Providing effective & equitable feedback

Tools and techniques for grading

Learning Goals:

After today's meeting, TAs should be able to...

- 1) Describe the features of feedback that is both effective and equitable
- 2) Use grading tools for effective and equitable grading

What is the point of giving students feedback?

Feedback is effective when it...

• is aligned to the **learning goals** of the assignment.

• encourages students to adopt a **growth mindset**.

creates a dialogue between student and teacher.

Feedback is equitable when it...

• uses objective criteria consistently across all submissions

• is free of implicit or unconscious bias

Key Grading Practices: Rubrics and feedback

Practice	Features	Reason
using rubrics for every assignment	 Rubrics have: different components or criteria being measured defined performance levels or weighted point values, and descriptions of each component/criterion at each level. 	
giving detailed feedback on all assignments	 includes a justification of the correct response, describes why an answer is not correct, focuses on the task not the student, and gives positive and constructive feedback. 	

006

An example

Question: (2 points) Explain what a positive control is and why they are used, then give an example of one you might design if you were to conduct an "experiment" at home.

Student response: Positive controls help you decide if an experimental result is an artifact of the experimental design. Suppose you were testing if adding baking soda to houseplant soil increases flowering. A positive control would be a set of houseplants that were given a commercial fertilizer that is demonstrated to increase the number of blooms.

Student Response: Positive controls help you decide if an experimental result is an artifact of the experimental design. Suppose you were testing if adding baking soda to houseplant soil increases flowering. A positive control would be a set of houseplants that were given a commercial fertilizer that is demonstrated to increase the number of blooms.

Point value (per part)	Explanation of positive control (1pt)	Example given (1pt)
0	missing entirely	missing entirely
+0.5	a positive control is correctly defined	the home experiment is described
+0.5	why positive controls are used is explained	the positive control identified is correct

Student Response: Positive controls help you decide if an experimental result is an artifact of the experimental design. Suppose you were testing if adding baking soda to houseplant soil increases flowering. A positive control would be a set of houseplants that were given a commercial fertilizer that is demonstrated to increase the number of blooms.

Example feedback:

- A. Not quite- a positive control receives a treatment that is known to produce a result comparable to what is proposed by your hypothesis.
- B. You gave an explanation of why positive controls are used and not what they are.
- C. 1.5/2 pts
- D. This is a good example of one application of a positive control, but your response is missing a full explanation of what positive controls are. Remember positive controls provide a comparison to a known outcome similar to that predicted by your hypothesis (1.5/2 pts).

What do you like and what is challenging about this process?

Remedies to Grading Challenges

Practice	Features	Reason	Remedies to challenges
using rubrics for every assignment	 Rubrics have: different components or criteria being measured defined performance levels or weighted point values, and descriptions of each component/criterion at each level. 	 helps you to be more objective and grade fairly ensures students understand expectations 	Challenge: initial time and effort investment Remedies: • rubrics could be reused and recycled for other assignments • rubrics save time otherwise spent disputing grades.
giving detailed feedback on all assignments	 Detailed feedback often: includes a justification of the correct response, describes why an answer is not correct, focuses on the task not the student, and gives positive and constructive feedback. 	 communicates to students they can improve outlines steps for success 	Challenge: takes time to respond Remedies: Develop a key for common feedback (often included in grading software like Gradescope).

Creating your own rubric and feedback

[Open-ended question prompt]

What would your rubric look like for this question?

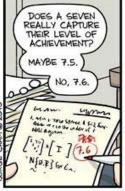
In your own words, provide this student with feedback on their response.

[Student response]

Practical tips for giving feedback more efficiently









"Piled Higher and Deeper" by Jorge Cham www.phdcomics.com Used with permission

- Look only at what was said, don't try to interpret what might have been meant.
- Make and stick to a rubric that aligns with the assignment goals
 - Don't focus on correcting every single little thing!
- Keep track of the most common pieces of feedback and copy/paste.

Grading fatigue is normal!



"Piled Higher and Deeper" by Jorge Cham www.phdcomics.com Used with permission

- Shuffle the order of grading between questions.
- Try to stay consistent in your comments throughout.
- Take breaks to walk/stretch.
- Be kind to yourself!

Exit Ticket:

- + What are you taking away from today's discussion of effective and equitable grading?
- Δ Is there anything you still have questions about?

MIT OpenCourseWare https://ocw.mit.edu/

RES.7-005 Biology Teaching Assistant (TA) Training Summer 2020

For information about citing these materials or our Terms of Use, visit: https://ocw.mit.edu/terms.