resolve the budget deficit?") (examples from Davis, 1993). Starting with convergent questions helps discussion participants to establish a base of shared knowledge and builds student confidence; it also gives you, the instructor, the opportunity to correct factual inaccuracies or misconceptions before the discussion moves into greater complexity and abstraction. Asking a variety of types of questions can also help to model for students the ways that experts use questions to refine their analyses. For example, an instructor might move an abstract discussion to a concrete level by asking for examples or illustrations, or move a concrete discussion to a broader level by asking students to generate a generalization or implication.

When instructors are nervous that a discussion might flag, they tend to fall prey to some common questioning errors. These include:

**Asking too many questions at once:** Instructors often make the mistake of asking a string of questions together, e.g., "What do you think the author is trying to say here? Do you agree with him? Is his evidence convincing? Did you like this article?" Students may get confused trying to figure out which question to address first. Asking a number of questions together may also conflate issues you really want to help students distinguish (for example, the author's thesis versus the kinds of evidence he uses to support it).

**Asking a question and answering it yourself:** We have all had the experience of asking a question only to encounter blank stares and silence. The temptation under these circumstances is to jump in and answer your own question, if only to relieve the uncomfortable silence. Don't assume, though, that students' silence necessarily indicates that they are stumped (or unprepared); sometimes they are simply thinking the

question through and formulating an answer. Be careful not to preempt this process by jumping in too early.

**Failing to probe or explore the implications of answers:** One mistake instructors can make in leading a discussion is not to follow up sufficiently on student contributions. It is important not only to get students talking, but to probe them about their reasoning, ask for evidence, explore the implications of what they say, etc. Follow-up questions push students to think more deeply, to substantiate their claims, and consider the practical impact of particular perspectives.

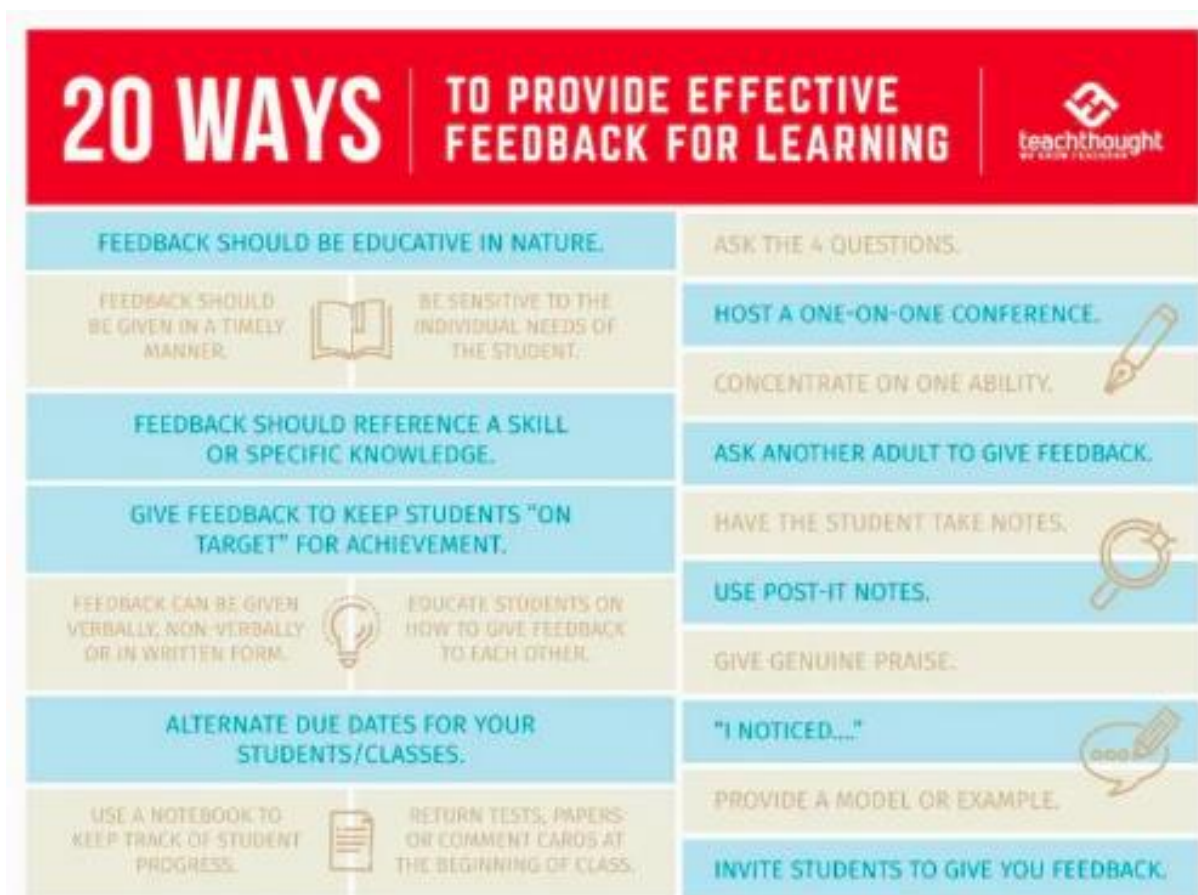
**Asking unconnected questions:** In the best discussions, there is a logical progression from question to question so that, ultimately, the discussion tells (or reveals) a story. When you are planning your discussion questions, think about how they fit together.

**Asking yes/no or leading questions:** Asking questions with a yes/no answer can be the starting point of a good discussion, but only if there is a follow-up question that calls for explanation or substantiation. Otherwise, yes/no questions tend to be conversation-stoppers. By the same token, discussions can stall if the instructor's questions are overly leading, i.e., if there is clearly an answer the instructor wants, and the students' task is simply to guess it, rather than to think for himself.

**Ignoring or failing to build on answers:** If students do not feel like their voices have weight in discussion, their motivation to participate drops. Thus, it is important to acknowledge student contributions, responding enthusiastically when they are insightful ("That's an excellent point, Sarah; could you elaborate further?") and pointing out when they contain inaccuracies or problematic reasoning ("Take another look at the article, Trinh; is that really what the author is claiming?"). If you do not wish to play such a directive role yourself – and want students to develop the habit of assessing and responding to one another's contributions – you can throw student comments back to the class for evaluation (for example, "Do the rest of you agree with John's recommendation? What would be some possible consequences if this plan of action were followed?")

### 3. Consider the following with feedback:

- a. Timeliness (Turn around quizzes and short assignments within 1-2 days, essays and exams within 1-2 weeks)
- b. Clarity
  - i. What can the student do?
  - ii. What can't the student do?
  - iii. How does the student's work compare with that of others?
  - iv. How can the student do better?
- c. Alignment of written or verbal feedback with grades
- d. Communicating to students when you are giving feedback.
  - i. Written on papers, exams, projects
  - ii. Verbal in person, individually or in groups or whole class
  - iii. Analysis of discussions
- e. Using rubrics
  - i. [Holistic, analytical, single point rubric](#) (Cult of Pedagogy)
  - ii. [Faster grading with rubric codes](#) (4 min video)
  - iii. <https://www.aacu.org/value-rubrics>





4. Consider the following questions when designing/revising assignments:

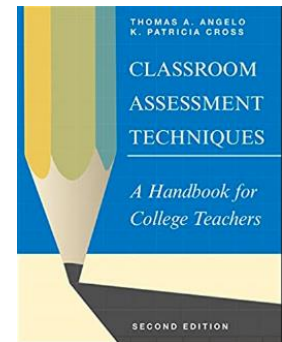
- a. In what ways does this assignment engage students?
- b. How does this assignment help students place new knowledge or experiences into the context of what they already know or have experienced?
- c. In what ways does this assignment allow students to synthesize, discuss, extend, or reflect on what they have learned or done?
- d. Will the student be able to self-assess whether they have met the goals?
- e. Which students may be disadvantaged by the assignment?
- f. Which students might be privileged by the assignment?

#### Formative Assessment Ideas

#### Classroom Assessment Techniques

Adapted from <https://cft.vanderbilt.edu/guides-sub-pages/cats/>

Classroom Assessment Techniques (CATs) are generally simple, non-graded, anonymous, in-class activities designed to give you and your students useful feedback on the teaching-learning process as it is happening.



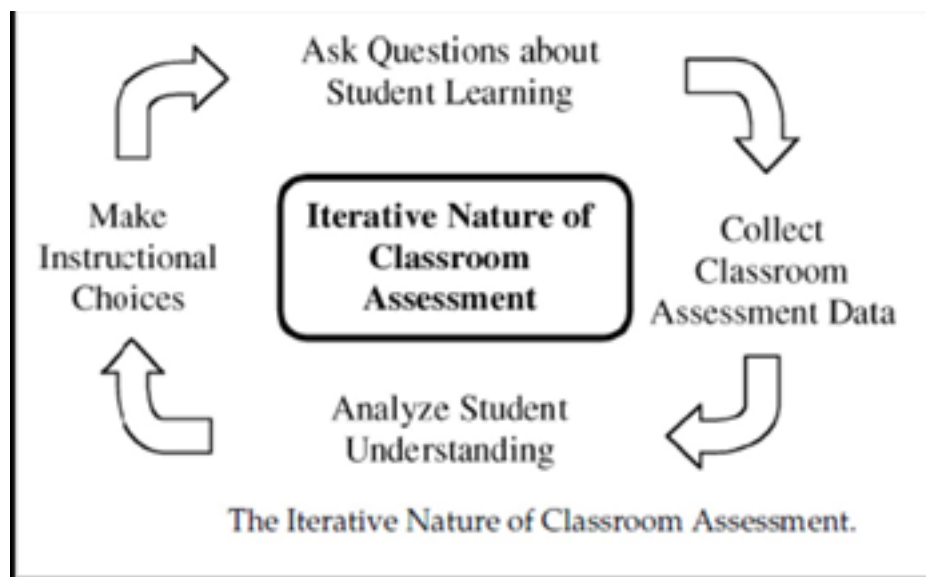
#### Examples of CATs include the following

- The Background Knowledge Probe is a short, simple questionnaire given to students at the start of a course, or before the introduction of a new unit, lesson or topic. It is designed to uncover students' preconceptions.
- The Minute Paper tests how students are gaining knowledge, or not. The instructor ends class by asking students to write a brief response to the following questions: "What was the most important thing you learned during this class?" and "What important question remains unanswered?"
- The Muddiest Point is one of the simplest CATs to help assess where students are having difficulties. The technique consists of asking students to jot down a quick response to one question: "What was the muddiest point in [the lecture, discussion, homework assignment, film, etc.]" The term "muddiest" means "most unclear" or "most confusing."
- The What's the Principle? CAT is useful in courses requiring problem-solving. After students figure out what type of problem they are dealing with, they often must decide what principle(s) to apply in order to solve the problem. This CAT provides students with a few problems and asks them to state the principle that best applies to each problem.

- **Defining Features Matrix:** Prepare a handout with a matrix of three columns and several rows. At the top of the first two columns, list two distinct concepts that have potentially confusing similarities (e.g. hurricanes vs. tornadoes, Picasso vs. Matisse). In the third column, list the important characteristics of both concepts in no particular order. Give your students the handout and have them use the matrix to identify which characteristics belong to each of the two concepts. Collect their responses, and you'll quickly find out which characteristics are giving your students the most trouble.

CATs can be used to improve the teaching and learning that occurs in a class. More frequent use of CATs can...

- Provide just-in-time feedback about the teaching-learning process
- Provide information about student learning with less work than traditional assignments (tests, papers, etc.)
- Encourage the view that teaching is an ongoing process of inquiry, experimentation, and reflection
- Help students become better monitors of their own learning
- Help students feel less anonymous, even in large courses
- Provide concrete evidence that the instructor cares about learning



5. Consider how you shape students' expectations of the course:
  - a. Title, description, and goal of class
  - b. Do the learning experiences on the first day of class preview what students will experience throughout the semester?