## Taking the Class Temperature: Cognitive and Affective Feedback

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"Are students getting it? How do I know?" Instructors answer these questions through a variety of assessments, from small, informal methods such as asking students if they have questions, to formal, graded methods such as multiple-choice exams and research papers. These assessments provide cognitive feedback, whether in the form of a score, a correction, lack of an answer, or an abundance of questions. But is that the whole picture? While these assessments can help us gauge how well students are "getting it," it often fails to explain why or why not.

The conditions around learning, such as students' emotional experience, are often invisible to instructors—and sometimes even to students themselves. This type of feedback can be understood as affective feedback. Hardiman (2002) calls this "testing the emotional temperature" of the classroom and it involves getting a sense of the underlying conditions influencing students' ability to learn effectively. Cognitive feedback tells us Student A scored a C- because she skipped nearly half of the quiz questions for a psychology course; affective feedback might tell us she struggled to process questions on trauma due to a painful connection to the subject matter. Cognitive feedback tells us Student B has missed most Friday class sessions; affective feedback might tell us he skipped these classes due to anxiety about group work. Affective feedback has the power to help instructors understand why students are going off track and help them course-correct.

You can "take the class temperature" by evaluating how often you receive both cognitive and affective feedback. We evaluate our feedback collection methods in three ways: frequency, form, and function.

- Frequency: How often do you solicit feedback?
- Form: In what way do you solicit feedback?
- Function: Is feedback optional or mandatory? If mandatory, are the stakes high or low?

For example, in a freshman composition course, we found that cognitive feedback was collected every week through quizzes, problem-based learning activities, discussion forums, and projects leading up to a research paper. The stakes for most of these was low, many of which directly built toward two high-stakes assignments. Looking at affective feedback in the same course, we found that there was one optional, weekly opportunity to collect feedback; two mandatory activities; and two other optional opportunities. Here are a few examples of the affective feedback activities we identified:

- Weekly Social Forum Every week, the instructor provided an online forum prompt
  aimed at building a community of learners in different ways: sharing study behaviors and
  tips, discussing course concepts' real-world application, and reflecting on learning
  experiences in previous classes, among others. This forum often shed light on the
  experience of learning within the class and the life circumstances surrounding the class
  experience. Students received extra credit for participating in the forum.
- Beginning of the Semester Survey During weeks 1 or 2, students completed a
  survey about their experience with course concepts and format (e.g. have they taken an
  online course before, used a discussion forum, engaged in web-conferencing, worked in
  teams?). At the end, students answered whether they had concerns about their ability to
  succeed in the course. The instructor then followed up with any students who indicated
  they had concerns.
- Progress Report Journal Before the official midterm point, students were asked to
  report their grade and attendance, reflect on their course performance, provide course
  feedback, or ask questions. The details of this reflection are further discussed in one of
  the author's previous Faculty Focus articles, "Assignment Helps Students Assess Their
  Progress." This assignment is not graded but students must complete it before moving
  onto other graded work.
- Help! Line At points in a larger project where students often get stuck—what has been referred to as a procedural bottleneck (Hinds, 1999)— a Help! Line can help bring those often-invisible issues to light before students fall too far behind. It is a simple text journal placed in the learning management system (LMS) where students are invited to ask questions or simply say "I'm stuck. I don't even know what to ask!" A response to this assignment automatically triggers an email alert to the instructor. This can be done in print form as well by asking students to briefly report their status on a project on a notecard and collecting these notecards at the end of class. This activity is optional.

Reflection activities are a common affective feedback opportunity, as students are asked to think about their experience learning in the class and how learning behaviors and life

circumstances have likely influenced their course experience. We share these ideas to illustrate that affective feedback can be collected in a variety of ways, some as brief as a two-question survey or rating level of comfort with material at the end of a class (e.g. 1 = "Yes, I totally get it." to 5 = "I'm totally lost."). Especially when working with large classes, consider how technology can help. For example, a University of Michigan professor developed a tool that allows students to send "confusion alerts" during a live class session, and most learning management systems have ways to track how students are interacting with online content, such as what links they have opened or how often they have logged into the course page.

No matter what tech tools are at your disposal, there are always opportunities to take the emotional temperature of your classroom. Doing so has the potential to build learner confidence, improve faculty-to-student relationships, and ultimately help students succeed.

## References

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