# GROWTH MINDSET FEEDBACK AND GRADING PRACTICES

## **PROMPT**

As many of you have mentioned in previous comments, faculty grading and feedback are crucial in stilling and supporting a growth mindset.

Therefore, please reflect on your own practice, the best practices of others, your research and even new ideas we might consider to answer the following question:

What grading and feedback practices support a growth mindset in students?

# **FINDINGS**

Faculty promoted five main strategies. Many faculty members implemented several strategies. From the most to least common strategy, faculty indicated using:

- 1. A Growth Mindset Grading Process (15/29)
- 2. A Growth Mindset "A Failure Isn't Permanent" Feedback Process (16/29)
- 3. Student Self Reflection or Self Evaluation (12/29)
- 4. Revision for Full or Partial Credit (11/29)
- Growth Mindset as a Component of the Course (10/29)

#### **OVERVIEW**

As a group, these faculty implement a variety of growth mindset strategies in their course design and student feedback.

# 1. A Growth Mindset Grading Process

Just over half of the respondents use growth mindset grading practices, such as a grading scale with increasing points towards the later stages of the semester, or portfolio grading. Faculty focus on "low" or even "no stakes" opportunities to help students grow and master concepts before "high stakes" assessment. Furthermore, faculty build towards capstone assignments by embedding smaller skills into a series of smaller assignments. Faculty also emphasize process and student progress as part of the grading process.

- Allowing early success with assignments, assignments get more difficult as semester progresses (and points increase). (Respondent 24)
- Having lots of low-stakes "check-in" kind of assignments like quizzes is helpful. I think we (teachers) need to collect and give feedback on these. Our feedback can emphasize growth and make suggestions for intelligent practice. (Respondent 25)
- Consistent feedback to students when using informal classroom assessment techniques (nonthreatening/nongraded). (Respondent 28)
- Looking at where students start and where they end up as a way to grade. (Respondent 1)
- This semester I am experimenting will incrementally increasing the values of exams (50-100-150-200 vs. 3 at 100 + 200). (Respondent 26)
- Incorporate tasks into larger assignments where tasks are embedded as course goes on (high-stakes). (Respondent 7)



# 2. A Growth Mindset "A Failure Isn't Permanent" Feedback Process

Faculty use the feedback process to encourage students to learn from failure and recognize errors as temporary setbacks that create learning opportunities. Linked with the growth mindset grading scale and the self reflection and revision process, faculty give individual student feedback to identify errors and encourage new strategies for improvement.

- Failure is not permanent. (Respondent 13)
- Try to emphasize that it is a learning opportunity; a "celebration of knowledge." (Respondent 15)
- Trying to be sure that feedback indicates that errors are "fixable." (Respondent 3)
- Marking guides are a bit more flexible for students grading than rubrics—but giving students feedback really helps them (specific feedback) to see where they can grow. (Respondent 1)
- We read "Promoting Student Metacognition" article and talk about ways to foster a culture of confusion (i.e. its okay to ask questions, I ask "What questions do you have?" instead of "Does anyone have any questions?") (Respondent 11)

### 3. Student Self Reflection or Self Evaluation

Faculty encourage students to learn from their past efforts by requiring and even rewarding self reflection and self evaluation. After both assignments and exams, faculty assign and give feedback on self reflection. Many faculty even award points to students who identify concept mastery and outline new strategies for future improvement.

- I use discussion forums in my online classes. To make them low-stakes, I give them points just for participation. To encourage metacognition, I have a high-point assignment where I ask each student to pick their best posting to be graded. They submit one at about week five and two more at the end of the semester. I let them submit a replacement for the first one, if they did not do well on it. (Respondent 6)
- Going over the test in class-Post -Exam (Respondent 10)
  - Doing a Post Test Survey—post test on specific factors: (1) Time to Prep (2) Strategy (3) Time management
- Also, my students make their own quizzes/activity (Teacher for the Moment). (Respondent 14)
- Reflection on exam result. (Respondent 16)
  - What they did to prepare for the test that worked?
  - What did not help at all?
  - Do they think they got what they expected? Less or more?
  - What will they do differently to better prepare for the next test?
  - What topics do you need to review and get better at?
  - What will you do to master these topics?

- I don't score quizzes, but have students record/reflect using RA techniques and points are awarded based on journal entries. (Respondent 17)
- I also like to give students a chance to review and self-correct their mistakes (sometimes I give credit for this, sometimes not). After this review I ask the students to identify the concepts they have mastered and the concepts they need to try a different strategy. (Respondent 26)

### 4. Revision for Full or Partial Credit

To encourage learning from mistakes and to create a growth mindset, faculty encourage, or even require, students to revise their work based on feedback and self reflection. Some faculty give full credit revision options, while others give partial credit for improvement.

- I think encouraging (not just allowing) revision on small and large assignments lets students see that failure isn't permanent. It also helps encourage them to look critically and curiously at mistakes and errors to consider "Why is this incorrect? How can I improve" Mistakes become more interesting. (Respondent 25)
- I allow students to do revisions on CAD drawing assignments in my Engineering Graphics course. This allows them to "fail" with low-risk because they can learn from their mistakes and improve their grade—max revision grade is 90% to incentivize doing it right the first time. (Respondent 9)
- They are given the chance to revise a project and if they put forth "effort," they are rewarded with 50% of the points lost (from not completing the project correctly the first time). (Respondent 13)
- Partial re-take of exams, quizzes where students have limited time to research and revise their answers. (Respondent 23)

# 5. Growth Mindset as a Component of the Course

Faculty include growth mindset strategies in the syllabus and course content. Faculty explicitly promote growth mindset strategies, in written documentation and class activities. Some faculty even assign students to teach specific mindset techniques as part of the course.

- Modify syllabus to incorporate GM strategies. (Respondent 22)
- Have groups of students be the teacher for 15 minutes out of one class–highlighting one mindset technique. (Respondent 28)
- Students keep track of their grades—that's where my bubble points comes in. They have a sheet with bubbles. On top of the bubbles they're to write dates and activities-and then get a peer's signature (or the teacher's signature). On a pre-agreed date instructor and student sit down and decide the final grade. (Respondent 14)