Why formative feedback on teaching is important

Formative feedback on teaching is a crucial part of the ongoing cycle of evaluation, reflection, and refinement aimed at improving your teaching practice. This form of self-assessment allows you to adapt your teaching to better serve the needs of your students by identifying what is working well in the classroom and what isn’t (Berk, 2006). Engaging in this continuous cycle of evaluation ensures the effectiveness of both the design and delivery of your courses and can also be used as evidence of your own professional development in teaching.

Although feedback on teaching can come from a number of sources, including self-reflection, peer ratings, external expert ratings, and student ratings from institutional surveys, this Best Practices will focus on methods you can use to obtain feedback from students, specifically within the classroom.

Historically, student ratings have been the main source of feedback on teaching practices (Berk, 2006). However, you should aim to interpret students’ feedback alongside other sources of evaluation in order to provide a more reliable measure of teaching effectiveness (Berk, 2005; Berk, 2006; Stark & Freishtat, 2014). Feedback obtained from only one or two sources will most likely not be sufficient in providing a complete formative or summative evaluation of your teaching. Feedback should also be collected at multiple points throughout the semester, allowing for continuous reflection and improvement across a teaching period.

Methods for Evaluating Teaching

Any aspect of teaching and learning can be evaluated, including the achievement of learning objectives, the mode of instructional delivery, the ways in which assessments are conducted, and even students’ attitudes towards the course. The form the evaluation takes will be shaped by the specific area in which you wish to receive feedback.

There are various methods by you can obtain feedback from students. Two of the most common ways in which instructors obtain input from students on their performance are classroom assessment techniques (CATs) and student evaluation of teaching (SET) surveys.

Classroom Assessment Techniques (CATs)

Classroom Assessment Techniques (CATs) are in-class evaluations that are conducted to both assess students’ learning and gather feedback you can use to inform, improve, and reflect on your teaching. They are quick and easy to implement activities that offer real time information and can be conducted on an ongoing basis. While there are many versions of CATs, some of the most commonly used ones are discussed below (Cross & Angelo, 1993; Olubummo, 2015; Simpson-Beck, 2011).

- One-minute paper: One-minute papers are often administered at the end of a lesson, and are used to gauge the level of students’ understanding. While the exact wording may vary, students are generally asked to note down the clearest or most important thing they learned.
• **Muddiest point:** The muddiest point is a simple variation of the one-minute paper, where students are asked to note the most unclear - or muddiest - part of the lesson. Students may also be asked to describe what could have been done differently to help them better understand the material.

• **Stop-start-continue:** In stop-start-continue, students are asked to provide responses indicating what they wish to stop in your teaching practice and what they wish you would start incorporating in your teaching practice. Finally, they can also describe what aspects of your teaching practice they enjoy and would want you to continue.

**Student Evaluations of Teaching (SETs)**

Another method for obtaining student feedback is to use standardized feedback forms—student evaluations of teaching (SETs)—that can be provided to your students in the classroom. These forms can be administered at various points throughout the semester, such as early on while a course is still progressing, at the midpoint of the semester, and then at the end of the semester.

There are some advantages and disadvantages to using student evaluations of teaching (SETs).

**Advantages**

• Student surveys allow instructors to collect data from a large number of students at the same time.

• Student surveys can provide instructors with a reliable source of information regarding their teaching effectiveness.

• The preparation, administration, and collection of questionnaires can be completed very quickly. This process can be conducted even faster if students complete the surveys online, although online surveys typically have lower response rates (Berk, 2006).

**Disadvantages**

• Student opinion can be biased. There may be a “halo effect” where student responses reflect their opinion of the instructor’s personality, rather than their teaching effectiveness. As a result, instructors that form more positive impressions on students may receive higher ratings, irrespective of their teaching ability (Ray, Babb, & Wooten, 2018).

• Students may not be qualified to rate all aspects of teaching (Berk, 2013). For example, previous research demonstrates that students can provide a necessary, but not sufficient, rating of instructors’ expertise of the content. As a result, student survey ratings should be supplemented with ratings from peers or colleagues in order to provide a sufficient evaluation.

**Developing Your Own Survey**

Existing scales can be used as a prototype in developing your own survey, serving as a foundation for both content and organization (see the Appendices of this document for sample survey statements). Student rating scales generally focus on assessing students’ opinions and attitudes towards teaching performance. When creating your own survey, there are a number of factors that need to be taken into consideration:

• **What is your definition of effective teaching?** You first need to determine what you believe are the components of “effective teaching” in order to produce statements that can measure these dimensions. Based on a review of studies examining effective teaching, Davis (as cited in Berk, 2006) identified four main clusters of information that would assess teaching effectiveness:
• Organizing and explaining material in ways appropriate to students’ abilities
  • Knows the subject matter
  • Can explain difficult concepts in plain, comprehensible terms
  • Gauges students’ knowledge and experiences

• Creating an environment for learning
  • Establishes and maintains rapport with students
  • Gives appropriate feedback
  • Uses strategies that actively engage learners

• Helping students become autonomous, self-regulated learners
  • Communicates goals and expectations to students
  • Directs students in making their own connections to course content

• Reflecting on and evaluating one’s own teaching
  • Critically examines why one is doing what one does
  • Identifies the effects of what one does on one’s students

Developing Survey Statements

After determining the dimensions along which you want to evaluate your teaching, you will need to develop the statements in your survey. Student rating scales provide a set of declarative sentences, with various response options assessing students’ levels of agreement. While the number of statements included in the survey may vary depending on the various aspects of teaching effectiveness you may wish to assess, it is recommended that you have a total of 25 to 40 statements in the survey (Berk, 2006).

When developing statements, Berk (2006) provides some rules below:

<table>
<thead>
<tr>
<th>The statement should...</th>
<th>The statement should not...</th>
</tr>
</thead>
<tbody>
<tr>
<td>be clear and direct</td>
<td>contain a double negative</td>
</tr>
<tr>
<td>be brief and concise</td>
<td>contain universal or absolute terms</td>
</tr>
<tr>
<td>contain only one complete behaviour, thought, or concept</td>
<td>contain value-laden or inflammatory words</td>
</tr>
<tr>
<td>be a simple sentence</td>
<td>contain words, phrases, or abbreviations that would be unfamiliar to all respondents</td>
</tr>
<tr>
<td>be at the appropriate reading level</td>
<td>measure a factual aspect of the instructor’s behaviour, rather it should be based on students’ attitudes toward a behaviour</td>
</tr>
<tr>
<td>be grammatically correct</td>
<td></td>
</tr>
<tr>
<td>be strongly worded</td>
<td></td>
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<tr>
<td>be congruent with the behaviour it is intended to measure</td>
<td></td>
</tr>
<tr>
<td>accurately measure a positive or negative behaviour</td>
<td></td>
</tr>
<tr>
<td>be applicable to all respondents (respondents should be in the best position to respond to the statement)</td>
<td></td>
</tr>
</tbody>
</table>
For example, when developing a statement regarding an instructor’s’ ability to engage students in classroom discussion, the following statements would not be considered good examples of according the rules outlined above:

“Instructor was capable of effectively answering student questions and facilitating discussion.”
- This is an example of a statement that measures two separate behaviours
- The statement should be reworded to inquire about only one of the behaviours (answering student questions OR facilitating discussion)

“Instructor answered students’ questions”
- This is an example of a statement where a factual aspect of the instructor’s behaviour is measured
- The statement should be reworded to inquire about students’ attitudes regarding the behaviour (e.g., “the instructor effectively answered students’ questions”)

“The instructor always included discussions as a classroom activity”
- This is an example of a statement with an absolute term
- The statement should be reworded to include a non-absolute term instead (e.g., “the instructor usually included discussions as a classroom activity”)

See Appendices A and B for Sample Course Evaluation Items to use in your Student Evaluations of Teaching

Developing Survey Anchors

Once you’ve constructed your statements, the next step is to develop anchors, or response options for students. Berk (2006) provides a review of the various types of anchors used in scales:

- **Intensity anchors** measure the extent of students’ feelings or opinions towards the behavior in the statement; intensity anchors generally are rated on a agree-disagree scale and can have multiple rating points:
  - 2-point anchor: Agree - disagree
  - 3-point anchor: Agree - neutral - disagree
  - 4-point anchor: Strongly agree - agree - disagree - strongly disagree
  - 5-point anchor: Strongly agree - agree - neutral - disagree - strongly disagree

- **Evaluation anchors** measure the quality of the behavior in the statement; these anchors can include descriptors such as
  - excellent-poor,
  - effective-ineffective, and
  - satisfactory-unsatisfactory.

- Other anchor types include **frequency anchors** (assessing how often a behavior occurs), **quantity anchors** (which assess how much of a behavior occurs), and **comparison anchors** (which ask students to compare aspects of the current course to other courses that they are taking).

While the number of response points can vary from a 2-point upto a 9-point anchor, previous studies have shown that having a 5-point scale is optimal in terms of scale reliability (Davis, 1973).
Open-Ended Questions
In addition to statements with set response options, you should include at least one open-ended question. This question should provide students with an opportunity to respond about their overall experience overall, such as discussing the strengths and weaknesses of the instructor (Davis, 1973). Students can also provide recommendations of potential changes in future offerings of the course.

Examples for open-ended questions include:

- What did you like most about the course? What did you like least about the course?
- What were some of the strengths of your instructor? What were some of the weaknesses of your instructor?
- What are some areas of improvement for the course? What would you like the instructor to continue doing in the course?
- What are some of your comments on the instructors’ performance?

Administering Your Survey
Having developed your own survey, there are also best practices that inform the practices surrounding the administration and completion of the survey in the classroom (Benton & Cashin, 2011; Davis, 1993):

- **Ensure student anonymity:** Students generally give higher ratings when they are asked to sign their ratings; therefore, it is better to ensure students provide their ratings anonymously.
- **Instructor should not be present in the room:** Students give higher ratings when the instructor is present; therefore, it is better to have a neutral individual (such as a teaching assistant) be present in the room during the process. Alternatively, a student from the class may also be designated to the collection and delivery of completed rating forms.
- **Let students know the purpose of the survey:** It is important to ensure that students are aware of the importance and use of completed forms, such as for purposes of professional development or for use in a teaching dossier.

Continuous evaluation of teaching aims to ensure that the quality of both teaching practices and the course content both meet the standards set by the institution. Across higher institutions, students have been identified as a key source of feedback on our teaching practices (Alderman, Towers, & Bannah, 2012). This feedback can then be used to identify what aspects of our performance are beneficial to students, as well as to highlight the weaknesses in our teaching practices. In addition to contributing to the continued improvement of teaching, feedback can also be used towards one’s own professional development, such as the use of aggregate data being presented as evidence of teaching effectiveness. It is important to ensure that students see that you incorporate the feedback from these assessments in your subsequent teaching, and that any concerns that are brought up are addressed as well.
Work Cited


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Please contact Michelle Schwartz, michelle.schwartz@ryerson.ca, with questions or suggestions for future topics. http://www.ryerson.ca/lt
Appendix A: Sample Course Evaluation Items
Adapted from the Berkeley Center for Teaching & Learning Course Evaluation Question Bank

Instructor-specific statements

Presentation of content
1. The instructor effectively presented concepts and techniques
2. The instructor presented content in an organized manner

Helpfulness/availability
1. The instructor helped me achieve my goals
2. The instructor helped me identify resources I needed to carry out the project
3. The instructor was helpful when I had difficulties or questions
4. The instructor was readily available during the class

Useful/clear feedback on performance
1. The instructor provided clear constructive feedback
2. The instructor clearly articulated the standards of performance
3. The instructor provided meaningful feedback on my writings

Encouraging of participation
1. The instructor engaged the class in productive discussions
2. The instructor guided the discussion well
3. The instructor encouraged student questions and participation
4. The instructor provided opportunities for class participation

Course-specific statements
1. The course was effectively organized
2. The course helped me understand concepts more clearly
3. The course was appropriate for the stated level of the class
4. The course developed my abilities and skills for the subject
5. The course developed my communication skills
6. The course developed my ability to think critically about the subject
7. The course developed my ability to apply theory to practice
Open-ended questions
1. Please identify what you consider to be the strengths of the course
2. Please identify the areas where you think the course could be improved
3. What advice would you give to another student who is considering taking this course?

Appendix B: Sample Course Evaluation Items
Adapted from the Sample Course Evaluation Scale by Berk, 2006

Course Content and Organization
1. The course outline provided clear statements of how you would be graded.
2. The course outline provided clear statements of course requirements.
3. The course outline provided objectives/outcomes that reflected course content.
4. Course materials were useful in attaining course objectives/outcomes.
5. Course materials were at the appropriate level of difficulty for the course level.
6. Assignments were useful in understanding course content.
7. The course was well organized.
8. The course requirements were appropriate for the number of credits.

Evaluation Methods
1. Evaluation methods measured course objectives/outcomes.
2. Evaluation methods were fair.
3. Evaluation methods covered important content, not trivial information.
4. Evaluation methods were appropriate for the course level.
5. Evaluation methods required critical thinking/problem solving, not just memorization.

Learning Outcomes
1. Attending classes in this course was worthwhile.
2. This course positively changed my thinking about the subject area.
3. I learned new information in this course.
4. What I learned in this course will be useful in my career.

Instructional Methods
1. The instructor encouraged self-directed learning.
2. The instructor utilized useful audiovisuals, where appropriate.
3. The instructor facilitated critical thinking/problem solving.
4. The instructor appeared knowledgeable about course content.
5. The instructor demonstrated clear relationships between theory and practice.
6. The instructor provided relevant examples to illustrate content.
7. The instructor paced instruction to facilitate learning.
8. The instructor encouraged questions, comments, and discussion.
9. The instructor provided timely feedback on assignments and/or tests.
10. The instructor encouraged students’ participation in learning during class.
11. The instructor made clear and understandable presentations.
12. The instructor was thoroughly prepared for each class.
13. The instructor provided helpful feedback on assignments and/or tests.

**Learning Atmosphere**
1. The instructor was available for individual assistance.
2. The instructor demonstrated respect for each student.
3. The instructor was responsive to students’ needs.
4. The instructor was approachable out of class to answer questions.
5. The instructor demonstrated sensitivity to gender and cultural differences.
6. The instructor displayed enthusiasm for teaching.

**Open-ended Questions**
1. What did you like **MOST** about the course?
2. What did you like **LEAST** about the course?