Alternative assessment strategies to help students stop worrying about grades and focus on learning instead

Caitlin Donnelly
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CMPS - UBCO

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BOTA/ZOOL - UBCV

Jackie Stewart
CHEM - UBCV

With Patrick Culbert (Forestry, UBCV)

We are multi-access- Zoom and in person

- Please continue to keep your microphone muted during the presentation (except during Q&A periods).

- Please do write your questions and comments in the Zoom chat as we go, participants should free to respond and comment too! Celeste and Firas will monitor the chat.

- For Q&A, you can raise your hand on Zoom to join the queue or your hand in person.

Session Outline

1. What's the problem?

2. What are some options for shifting students' focus to learning?

3. Examples from biology, data science, and science writing courses.

4. Application of these ideas to your own context.

5. Key take-away messages and practical ways to get started.

Do you have a story or reflection about how grade-focused your students or classes are?


Why is it important to
focus on feedback instead of grades?

Grades as Feedback on Performance—Does Grading Provide Feedback to Help Students Understand and Improve upon Their Deficiencies?

> [This] work affirms an observation that many classroom teachers have made about their students: if a paper is returned with both a grade and a comment, many students will pay attention to the grade and ignore the comment.
>
> —Brookhart (2008, p. 8)

Teaching More by Grading Less (or Differently) by Jeffrey Schinske and Kimberly Tanner

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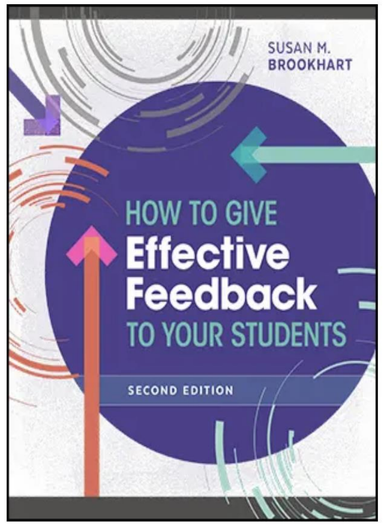

How to Give Effective Feedback to Your Students, 2nd Edition

By Susan M. Brookhart

Teaching More by Grading Less (or Differently) by Jeffrey Schinske and Kimberly Tanner

Grades as a Motivator of Student Effort—Does Grading Motivate Students to Learn?

> Our results suggest…that the information routinely given in schools—that is, grades—may encourage an emphasis on quantitative aspects of learning, depress creativity, foster fear of failure, and undermine interest.
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> —Butler and Nisan (1986)

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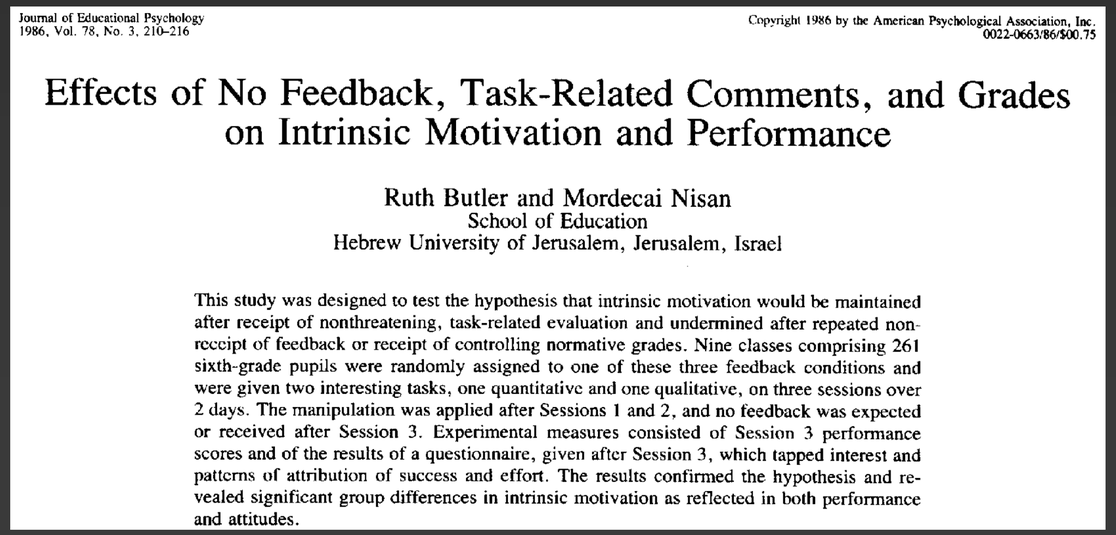

Journal of Educational Psychology
1986, Vol. 78, No. 3, 210-216

0022-0663/86/$00.75

Effects of No Feedback, Task-Related Comments, and Grades on Intrinsic Motivation and Performance

Ruth Butler and Mordecai Nisan
School of Education
Hebrew University of Jerusalem, Jerusalem, Israel

This study was designed to test the hypothesis that intrinsic motivation would be maintained after receipt of nonthreatening, task-related evaluation and undermined after repeated non-receipt of feedback or receipt of controlling normative grades. Nine classes comprising 261 sixth-grade pupils were randomly assigned to one of these three feedback conditions and were given two interesting tasks, one quantitative and one qualitative, on three sessions over 2 days. The manipulation was applied after Sessions 1 and 2, and no feedback was expected or received after Session 3. Experimental measures consisted of Session 3 performance scores and of the results of a questionnaire, given after Session 3, which tapped interest and patterns of attribution of success and effort. The results confirmed the hypothesis and revealed significant group differences in intrinsic motivation as reflected in both performance and attitudes.

Teaching More by Grading Less (or Differently) by Jeffrey Schinske and Kimberly Tanner

Ideal characteristics of assessment

- Demonstrates ability to think through and justify decisions about a conceptual or authentic task.
- Tasks are meaningful and realistic.
- Students understand the purpose of the task and are motivated to learn.
- Students have opportunities to develop and improve.
- Feedback is useful for growth and improvement.
- Students develop awareness of their own knowledge, skills, and gaps.
- Students feel a sense of ownership over the learning.
- Celebrates diversity in approaches based on students' prior knowledge, life experiences, and goals.

Anything missing?

What are some options for shifting our focus to learning?

Some Grading Models

Traditional grading - each assessment is worth a % of the grade, grade is a weighted average

Mastery grading - students must meet a certain level of competence in a task before moving on to the next

Specifications grading - pass/fail grading on individual assignments or tests (P is usually >B work), revisions, bundles/modules of assessments linked to learning outcomes

Contract grading - broader than specs grading, each grade level is defined and students determine which level they want to aim for. If they meet the contract, they get the grade.

Ungrading – no grades at all, or in the cases where grades are required, typically students provide their own (well justified) grade.

Great resource: https://uncw.edu/keepteaching/documents/alternativegradingadapt2020july7.pdf

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To what extent does traditional grading align with this list?

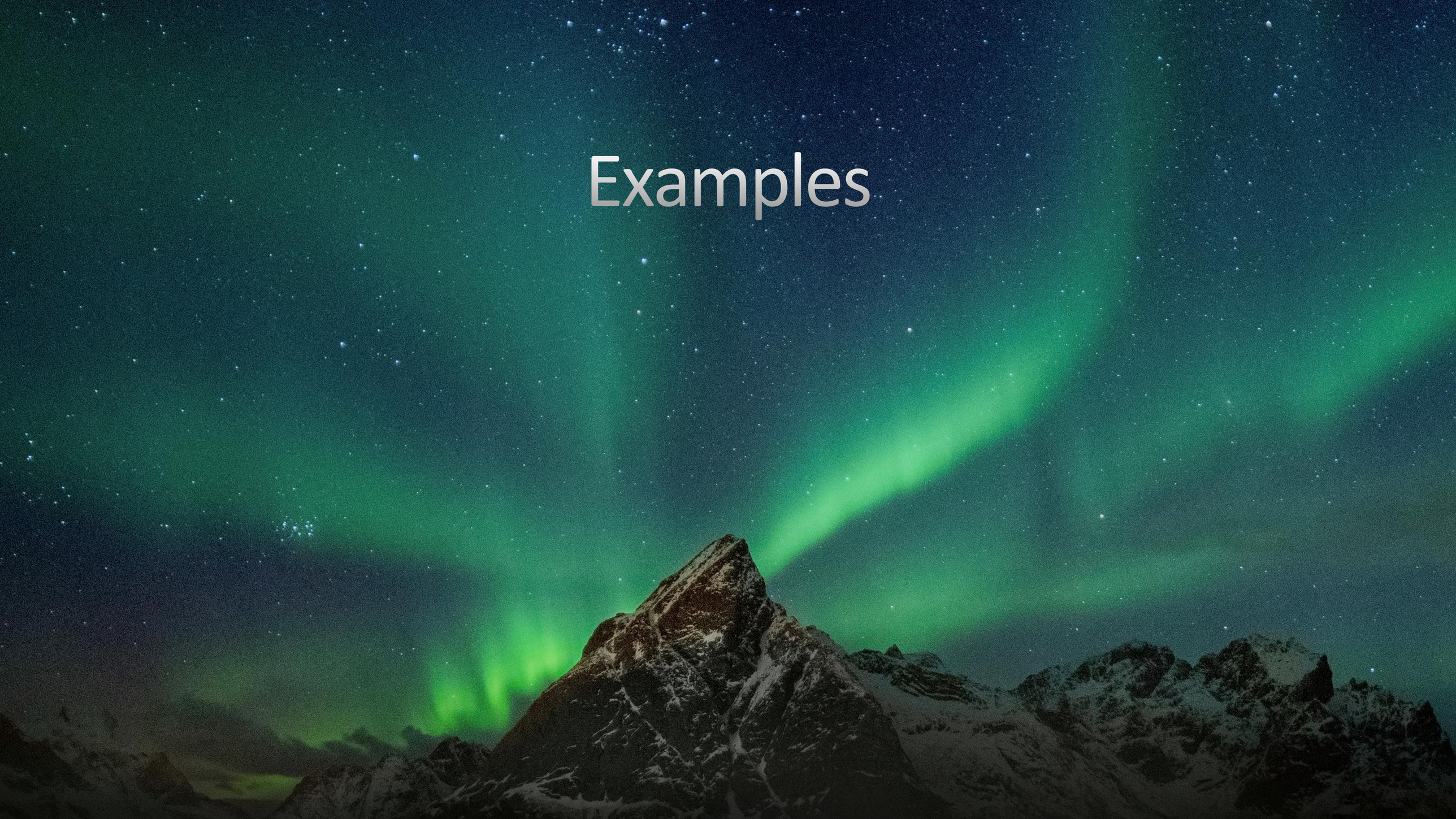
Focus on feedback

"Feedback is most effective when it explicitly **communicates** to students about some specific aspects of their performance relative to specific target **criteria**, and when it provides information that helps students **progress** toward meeting those criteria. This kind of feedback, which informs students' subsequent learning, is often called formative feedback.

In contrast, summative feedback is that which gives a final judgment or evaluation of proficiency, such as grades or scores."

Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., & Norman, M. K. (2010). *How learning works: Seven research-based principles for smart teaching*. John Wiley & Sons. p. 139

Examples



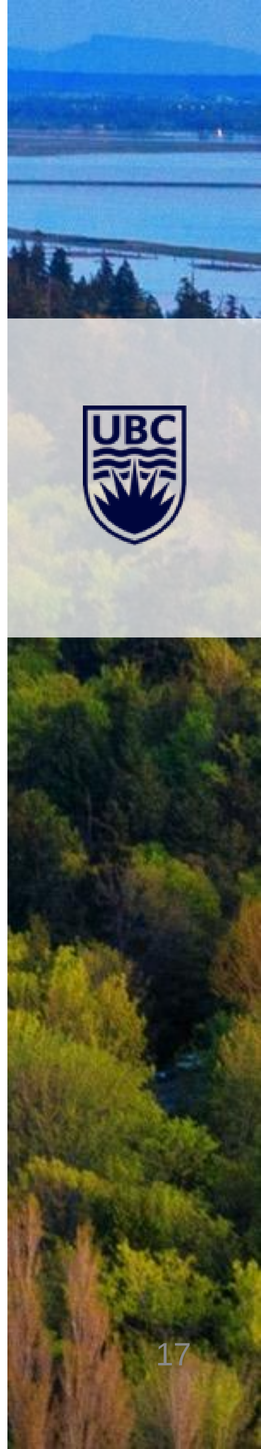
Reflections on SCIE 113 Ungrading

Caitlin Donnelly, Marcia Graves
Collaborators: Jackie Stewart, Taylor Wright, Montse Rueda, Brian Hunt

About SCIE 113

- **Scientific communication** course for **first-year students** in the Faculty of Science
  - Small class: approx. 25 students in each section

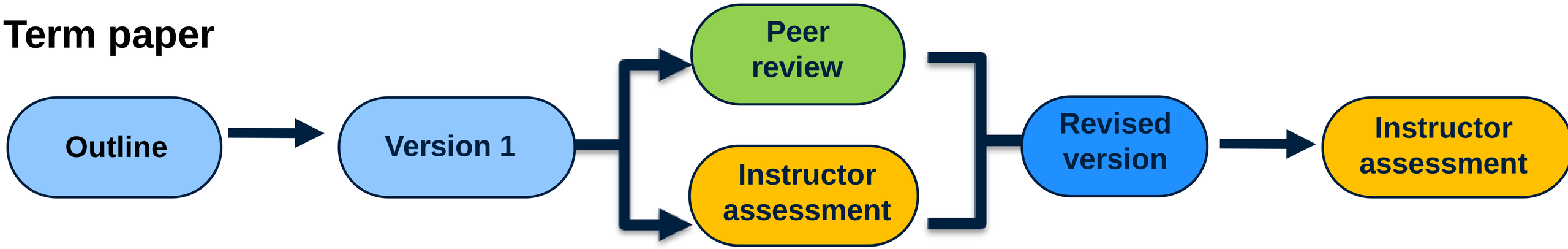
- Two **argumentative essays**, worth 53.5% of the course grade
  - Essay 1: about the philosophy of science
  - Term paper: about an unresolved research question in science
  - Each with a claim, reason, evidence, counterargument, and rebuttal



Argumentative essays

Essay 1

Term paper

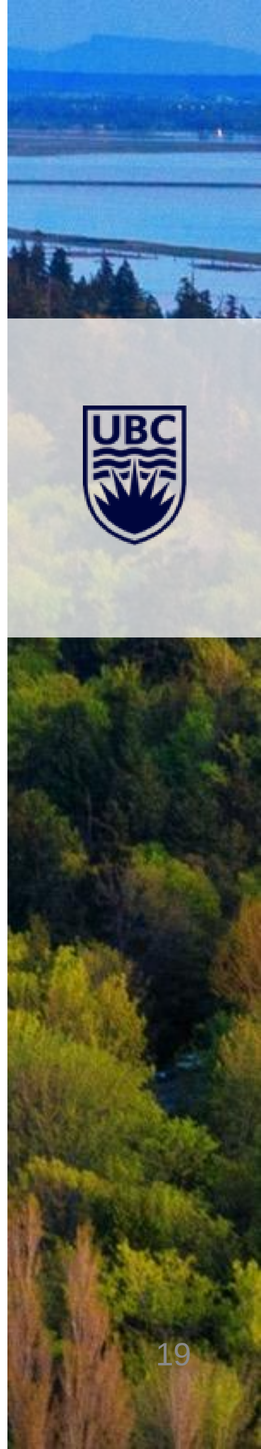


Self-assessment

- Does **de-coupling feedback and grades** promote greater student engagement with **metacognition and self-reflection** on written assessments?

- How accurately can students self-assess their work? Does this improve?

- We asked students to complete a **self-assessment** for each assignment that was assessed by an instructor
  - Students gave themselves a mark in each rubric category
  - Students answered questions about what they perceived to be the strengths and weaknesses of the work, and could request specific instructor feedback on a certain category of the rubric
  - Instructors responded with feedback, but withheld grades

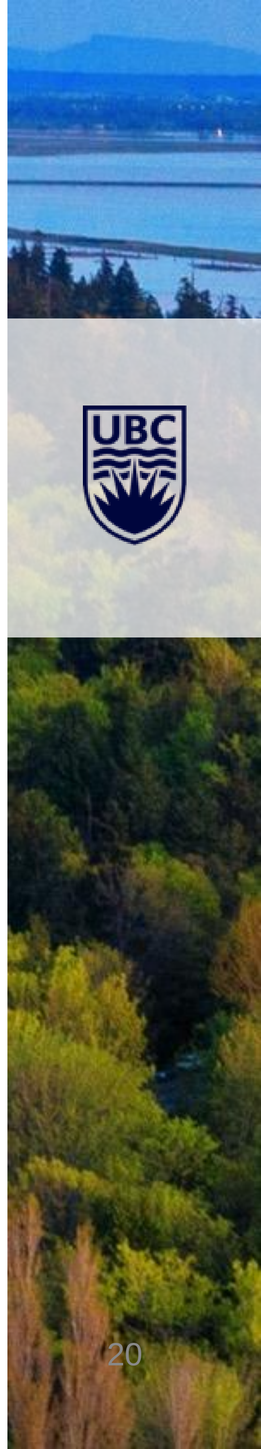


Reflections (Caitlin)

- **Withheld grades on term paper version 1 only**

- Students over-estimated their grades on self-assessments, but accuracy improved on the final version of the term paper
  - Overestimated Essay 1 grade by 6.5%, term paper v1 by 7%, term paper v2 by 2.3%
  - Similar trend in two other sections of the course where I did not withhold grades (Essay 1 6.3%, term paper v1 7.5%, term paper v2 3.7%)

  - Student reflections shifted focus from **written expression to argumentation**
    - Essay 1: 18/24 noted written expression as a major weakness, requesting feedback
    - Term paper v1: 12/24 focused on written expression
    - Term paper v2: 10/25 focused on written expression



Building Self-awareness and meta-cognition:
Focusing on self-assessment and response to feedback in SCIE 113 (Marcia)

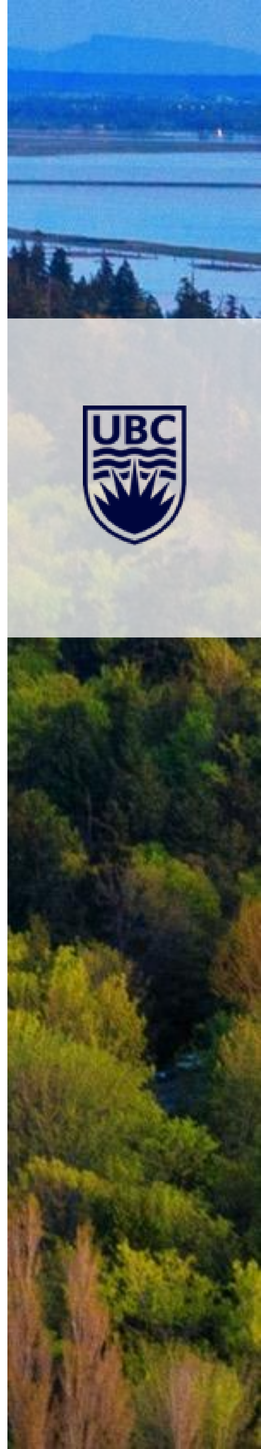
A key feature of this approach?

Promote student buy-in from day 1

- How do you feel when waiting for a grade? ANXIOUS, SCARED
- How do you feel when you receive a grade? RELIEVED, ANNOYED
- How does a grade help you improve? IT DOESN'T SAY HOW

COMMON THEME:

"When I receive my grade I absorb it, repress my emotions around it and just move on."



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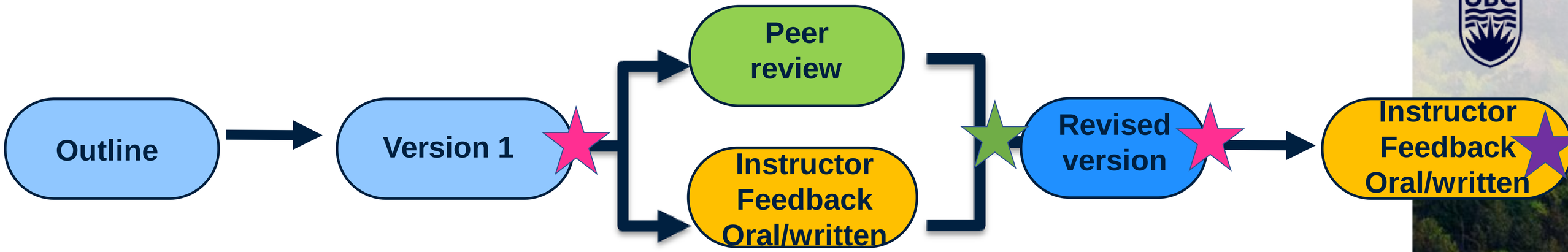


- Student's self-assess based on a rubric, reflect on their work
- Students re-assess and reflect on Instructor feedback
- Quantitative Grades on assignments were discussed in 1-on-1 meetings with students at the end of course

Building Self-awareness and meta-cognition:
Focusing on self-assessment and response to feedback in SCIE 113 (Marcia)

Key outcomes

FOR STUDENTS:

- ✓ Majority of students bought-in to the process and the goals of the term.
  "It was great to focus on learning instead of grades."
  "I like the focus on feedback, because I really felt like I was practicing how to improve instead of just finishing assignments."

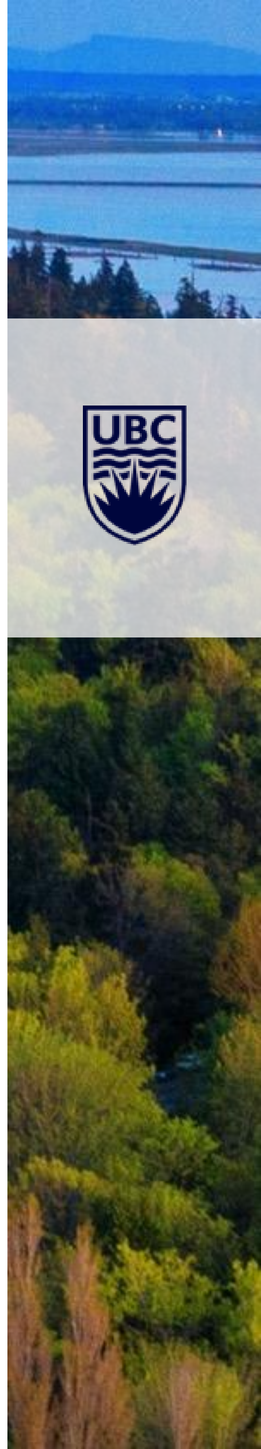
- ✓ Students reported that this approach felt relieving.
- ✓ All students took it seriously and provided rich written reflections.
- ✓ Abilities to self-assess accurately varied. This seemed to have improved throughout the term.
- ✓ Students seemed to apply the feedback more thoroughly in final assignments.

Building Self-awareness and meta-cognition:
Focusing on self-assessment and response to feedback in SCIE 113 (Marcia)

Key outcomes

FOR ME:

- ✓ Satisfying to know students are responding to written feedback!
- ✓ Improved my understanding of each student's growth.
- ✓ Adding 1-on-1, 15 min scheduled feedback sessions were more effective than open office hours to deliver and discuss feedback.
- ✓ APPLICATION TO ALL MY OTHER CLASSES!
  - Adding self-assessment and reflections have been really effective in large enrolment class activities and lab classes!



Firas

COSC 123

Search this book...

Course Description

COSC 123 (3) Computer Creativity

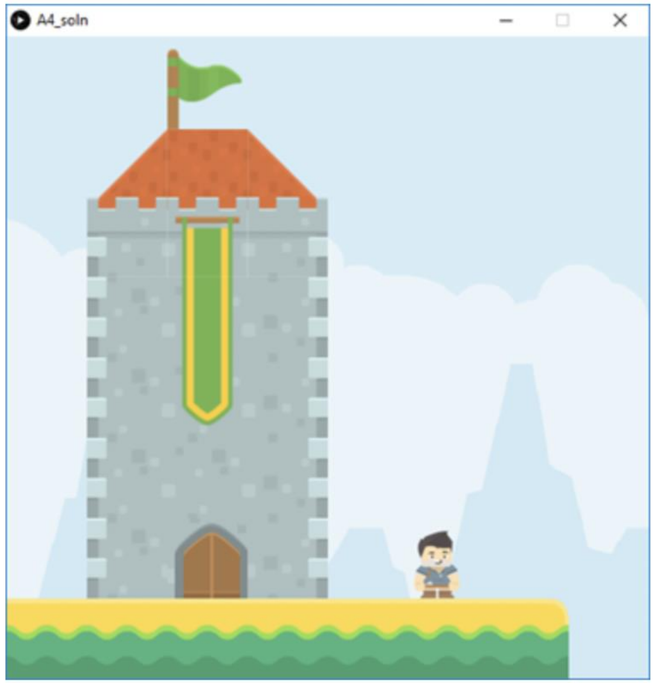
The UBCO calendar description of this course is:

> COSC 123 (3) Computer Creativity
>
> A hands-on introduction to programming and computer-based problem solving and creativity. Experience with application development including storytelling, graphics, games, and networking. [3-2-0]
>
> Prerequisite: One of COSC 111, COSC 122..
>
> Corequisite: N/A.

Warning

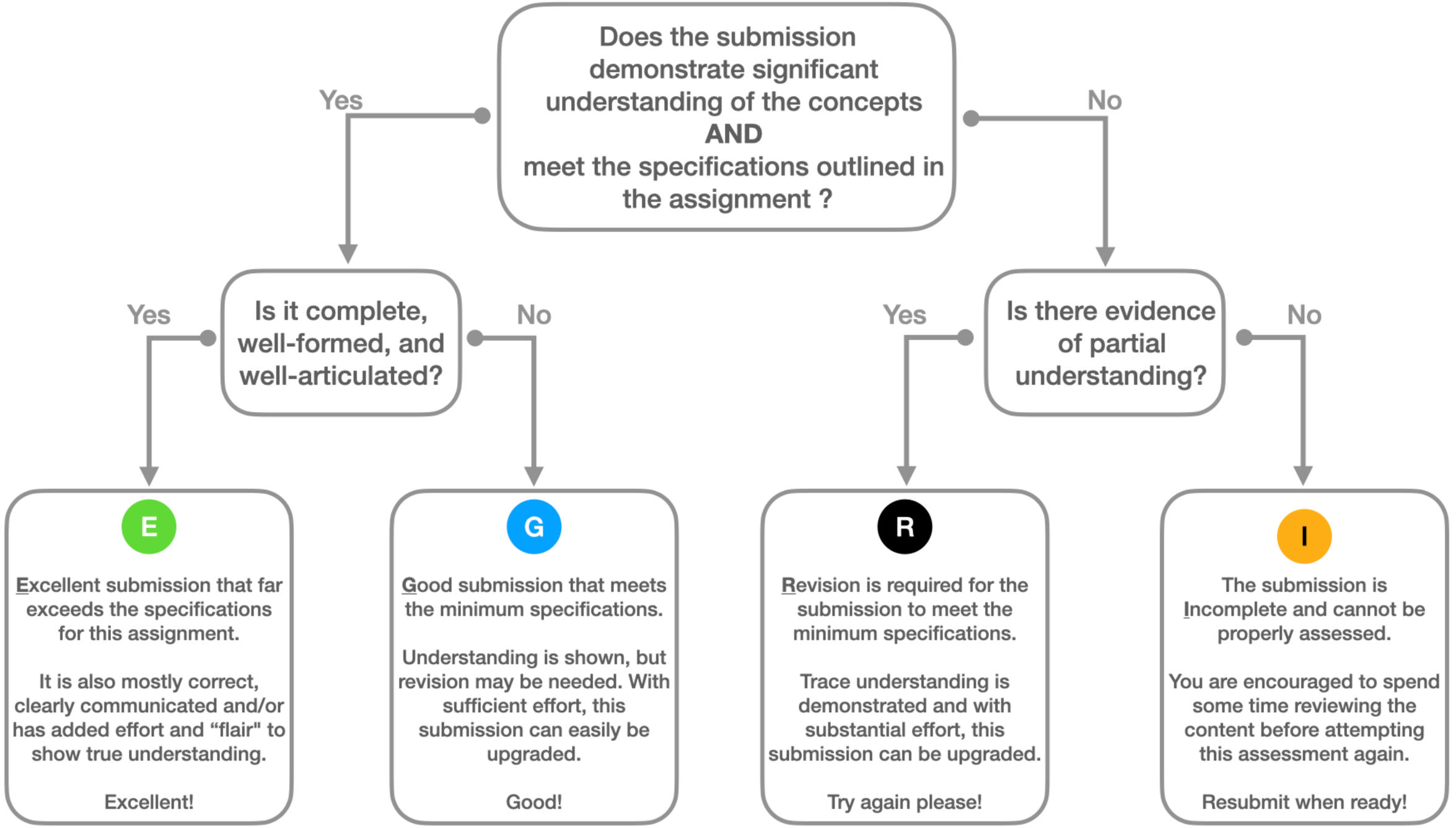
If there is a lab and/or tutorial listed on the SSC for this course, You **must** register for all course elements without conflicts, otherwise the department will remove you from the course!

Task 1: Create a Scene ¶



Specifications

- We are expecting you to commit your work often (try to aim for a minimum of 3-5 commits per lab) with useful commit messages marking your progress.
- At least one *big* building (e.g. the tower in my design)
- At least one flag (the one on top of the tower in my design)
- At least one banner flag (the long green and yellow one above the door in my design)
- At least one door or window
- A ground
- A player character that moves horizontally with the mouse.
- A background image (not a plain text)



Inspired by "EMRF: Everyday Rubric Grading", by Rodney Stutzman and Kimberly Race and "Specifications grading with the EMRF rubric" by Robert Talbert

I prefer **not** to associate percentages or grades to the levels (I personally feel that this hampers your learning and poisons motivation and creativity), but I know that it will take us some time to eliminate grades completely. If you must think of things in terms of numbers and percentages, you can expand the box below to see my best guess of what each level translates into.

Resist the temptation to click this button! Click to show

I prefer **not** to associate percentages or grades to the levels (I personally feel that this hampers your learning and poisons motivation and creativity), but I know that it will take us some time to eliminate grades completely. If you must think of things in terms of numbers and percentages, you can expand the box below to see my best guess of what each level translates into.

Resist the temptation to click this button!

- The **E** level is about 100%.
- The **G** level is about 85%.
- The **R** level is < 50%.
- The **I** level does not have a number associated because it was not graded.

Q2.1 Overall did the specs-grading system work for you?

1 Point

Overall, please comment on whether you believe the specs-grading system worked for you in COSC 123:

- ○ Yes.
- ○ It's complicated.
- ○ No.

Explain your answer and try to link it back to your experience based on a traditional points-based grading system.

Celeste

FALL
2018

The Basics: There are no textbooks for this course. Instead, you need a labcoat and a bound sturdy lab notebook. Your mark in this course is based on your lab notebook (20%), a field ecology study (20%), a molecular biology study (10%), Kahoot quizzes (in lecture) (10%), and a grand finale student designed research project (40%).*** *(There are also secret bonus marks available. These are hidden in your lab notebook.)*

WELCOME TO BIOLOGY 342

Class tips

You will see me vary my teaching style to ensure that this course is accessible to everyone. You will have lectures, demonstrations, and active learning opportunities. Everyone has the right to be successful in this course and I want you to succeed; please come by my office** and introduce yourself. Because this is a lab course, your single biggest job will be to come prepared - this means reading* the lab manual before lab. Set aside an hour or so each week to grab a coffee, read the lab manual (and associated stuff), and prepare your lab notebook. Your projects are group based, so your second biggest job will be to communicate well and often with your group members.

{

Previously:

1. Project based
2. Audiences outside of UBC
3. Fairly standard grading

Fall 2021 and Winter 2021/22

Student Self Assessment

“Will work ethic decline?”

Students spent equal hrs in the lab. We did notice more brave project choices.

“Will quality of work decline?”

When the first assignment came in, we are relieved to see quality of work remained high

“Will they inflate grades?”

Course average (F 21) was 1% lower than previously traditional grading semester

Preliminary thematic coding (done by Tessa Blanchard and Christine Goedhart)

"Please comment on what this “ungrading” experience was like for you this term."

Less Stress	60%
Higher engagement/focus	45%
More effort/quality work	40%
Take more risks/brave	25%

**“There are certainly courses where I’ve earned a higher grade,
but this is the one I’m most proud of. “**

“I prefer the ungraded course as I could purely focus on my learning. “

“This was an amazing course that made me undergo an epiphany about how influenced I was by academic grades instead of expanding that ceiling to learn more.”

“To be honest, I got so engrossed in the course that I completely forgot that it was ungraded.”

“In a weird way, not having a rubric made it more motivating to make sure we were submitting our best quality work.”

“Ungrading allows me to focus more on working on the assignments rather than worrying about the grades.”

“I feel so much less stressed about grades and put more mental energy towards producing good quality work”

The end of the semester be like . . .

Questions for us?

On your own: ***Select one of the alternative grading models and think about how it could be applied in your course.***

Then we will discuss in pairs and whole-group.

What support or information do you need to implement this in your course?

Some Grading Models

Mastery grading - students must meet a certain level of competence in a task before moving on to the next

Specifications grading - pass/fail grading on individual assignments or tests (P is usually >B work), revisions, bundles/modules of assessments linked to learning outcomes

Contract grading - broader than specs grading, each grade level is defined and students determine which level they want to aim for. If they meet the contract, they get the grade.

Ungrading – no grades at all, or in the cases where grades are required, typically students provide their own (well justified) grade.

Great resource: https://uncw.edu/keepteaching/documents/alternativegradingadapt2020july7.pdf

Take-home messages and practical tips to get started

Take-home messages and practical tips

1. Start small, these approaches are not “all or nothing”.
2. Explain your approach to students.
3. Just because students create or produce something does not mean you have to grade it.
4. For the most part, grades (scores) ARE NOT feedback.
5. Consider ways to encourage students to reflect on their feedback.

What can you do next?

Recommended Resources

CBE—Life Sciences Education
Vol. 13, 159–166, Summer 2014

Feature
Approaches to Biology Teaching and Learning

Teaching More by Grading Less (or Differently)

Jeffrey Schinske* and Kimberly Tanner†

*Department of Biology, De Anza College, Cupertino, CA 95014; †Department of Biology, San Francisco State University, San Francisco, CA 94132

https://doi.org/10.1187/cbe.cbe-14-03-0054

The Case Against Grades

By Alfie Kohn

[This is a slightly expanded version of the published article.]

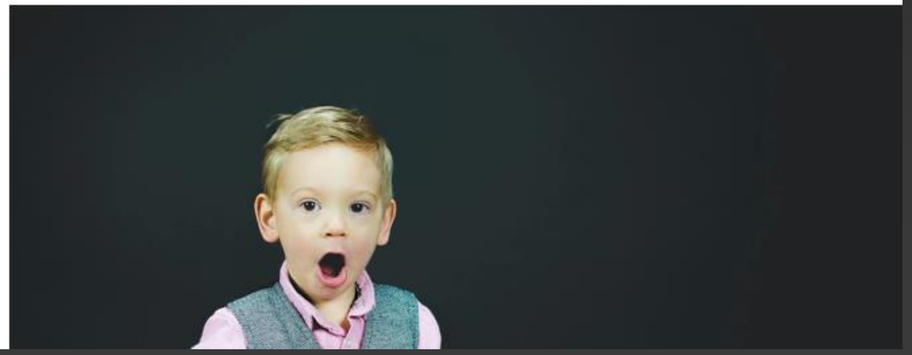
> *"I remember the first time that a grading rubric was attached to a piece of my writing....Suddenly all the joy was taken away. I was writing for a grade — I was no longer exploring for me. I want to get that back. Will I ever get that back?"*
>
> — Claire, a student (in Olson, 2006)

https://www.alfiekohn.org/article/case-grades/

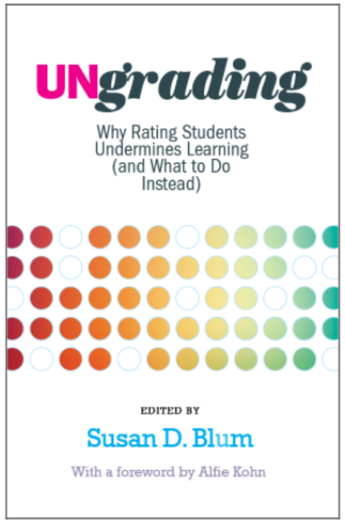
What to expect when you're alternatively assessing

Things to be ready for when you jump in to alternative assessments.

David Clark
Dec 6



https://gradingforgrowth.com/p/what-to-expect-when-youre-alternatively?s=r



Ungrading

Why Rating Students Undermines Learning (and What to Do Instead)

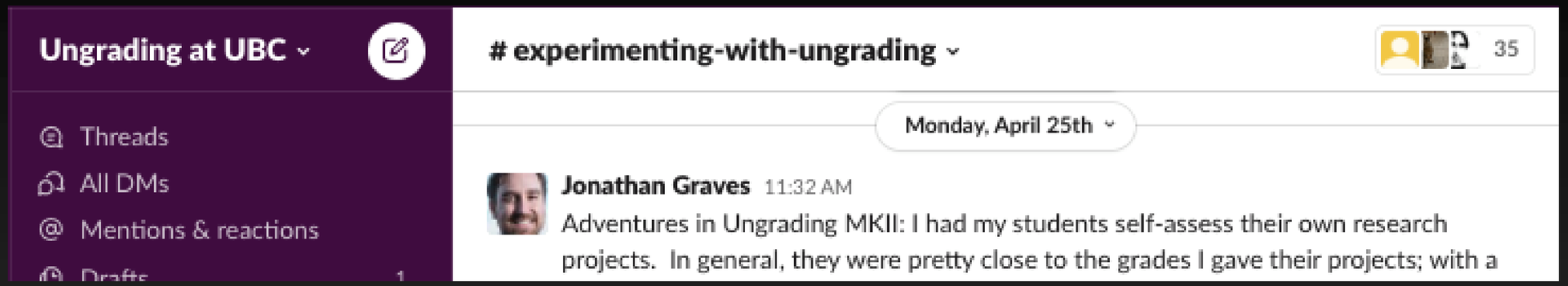
Summary | Contents | Author | Reviews

Summary

The moment is right for critical reflection on what has been assumed to be a core part of schooling. In *Ungrading*, fifteen educators write about their diverse experiences going gradeless. Some contributors are new to the practice and some have been engaging in it for decades. Some are in humanities and social sciences, some in STEM

Book, ebook, audio book

Join us on Slack



https://join.slack.com/t/ungradingatubc/shared_invite/zt-rjfxgvnl-reMnwPwhoQbhf0LCfC8WPA

or

https://tinyurl.com/UBCUngrading

1. Alternative grading lightning talks at Celebrate Learning Week

Tuesday May 10th, 2022 3:00-4:10 via Zoom

Claire Yan, Associate Professor of Teaching, Faculty of Applied Science, School of Engineering
Julia Bullard, Assistant Professor, School of Information
Jonathan Graves, Assistant Professor of Teaching, Faculty of Arts
Louis Maraj, Assistant Professor, School of Journalism, Writing and Media
Katie Lee Bunting, Assistant Professor of Teaching, Department of Occupational Science and Occupational Therapy | Faculty of Medicine

- & more!

2. Implementing Alternative Grading Practices Workshop, CTLT Spring Institute

Wednesday June 1, 2022 9-10:30 via Zoom

Surita Jhangiani, Faculty of Education, Department of Educational & Counselling Psychology & Special Education
Jaclyn Stewart, Associate Dean Academic Faculty of Science, Department of Chemistry
Christina Hendricks, Academic Director of the Centre for Teaching, Learning and Technology Faculty of Arts, Department of Philosophy
Firas Moosvi, Lecturer in the Department of Computer Science, Mathematics, Physics, and Statistics, UBCO

Session Feedback

Please take a moment to complete this brief survey:

https://ubc.ca1.qualtrics.com/jfe/form/SV_1Zg7rQc5xfnvzOC

or

https://tinyurl.com/ForestryAltGrading

Thank you!

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What are some Challenges and Opportunities ?

Challenges

1. **Upfront-time investment**

   hard to work against inertia with our workloads…

2. **Tools and technology**

   they just don’t do what we want !

3. **Getting buy-in from students is sometimes hard, from TAs is often even harder**

   Systems change is hard and sometimes soul-crushing.

4. **In the long-run, does what we do in one course matter?**

   Once they leave the course, it’ll be back to status quo.

Opportunities

1. **Upfront-time investment**

   Strategically (and collectively) apply for funds and grants !!

2. **Tools and technology**

   Invest (time, money, energy) in free and open source tech !

3. **Getting buy-in from students is sometimes hard, from TAs is often even harder**

   Idea: Faculty/University-wide TA training program (ISW+)

4. **In the long-run, does what we do in one course matter?**

   Foster Communities of Practice to promote these notions/ideas

Slides from previous
related talks/workshops

Feel free to use/re-use as you like!

QUESTIONS TO LEAVE WITH

Source: [Jesse Stommel - How to Ungrade]

1. Why do we grade? How does it feel to be graded? What do we want grading to do (or not do) in our classes (for students or teachers)?
2. What do letter grades mean? Do they have any intrinsic meaning, or is their value purely extrinsic? Does assessment mean differently when it is formative rather than summative?
3. How does feedback function in relation to grades? To what extent should teachers be readers of student work (as opposed to evaluators)?
4. What would happen if we didn't grade? What would be the benefits? What issues would this raise for students and/or teachers? How would institutions be forced to rethink their systems for evaluation?

“Ungrading is not as simple as just removing grades. The word “ungrading" suggests that we need to do intentional, critical work to dismantle traditional and standardized approaches to assessment.”

- Jesse Stommel

Source: “What If We Didn't Grade?”

Alternative Assessments

- Abstract
- Advertisement
- Annotated bibliography
- Biography or autobiography
- Brochure, poster
- Budget with rationale
- Case analysis
- Chart, graph, visual aid
- Client report for an agency
- Cognitive map, web or diagram
- Contemplative essay
- Debate
- Definition
- Description of a process
- Diagram, table, chart
- Dialogue
- Diary of a real or fictional historic character
- Essay exam
- Executive summary
- Fill in the blank test
- Flowchart
- Group discussion

- Instructional manual
- "Introduction" to an essay or scientific report (rather than the full report)
- Inventory
- Laboratory or field notes
- Letter to the editor
- Matching test
- Materials and methods plan
- Mathematical problem
- Memo
- "Micro-theme" (a tight, coherent essay typed on a 5x 8 note card)
- Multimedia or slide presentation
- Multiple-choice test
- Narrative
- News or feature story
- Notes on reading
- Oral report
- Outline
- Personal letter
- Plan for conducting a project

- Poem, play, choreography
- Question
- Regulations, laws, rules
- Research proposal addressed to a granting agency
- Review of book, play, exhibit
- Review of literature
- Rough draft or freewrite (writer writes freely, with no constraints for a certain amount of clock time)
- "Start" (a thesis statement and outline or list of ideas for developing)
- Statement of assumptions
- Summary or précis
- Taxonomy or set of categories
- Technical or scientific report
- Term paper, research paper
- Thesis sentence (sentence that expresses author's main point)
- Word problem

and much more… !

Queen's Centre for Teaching and Learning; Ryerson Learning & teaching office; Berkley Center for Teaching & Learning: Alternatives to Traditional Testing

Diversity, equity, and inclusion

Avoid high-stakes assessments

Use a variety of assessment types

Scaffold larger assessments (break large writing tasks into smaller steps)

Consider multiple forms of participation IF assessing participation

Incorporate metacognition/reflection

Consider the “hidden curriculum” and include exemplars

Do not grade on a curve

Grades as a Tool for Comparing Students—Is Grading on a Curve the Fairest Way to Grade?

In brief, curved grading creates a competitive classroom environment, alienates certain groups of talented students, and often results in grades unrelated to content mastery. Curving is therefore not the fairest way to assign grades.

Teaching More by Grading Less (or Differently) by Jeffrey Schinske and Kimberly Tanner