

# Welcome!

## Say Hello in the Zoom chat!

(You can also include your role, department, and optionally, 1 sentence about what brought you to this session)

Skylight Online Teaching Series

UBC Skylight (Science Centre for Teaching and Learning)  
<https://skylight.science.ubc.ca/online-teaching-series>

**How to get students to stop  
thinking about grades, and focus  
on learning instead**

Firas Moosvi (CMPS, UBCO), Celeste Leander (BOTA/ZOOL, UBCV), Jackie Stewart (CHEM, UBCV), Brian Hunt (IOF, UBCV), Caitlin Donnelly (BOTA, UBCV), Marcia Graves (MBIM, UBCV), Montserrat Rueda-Becerril (CHEM, UBCV), and Taylor Wright (CHEM, UBCV)

Wednesday December 15, 2021

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A student walks past a display at Ottawa's Hillcrest High School on Canada's first National Day for Truth and Reconciliation on Sept. 30, 2021. (Blair Gable/Reuters) - Ottawa earmarks \$40B for Indigenous child welfare compensation | CBC News · Dec 13, 2021 |



- 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 feel free to respond and comment too!
- We will pause after each section for some Q&A, you can raise your hand on Zoom to join the queue.
- Presenter slides (PDF) are posted in the Zoom chat, and will also be posted on the Skylight Online Teaching Series website after the session.
- During breakout rooms, if you cannot participate, there's no need to leave the session! Feel free to hang out in the Main Room and take a break for a few mins!

# Presenters



Firas Moosvi  
CMPS - UBCO



Celeste Leander  
BOTA/ZOOL - UBCV



Jackie Stewart  
CHEM - UBCV



Brian Hunt  
IOF - UBCV



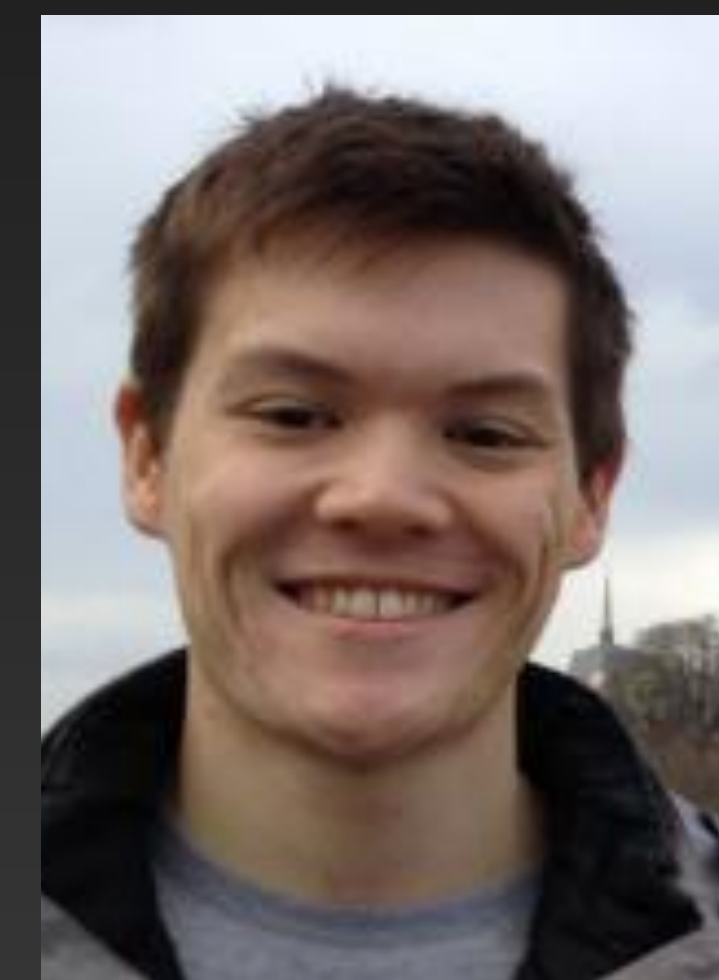
Caitlin Donnelly  
BOTA - UBCV



Marcia Graves  
MBIM - UBCV



Montserrat Rueda-Becerril  
CHEM - UBCV



Taylor Wright  
CHEM - UBCV

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1. What are some practical **options for shifting our focus** to learning?
2. Why is it important to **focus on learning** instead of grades?
3. Course policies and activities that may **promote learning**.
4. Taking a scholarly approach to **explore the impact of grades on feedback**.
5. What if **students were in charge of their own learning** ?
6. What are some **challenges and opportunities** ?

What **can you do** next?

What are some practical **options**  
for **shifting our focus to learning?**

A photograph of a snowy mountain peak under a starry night sky with a vibrant green aurora borealis. The aurora is a bright, glowing green light that curves across the sky, illuminating the mountain and the surrounding landscape. The sky is dark and filled with numerous stars, and the mountain is covered in snow and has a jagged, rocky peak.



Alternative  
**Assessments**

Alternative  
**Grading Systems**

# Alternative Assessments

| <b>Traditional Assessment</b>                    | <b>Alternative Assessment</b>   |
|--|---|
| Requires right answer                            | Requires high-quality performance or product, along with justifications of decisions.     |
| Questions must be unknown to students in advance | Instructions/questions/purpose must be known to students in advance.                      |
| Disconnected from the real world                 | Tied to real-world contexts and constraints. Requires student to solve realistic problem. |
| Isolations of skills, focus on facts             | A range of skills/knowledge need to be integrated in order to solve a problem.            |
| Easily scored                                    | Includes complex tasks for which there may not be a right answer.                         |
| “One shot” approach                              | Iterative in nature.  |
| Given a score                                    | Opportunity to provide diagnostic feedback.   |

Source:

Ryerson Learning & Teaching office  
Indiana University Center for innovative Teaching and Learning

# Alternative Assessments

| <b>Traditional Assessment</b>                    | <b>Alternative Assessment</b>   | <b>What Makes it Authentic</b>   |
|--|---|--|
| Requires right answer                            | Requires high-quality performance or product, along with justifications of decisions.     | Students must be able to think through why they made decisions that resulted in final product. |
| Questions must be unknown to students in advance | Instructions/questions/purpose must be known to students in advance.                      | Tasks that are to be judged should be known ahead of time. Rubrics should be provided.         |
| Disconnected from the real world                 | Tied to real-world contexts and constraints. Requires student to solve realistic problem. | Task is similar in nature as to what would be encountered by a real-life practitioner.         |
| Isolations of skills, focus on facts             | A range of skills/knowledge need to be integrated in order to solve a problem.            | Tasks are multi-step and multifaceted.   |
| Easily scored                                    | Includes complex tasks for which there may not be a right answer.                         | Meaningful assessment and feedback is emphasized.  |
| “One shot” approach                              | Iterative in nature.  | Knowledge and skills are used in more than one way.  |
| Given a score                                    | Opportunity to provide diagnostic feedback.   | Designed to give practical experience and improve future performance.                          |

# 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... !

Alternative  
**Assessments**

Alternative  
**Grading Systems**

# Alternative Grading Systems

| <b>Focus</b>           | <b>Grading Systems</b>   |
|------------------------|--|
| Performance            | <ul style="list-style-type: none"><li>- Traditional Grading</li><li>- Grading on a Curve</li></ul>   |
| Skills or Competencies | <ul style="list-style-type: none"><li>- Competency-based Grading</li><li>- Standards-based Grading</li><li>- Skill-based Grading</li><li>- Specifications-based grading</li><li>- Mastery-based Learning</li></ul> |
| Work Completed         | <ul style="list-style-type: none"><li>- Labour-based Grading</li><li>- Contract Grading</li></ul>  |
| Creativity and Agency  | <ul style="list-style-type: none"><li>- Portfolio Grading</li><li>- Ungrading</li></ul>  |

## Standards and Contracts and Competencies, oh my!

A review of some common forms of alternative assessment



David Clark

Aug 23



There is a wide variety in alternative assessment methods, and even more names for them. You might have heard some of these names and wondered, “What is that?” In today’s post, I’m going to describe some of these approaches to assessment that *aren’t* standards-based grading, specifications grading, or things along those lines. I’ll take a look at their common features and differences with the forms of assessment that we more often discuss on this blog.

# Alternative Grading Systems

**There are other options!**

**&**

**You are not alone!**



Why is it important to  
**focus on learning** instead of grades?

The background of the image is a night sky filled with stars. A vibrant green aurora borealis (Northern Lights) is visible, arching across the sky. In the foreground, there are dark, rugged mountain peaks covered in snow, illuminated by the light of the aurora.

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<sup>†</sup>**

\*Department of Biology, De Anza College, Cupertino, CA 95014; <sup>†</sup>Department of Biology, San Francisco State University, San Francisco, CA 94132

## *Grades as an Objective Evaluation of Student Knowledge—Do Grades Provide Reliable Information about Student Learning?*

In summary, grades often fail to provide reliable information about student learning. Grades awarded can be inconsistent both for a single instructor and among different instructors for reasons that have little to do with a students' content knowledge or learning advances. Even multiple-choice tests, which can be graded with great consistency, have the potential to provide misleading information on student knowledge.

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

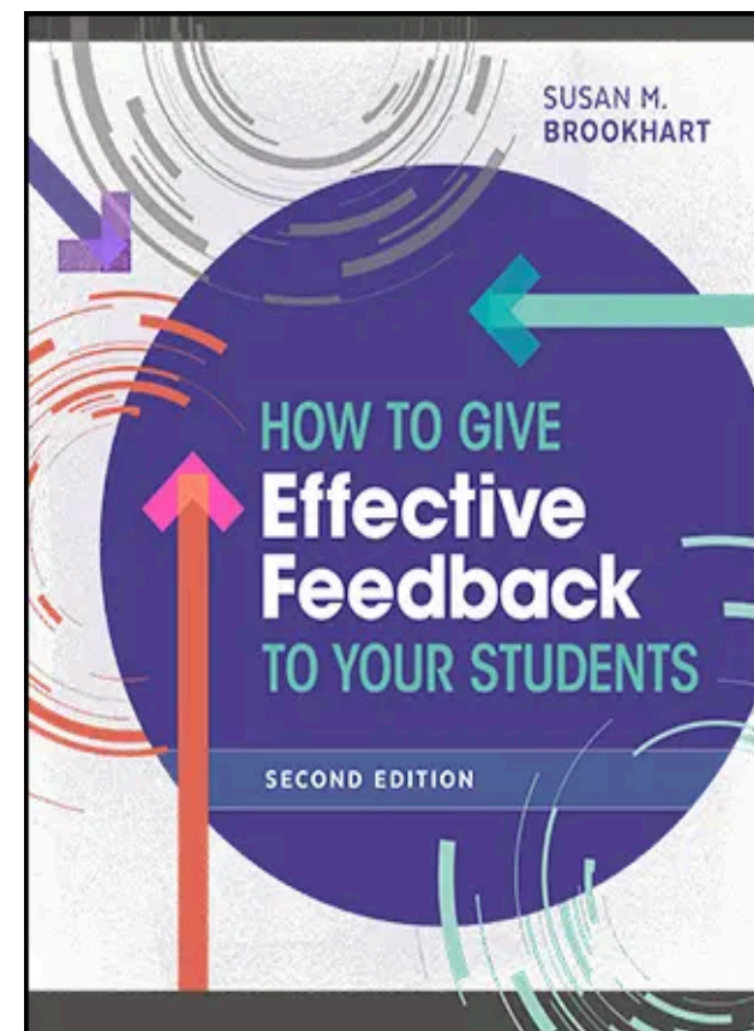
[This] work affirms an observation that many classroom teachers have made about their students: if a paper is returned with both a grade and a comment, many students will pay attention to the grade and ignore the comment.

—Brookhart (2008, p. 8)

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

By [Susan M. Brookhart](#)

## *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.

## *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.

—Butler and Nisan (1986)

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

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—Butler and Nisan (1986)

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

Copyright 1986 by the American Psychological Association, Inc.  
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.



## Game changer:

**“Just because students create/produce ‘stuff’ does NOT mean we have to grade all of it. There is pedagogical value in the mere creation of it.”**

*- Many people way smarter than me*

Question Prompt:

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

Share in your breakout rooms!

*If for whatever reason you cannot or do not want to participate in breakout rooms (childcare, marking, whatever other reason) - no worries!*

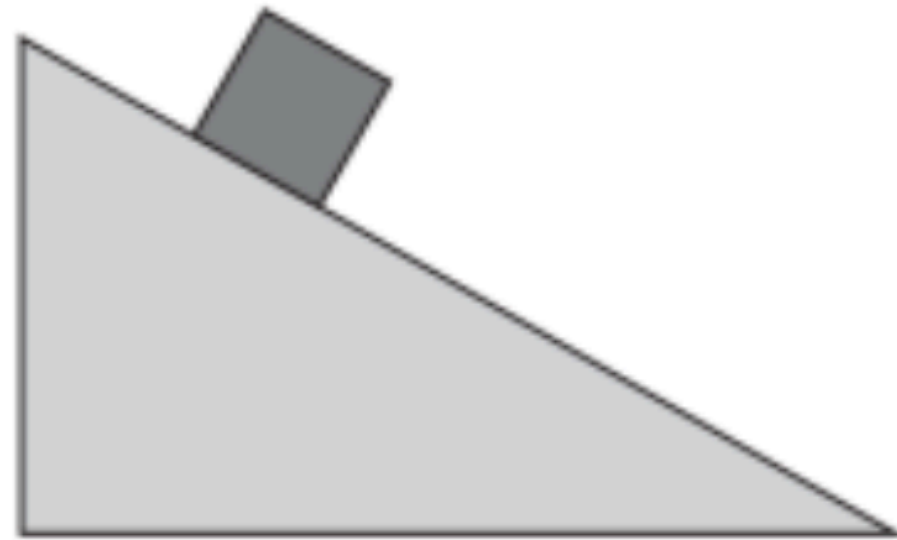
*Feel free to stay (or come back) to the Main Room here and take a 5-7 minute break!*

Course policies and activities  
that may **promote learning**

The background of the slide is a photograph of a night sky. A vibrant green aurora borealis (Northern Lights) is visible, arching across the sky. Below the aurora, a range of rugged, snow-capped mountains is silhouetted against the dark sky. The overall scene is serene and majestic.

## HW6.2. Block on a Ramp

A mass of  $8\text{ kg}$  sits at rest on an incline making an angle of  $22^\circ$  with respect to the horizontal.



If  $\mu_s = 0.3$ , what is the friction force on the block? Choose the best answer.

- (a)  $29.0\text{ N}$ , down the incline
- (b)  $73.0\text{ N}$ , up the incline
- (c)  $29.0\text{ N}$ , up the incline
- (d)  $8.8\text{ N}$ , down the incline
- (e)  $22.0\text{ N}$ , down the incline

Problem is licensed under the [CC-BY-NC-SA 4.0 license](#).



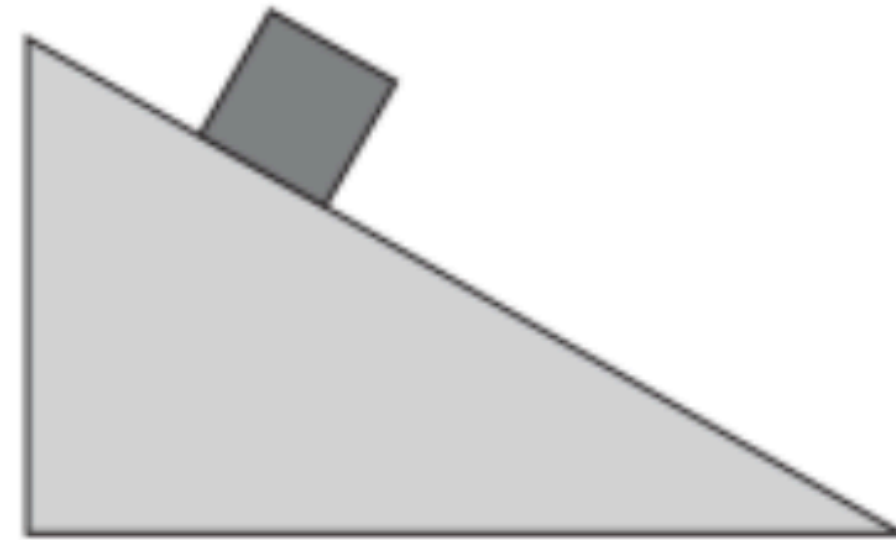
Save & Grade 2 attempts left

Save only

Additional attempts available with new variants ?

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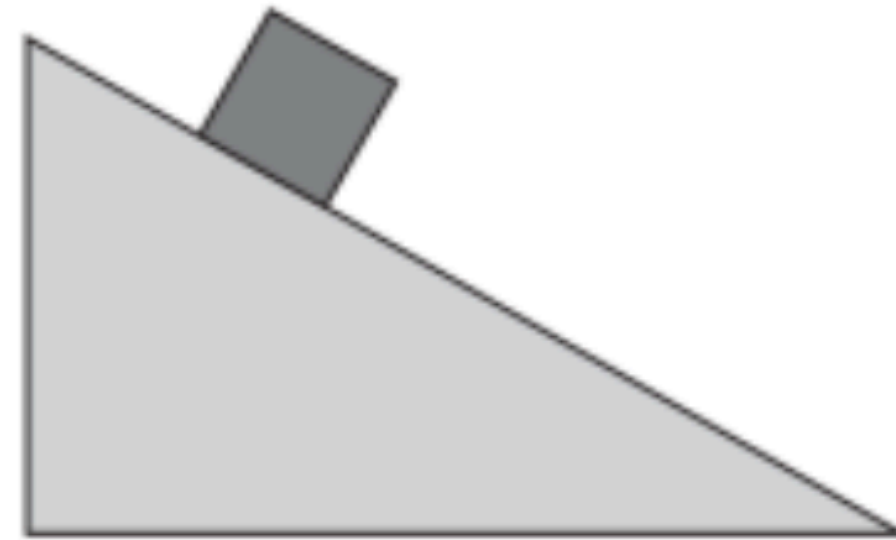
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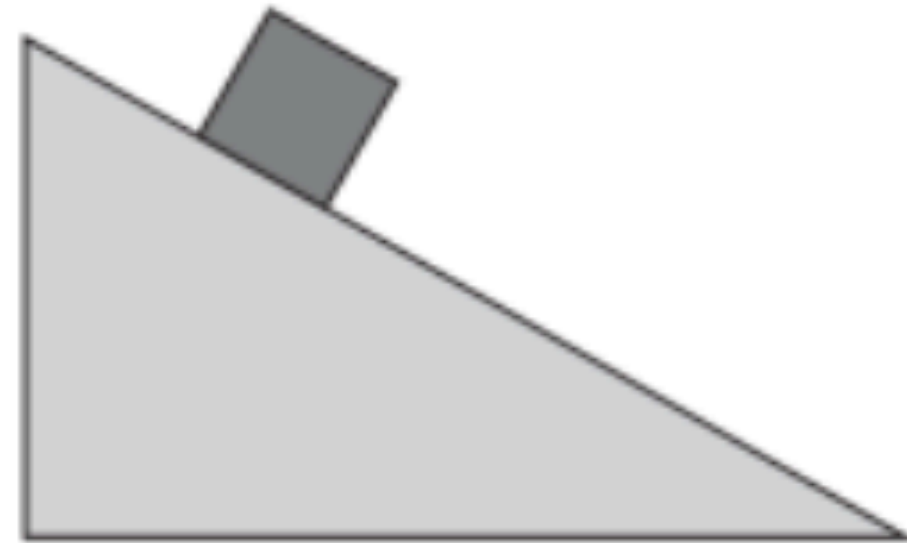
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If  $\mu_s = 0.3$ , what is the friction force on the block? Choose the best answer.

- (a)  $29.0 \text{ N}$ , down the incline
- (b)  $73.0 \text{ N}$ , up the incline
- (c)  $29.0 \text{ N}$ , up the incline ✓
- (d)  $8.8 \text{ N}$ , down the incline
- (e)  $22.0 \text{ N}$ , down the incline

✓ 100%

Problem is licensed under the [CC-BY-NC-SA 4.0 license](#).



Try a new variant

# Course Policy 1: Unlimited attempts on assigned Homework problems

| Homework |                                    | AID  | Students | Scores | Mean Score | Mean Duration |
|----------|------------------------------------|------|----------|--------|------------|---------------|
| HW1      | HW1 - Introduction to PrairieLearn | HW1  | 338      |        | 95%        | 42m           |
| HW2      | HW2 - Math and Vectors             | HW2  | 325      |        | 92%        | 1h 12m        |
| HW3      | HW3 - Kinematics in 1D             | HW3  | 303      |        | 88%        | 2h 52m        |
| HW4      | HW4 - Kinematics 2D                | HW4  | 300      |        | 79%        | 3h 55m        |
| HW5      | HW5 - Forces I                     | HW5  | 294      |        | 95%        | 2h 13m        |
| HW6      | HW6 - Forces II                    | HW6  | 292      |        | 91%        | 2h 42m        |
| HW7      | HW7 - Work and Energy              | HW7  | 287      |        | 99%        | 1h 25m        |
| HW8      | HW8 - Energy                       | HW8  | 280      |        | 89%        | 2h 17m        |
| HW9      | HW9 - Momentum and Impulse         | HW9  | 279      |        | 88%        | 2h 45m        |
| HW10     | HW10 - Torque and Rotation         | HW10 | 273      |        | 92%        | 1h 27m        |
| HW11     | HW11 - Review (Bonus)              | HW11 | 240      |        | 65%        | 2h 4m         |





For **only the Homework assignments** this year, here is the flexible grading policy I have instituted:

| <b>Submission Time</b>                           | <b>Maximum Possible Grade</b> |
|--|-------------------------------|
| Before the deadline                              | 110%                          |
| 2 days (48 hour grace period) after the deadline | 100%                          |
| 7 days after original deadline                   | 80%                           |
| 14 days after original deadline                  | 60%                           |
| Any time before last day of classes              | 50%                           |

## Interleaved practice enhances memory and problem-solving ability in undergraduate physics

[Joshua Samani](#) ✉ & [Steven C. Pan](#) ✉

[npj Science of Learning](#) 6, Article number: 32 (2021) | [Cite this article](#)

2998 Accesses | 86 Altmetric | [Metrics](#)

### Abstract

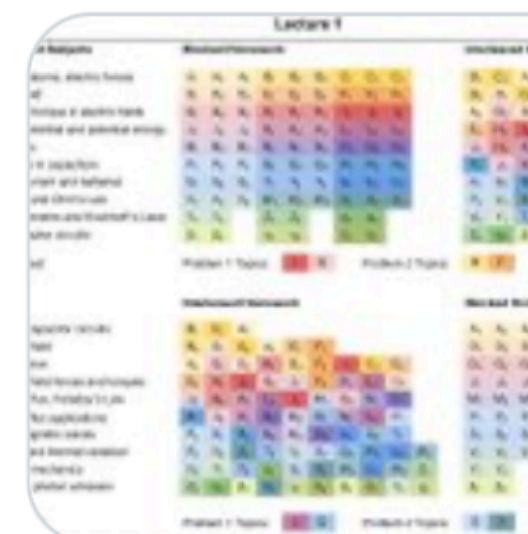
We investigated whether continuously alternating between topics during practice, or interleaved practice, improves memory and the ability to solve problems in undergraduate physics. Over 8 weeks, students in two lecture sections of a university-level introductory physics course completed thrice-weekly homework assignments, each containing problems that were interleaved (i.e., alternating topics) or conventionally arranged (i.e., one topic practiced at a time). On two surprise criterial tests containing novel and more challenging problems, students recalled more relevant information and more frequently produced correct solutions after having engaged in interleaved practice (with observed median improvements of 50% on test 1 and 125% on test 2). Despite benefiting more from interleaved practice, students tended to rate the technique as more difficult and incorrectly believed that they learned less from it. Thus, in a domain that entails considerable amounts of problem-solving, replacing conventionally arranged with interleaved homework can (despite perceptions to the contrary) foster longer lasting and more generalizable learning.



Daniel Willingham  
@DTWillingham



### College physics students learn more from interleaved practice, think they are learning less



nature.com

Interleaved practice enhances memory and problem-solving...  
npj Science of Learning - Interleaved practice enhances memory and problem-solving ability in...

6:28 AM · Nov 27, 2021 · Twitter Web App









62 Retweets 13 Quote Tweets 231 Likes

# Course Activity 1: Frequent Testing Paradigm

| Tests            |                |             |     |  |   |     |  |
|------------------|----------------|-------------|-----|--|---|-----|--|
| <b>T 1</b>       | Test 1         | Test1       | 289 |  | <div style="width: 65%;"><span>65%</span></div> | 46m |  |
| <b>T 1-Bonus</b> | Test 1 - Bonus | Test1-Bonus | 214 |  | <div style="width: 82%;"><span>82%</span></div> | 45m |  |
| <b>T 2</b>       | Test 2         | Test2       | 275 |  | <div style="width: 72%;"><span>72%</span></div> | 48m |  |
| <b>T 2-Bonus</b> | Test 2 - Bonus | Test2-Bonus | 212 |  | <div style="width: 70%;"><span>70%</span></div> | 46m |  |
| <b>T 3</b>       | Test 3         | Test3       | 274 |  | <div style="width: 60%;"><span>60%</span></div> | 42m |  |
| <b>T 3-Bonus</b> | Test 3 - Bonus | Test3-Bonus | 235 |  | <div style="width: 72%;"><span>72%</span></div> | 36m |  |
| <b>T 4</b>       | Test 4         | Test4       | 258 |  | <div style="width: 59%;"><span>59%</span></div> | 50m |  |
| <b>T 4-Bonus</b> | Test 4 - Bonus | Test4-Bonus | 249 |  | <div style="width: 69%;"><span>69%</span></div> | 45m |  |
| <b>T 5</b>       | Test 5         | Test5       | 262 |  | <div style="width: 60%;"><span>60%</span></div> | 49m |  |
| <b>T 5-Bonus</b> | Test 5 - Bonus | Test5-Bonus | 231 |  | <div style="width: 77%;"><span>77%</span></div> | 42m |  |

# Course Activity 3: Frequent Testing Paradigm

## Tests

|                  |                |             |     |   |   |     |
|------------------|----------------|-------------|-----|---|---|-----|
| <b>T 1</b>       | Test 1         | Test1       | 289 |    | <div><div style="width: 65%;">65%</div></div> | 46m |
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### Q11 Earned Grade

2 Points

As an educator, I am very aware that learning is not easily measured by scores on labs, tests, and exams. There are many other ways and sources of learning, and I admit that not everything can be captured by the assessments that I give you.

Pretend that there were no guidelines in the syllabus for calculating your final grade. Based on the work that you have done all semester, and the learning goals for the course, what grade (out of 100) do you think you have earned?

Here are the learning goals for this course:

Insert Course Learning Goals

Try **NOT** to focus on calculating your earned grade and avoid mentioning or referring to average grades on the labs, tests, homework, or even the posted grade with your grade before the final exam.

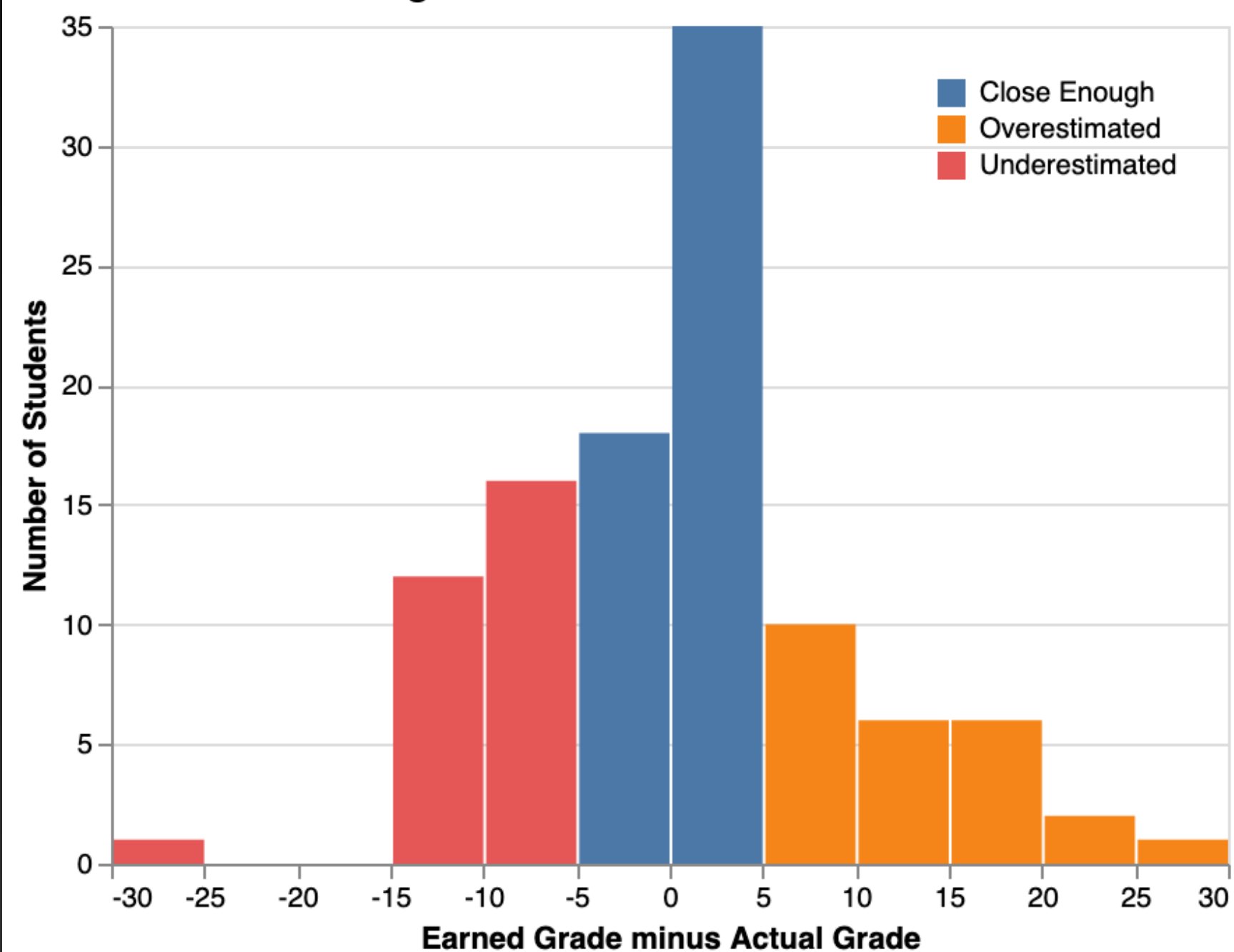
What is some other evidence of your learning? Consider not just what you have learned, but how much effort you put into the course (and whether that effort was productive or not), and honestly assess how much of the material you feel truly comfortable with.

Pretend that there were no guidelines in the syllabus for calculating your final grade. Based on the work that you have done all semester, and the learning goals for the course, what grade (out of 100) do you think you have earned in  ?

# Course Activity 2: Learning Logs and Frequent Reflection

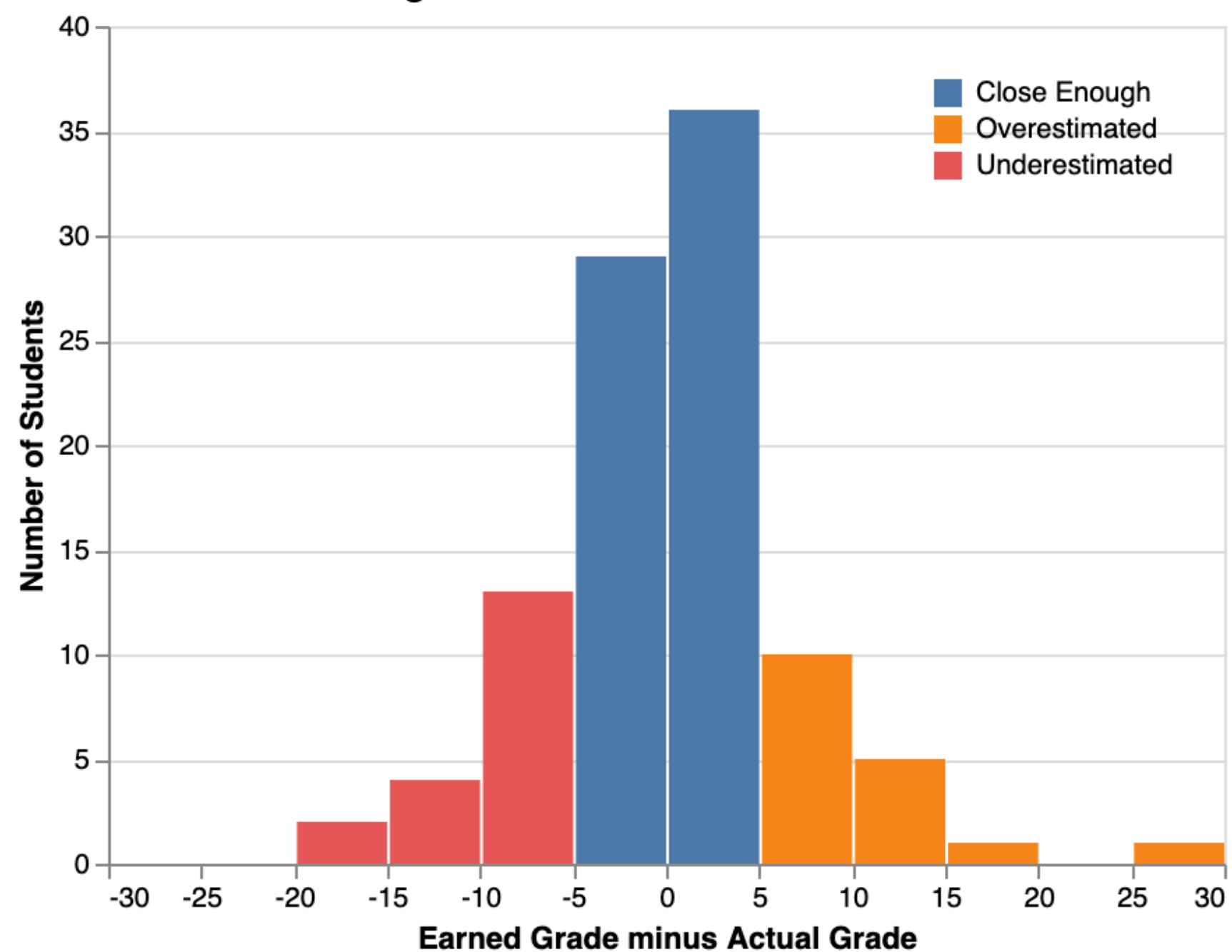
**On the COSC 111 final exam, I asked my students what they think they earned in the course (ignoring the syllabus)**

25 overestimated by >5%, 29 underestimated by >5%,  
53 were close enough, and 38 did not answer



**On the COSC 123 final exam, I asked my students what they think they earned in the course (ignoring the syllabus)**

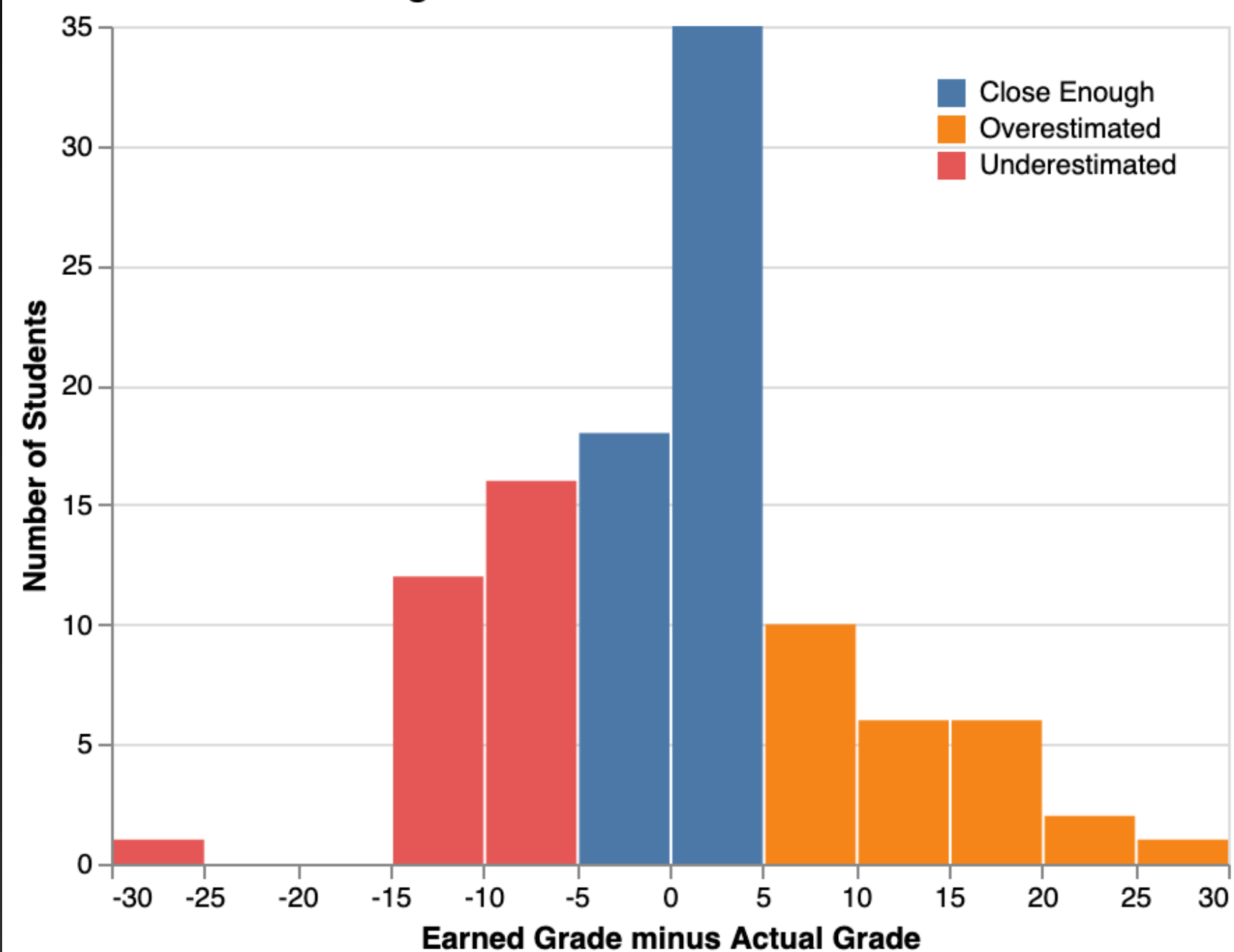
17 overestimated by >5%, 19 underestimated by >5%,  
65 were close enough, and 23 did not answer



# Course Activity 2: Learning Logs and Frequent Reflection

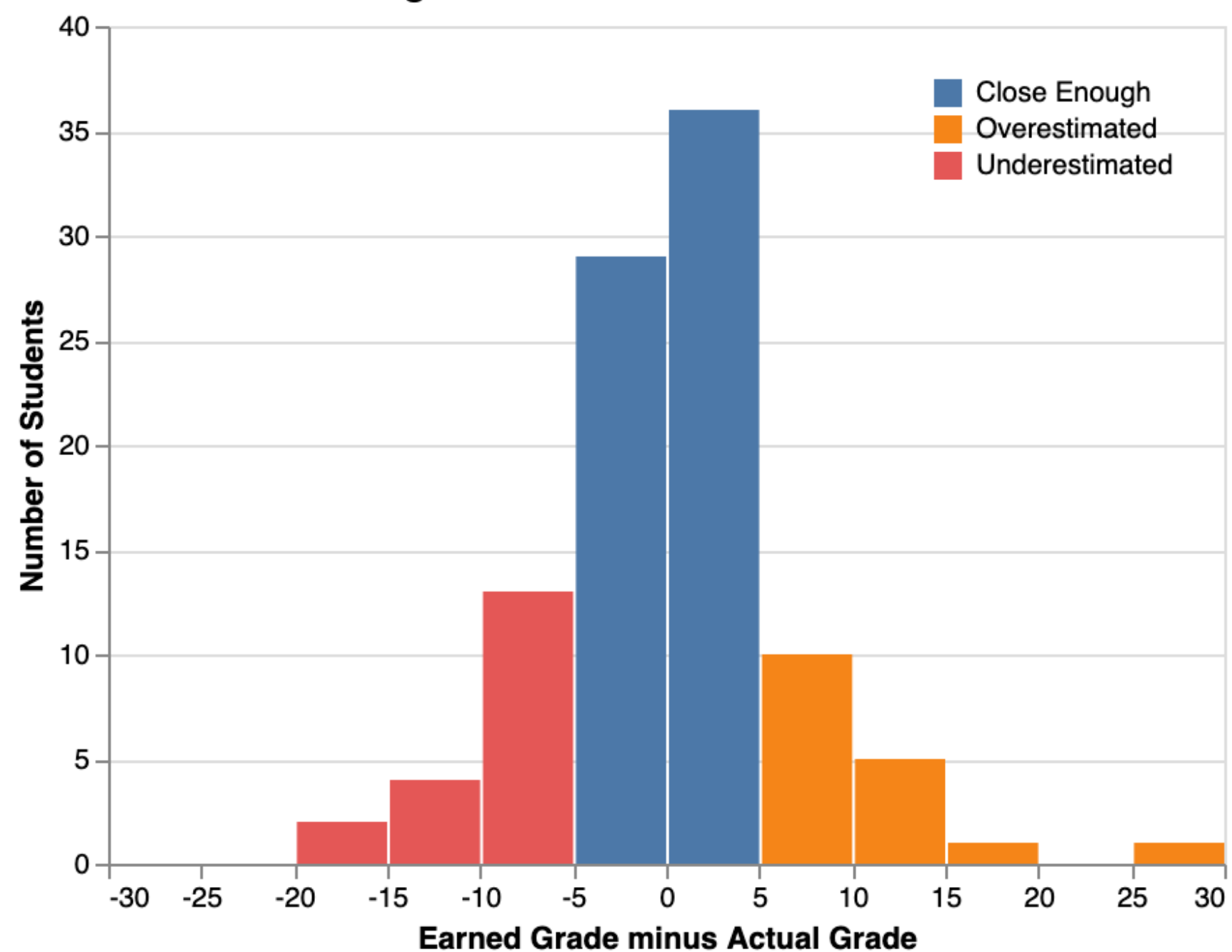
**On the COSC 111 final exam, I asked my students what they think they earned in the course (ignoring the syllabus)**

25 overestimated by >5%, 29 underestimated by >5%,  
53 were close enough, and 38 did not answer



**On the COSC 123 final exam, I asked my students what they think they earned in the course (ignoring the syllabus)**

17 overestimated by >5%, 19 underestimated by >5%,  
65 were close enough, and 23 did not answer



**Taking a scholarly approach to  
explore the impact of grades on feedback.**

The background of the image is a night sky filled with stars. A vibrant green aurora borealis is visible, arching across the sky. In the foreground, there are dark, jagged mountain peaks covered in snow, illuminated by the light of the aurora.



# SCIE 113 Ungrading Research Pilot

x<sup>w</sup>məθk<sup>w</sup>əy̓əm (Musqueam) Traditional Territory

Taylor Wright, Montse Rueda, Brian Hunt, Marcia Graves, Caitlin Donnelly



# SCIE 113 Background

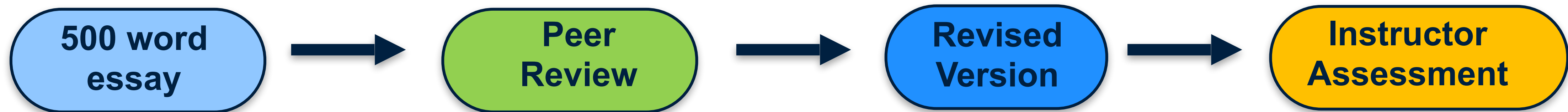
- **Scientific Communication** course focused on building arguments
  - Claims, Reason, Evidence, Uncertainty, Bias
- Open to **1<sup>st</sup> Year students** in the Faculty of Science
- 8 Sections of approximately 25 students each
- Both **online** and **in-person** sections



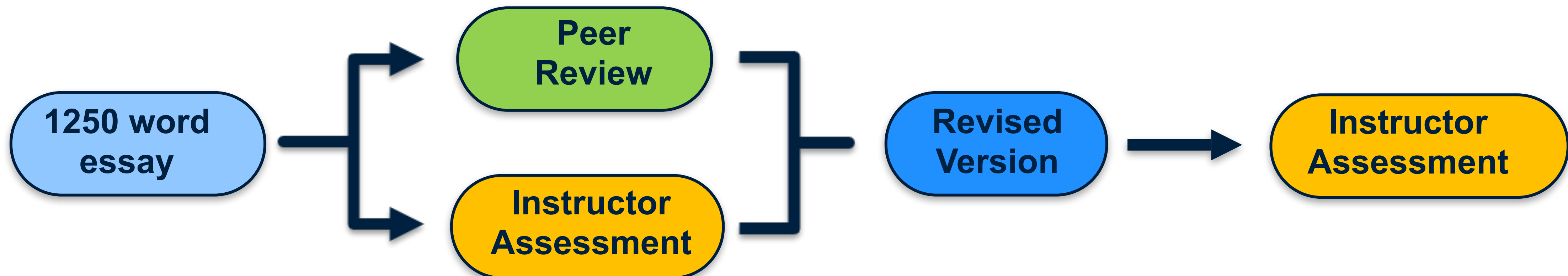
# Major Assignments

- **2 major essays** worth ~50% of final grade
  - Argumentative essay with claim, reason, evidence, counterargument

## Essay 1



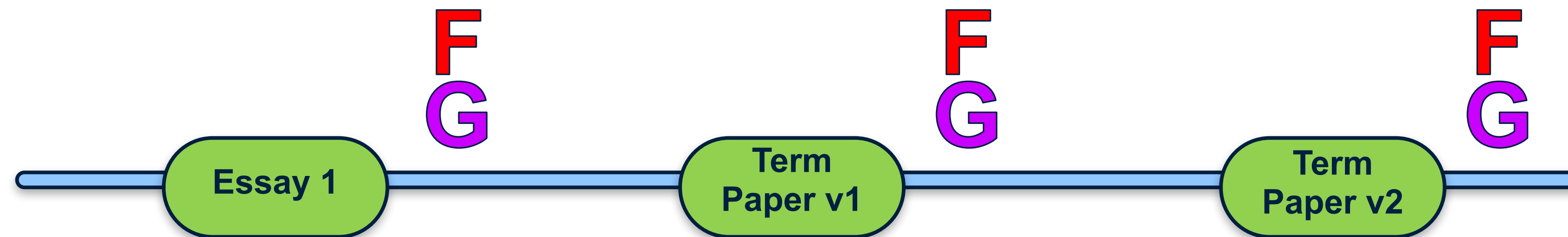
## Term Paper



# Current Grading Practices

- Each instructor has complete autonomy with when they **release grades to students**

## Traditional Marking



**F** = Feedback released      **G** = Grades released

# Research Question

Does **de-coupling feedback and grades** promote greater student engagement with **metacognition** and self-reflection for written STEM essays?

- How accurate are students at self-assessing their work? Does this improve?
- What are **students perceptions** of ungrading practices?
- What motivates students in SCIE 113?



# Self Assessment

## Instructor Assessment

- Students submitted a **self-assessment** along **with every submission to instructor**
  - Self-assign a mark using the same rubric for instructor assessment
  - Also reflect on what areas of strength and weakness

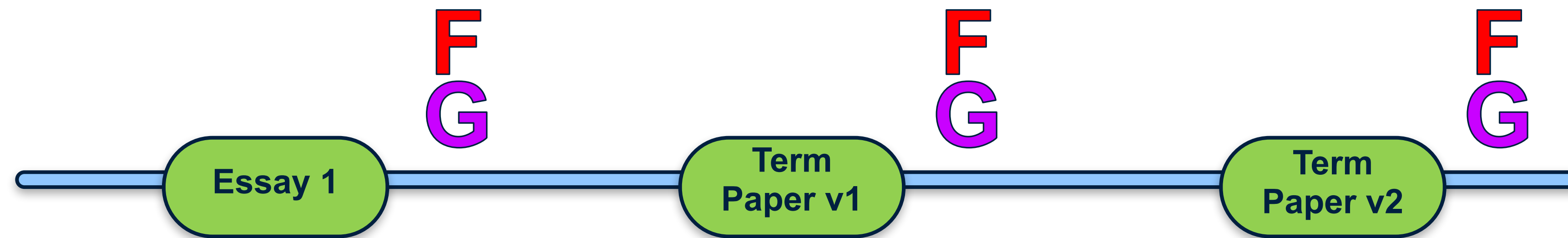
| Type your predicted scores in this column. | Fail (0-49%)  | Poor (50-54%)                               | Acceptable (55-67%)  | Good (68-79%)   | Excellent (80-100%)   |
|--|---|---|--|---|---|
| <b>Claim</b>                               | The paper lacks a claim. It may have a descriptive statement rather than a claim as the thesis statement. | The claim is both unclear and inconsistent. | The paper has a claim, but it is too broad. <u>Or</u> , the claim is inconsistent (e.g., the paper supports a different claim than that which is in the introduction). | The claim is clear and <u>debatable, but</u> could be more specific. It is consistent throughout the paper. | The claim is clear, specific, and debatable. It is consistent throughout the paper. |
| <b>Predicted score:</b>                    |   |   |  |   |   |
| <b>Max score: 10</b>                       |   |   |  |   |   |



# Reminder: Current Grading Practices

- Each instructor has complete autonomy with when they **release grades to students**

## Traditional Marking

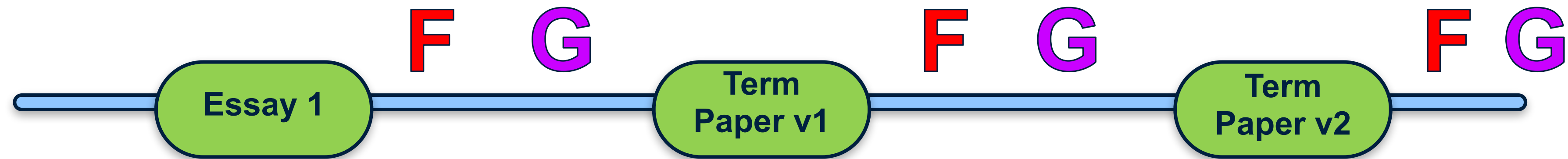


**F** = Feedback released      **G** = Grades released

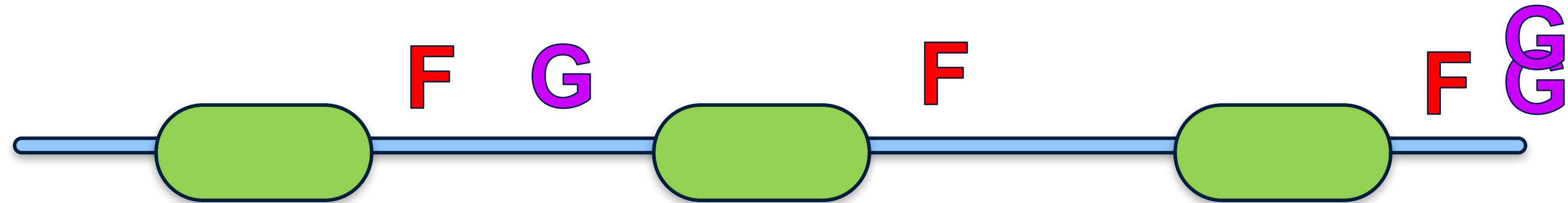


# NEW: Detaching Grades from Feedback

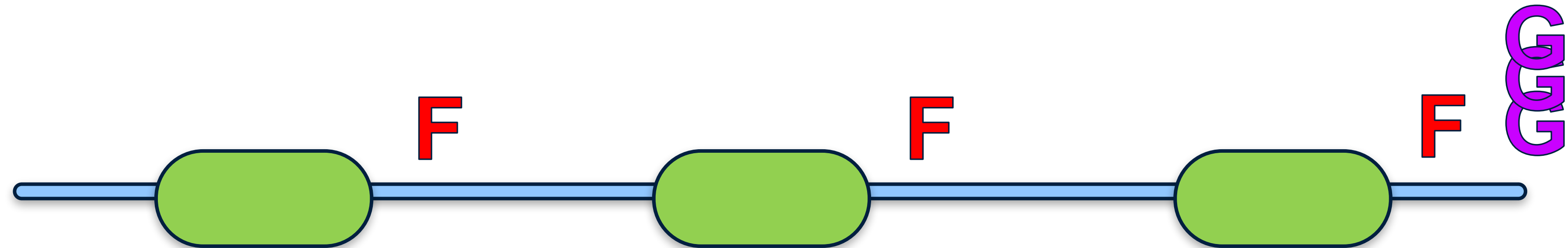
Mild



Medium



Large



**F** = Feedback released      **G** = Grades released





# Reflections on SCIE 113 Ungrading

Montse Rueda, Brian Hunt, Marcia Graves, Caitlin Donnelly



# Reflections (Caitlin)

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

-Student self-assessments were consistently higher than mine (6.5% higher on Essay 1, 7% on term paper version 1)

**-Shift in the focus of student reflections from **written expression to argumentation****

-Essay 1: 18/24 noted written expression as a major weakness, requesting feedback

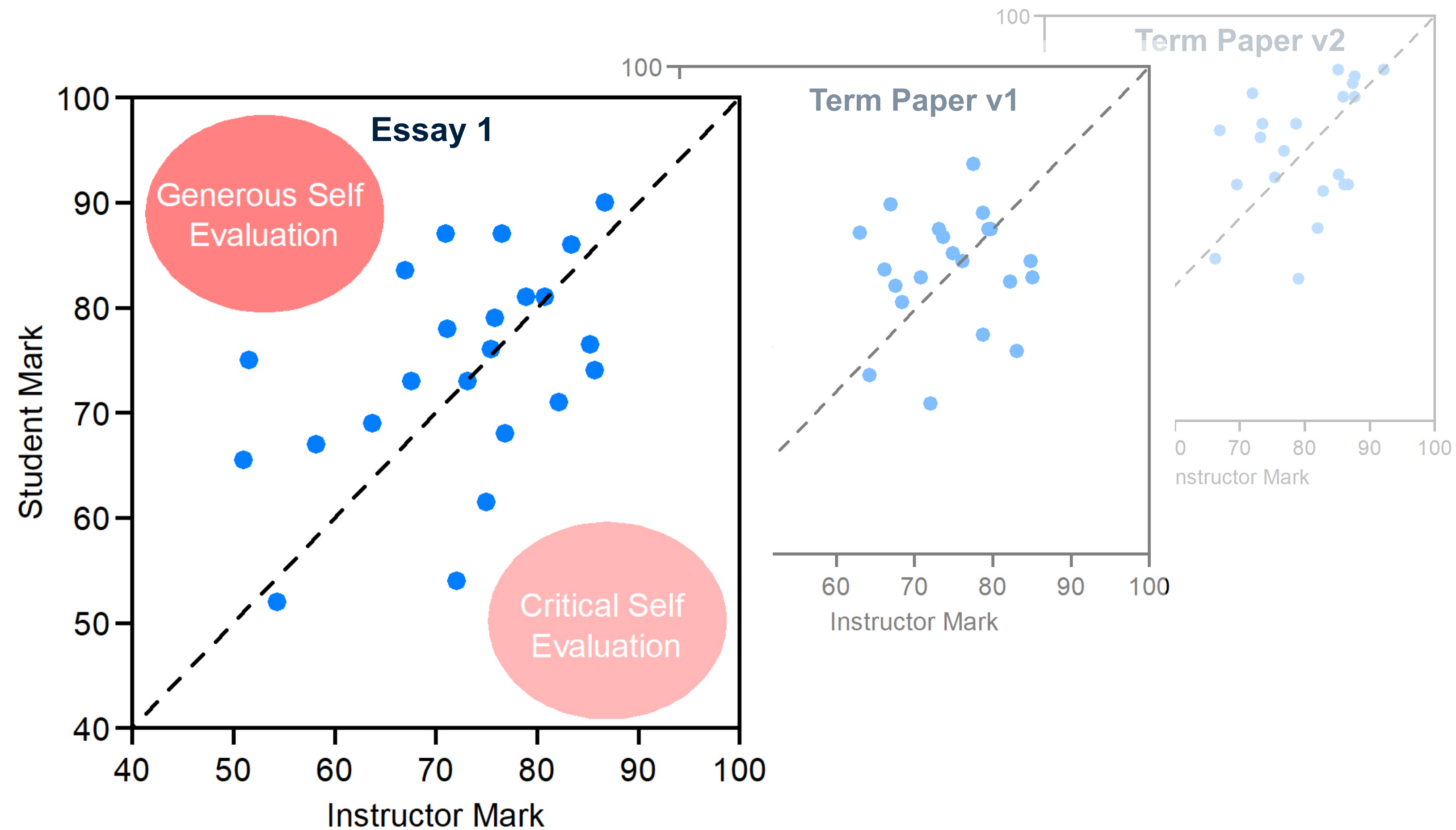
-Term paper version 1: 12/24 focused on written expression

-Term paper version 2: 10/25 focused on written expression



# Research

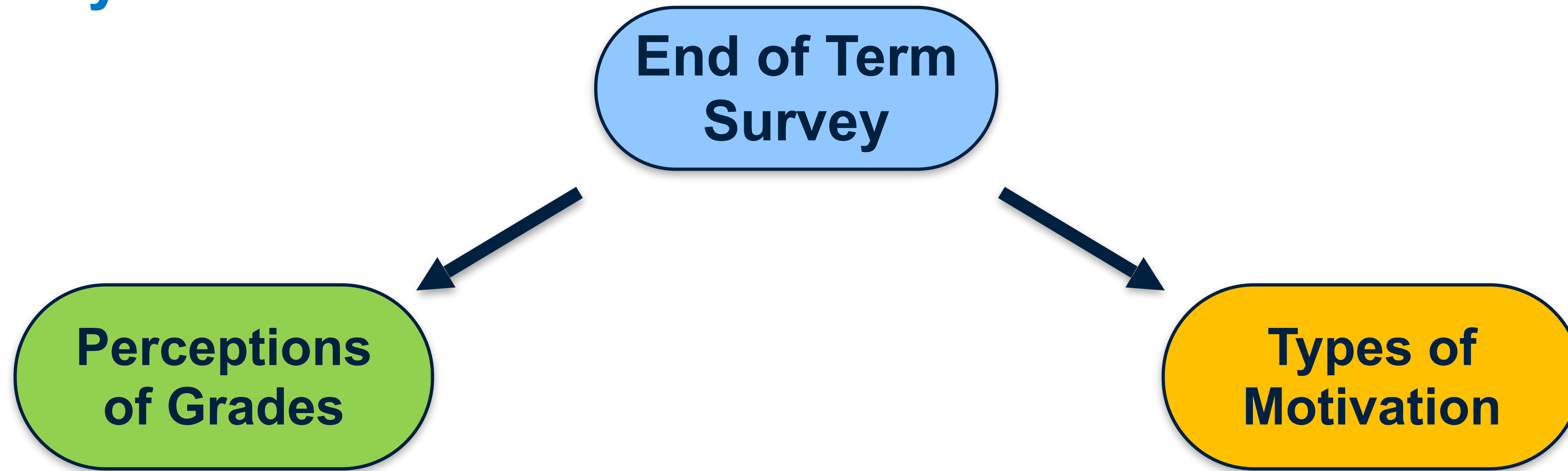
- Each class is a **unique case study**
  - Examine the relationship between **instructor** and **student** assessment



\*simulated data



# Survey



- Assess **how students value** different aspects of the grading and feedback processes
- 2 open ended questions regarding **how they performed** the self-assessment
- Assess extrinsic, intrinsic, amotivation using validated scale



# Future Work

- Collect and Analyze **self-assessment vs grades** data
- **Code** open-ended survey questions
- Possibility of re-running in SCIE 113 **Term 2**
  - In Term 1, students performed their first self-assessment **prior to any midterm** marks
- **Learn from instructors** on how they engaged with ungrading



What if **students** were in charge  
of **their own learning** ?



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

**Biology 342 Self Assessment Form, Fall 2021**

**Your name:**

**Your lab section:**

Congratulations!! You have made it through the term. We have shared a long and involved journey this semester as you have experienced what's it's like to be a scientist. I hope you have enjoyed this experience and were successful in meeting your learning goals. Because you are the one who has spent time learning this term (and I am not), you are best able to authentically evaluate your progress.

Gather your stuff from this course. The stuff you have created constitutes your portfolio of learning. This includes your lab notebook, your City of Vancouver mini-report, your salmon letter, your term project, and feedback for oral presentations. Grab some tea/coffee/water/a snack and settle in for some reflection. Plan to spend 30-60 minutes or so.



**Currently:**

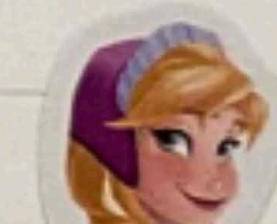
The first paragraphs of a 5 pg end of term self assessment

Instead: Students submit assignments, like normal, and receive detailed feedback with the opportunity to re-submit



## A Sample Learning Goal (includes the "why")

1)  
ELECTROPHORESIS! IT'S TIME FOR ROUND TWO BABY! Aye, I screwed up last lab when loading in our samples but I'm getting it right this time. This is my redemption lab, my second shot at this. My goal today is to make it through flawlessly without any mistakes so that I can feel better from last lab! Oh yeah, presentations for project proposals is today... I feel slightly unprepared but my team and I are gonna full send. I'm going to do my best to present my part clearly and hopefully my legs don't start shaking cause istg that'll be embarrassing.. Presenting has never been a strong suit of mine but we gotta do what we gotta do, it's all about seeking discomfort! Let's get started!  
LGI LETS GET IT LETS GO!!



# How it went, week 4 (this is before anything was due)



Preliminary thematic coding (done by Tessa Blanchard)

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

| Themes  | # Responses | Total | %          |              |
|---|-------------|-------|------------|--------------|
| "Less Stress/Less Worry"  | 44          | 84    | 52.3809523 |              |
| "More Learning"   | 31          | 84    | 36.9047619 |              |
| "Postive Experience/More Fun/Enjoyable"                                     | 51          | 84    | 60.7142857 |              |
| "More Structure"  | 2           | 84    | 2.38095238 |              |
| "Learn at my own pace/changed how I learn/Be more creative"                 | 19          | 84    | 22.6190476 | * I just add |
|   |             |       |            |              |
|   |             |       |            |              |
|   |             |       |            |              |
|   |             |       |            |              |
|   |             |       |            |              |
| <b>Comments that stand out</b>  |             |       |            |              |
| *Didn't complete taks just for the sake of getting a grade.                 |             |       |            |              |
| *Comments about lab members not taking I seriously since there was no grade |             |       |            |              |
| *Other lab mates not putting enough effort.                                 |             |       |            |              |

## What we noticed

1. Students made brave choices on their projects
2. It was much more fun to provide feedback when marks were not associated
3. Student enthusiasm and commitment seemed higher
4. Projects seemed better (with the exception of salmon letters, which were about the same)




# Considerations moving forward

1. Relative weighting suggestions
2. Options for landing outside the median
3. Feedback at all stages of submission (including final)
4. Peer review (more structured)



# What are some Challenges and Opportunities ?

A photograph of a snowy mountain peak under a starry night sky with a vibrant green aurora borealis. The aurora is a bright, glowing green light that curves across the sky, illuminating the mountain and the surrounding landscape. The sky is dark and filled with numerous stars, and the mountain is covered in snow and has a jagged, rocky peak.

# 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



What **can you do** next?

A photograph of a snowy mountain peak under a starry night sky with a vibrant green aurora borealis. The aurora is a bright, glowing green light that curves across the sky, illuminating the mountain and the surrounding landscape. The sky is dark blue and black, filled with numerous stars. The mountain is covered in snow and has a jagged, rocky peak. The overall scene is serene and majestic.

# What can you do next?



Skeptical?



Want to know more?



Ready to dive in?



Have questions?

# What can you do next?



Skeptical?



Want to know more?



Ready to dive in?



Have questions?

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

# What can you do next?



Skeptical?



Want to know more?



Ready to dive in?



Have questions?

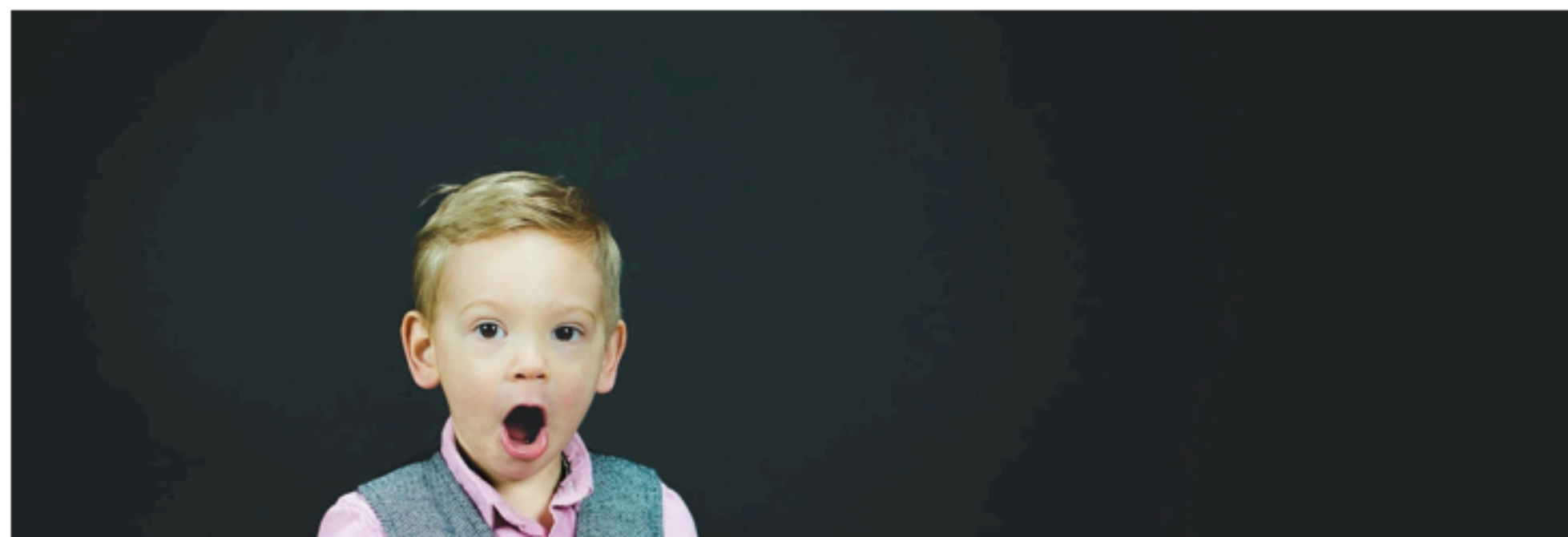
## What to expect when you're alternatively assessing

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



David Clark

Dec 6



## 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)

# What can you do next?



Skeptical?



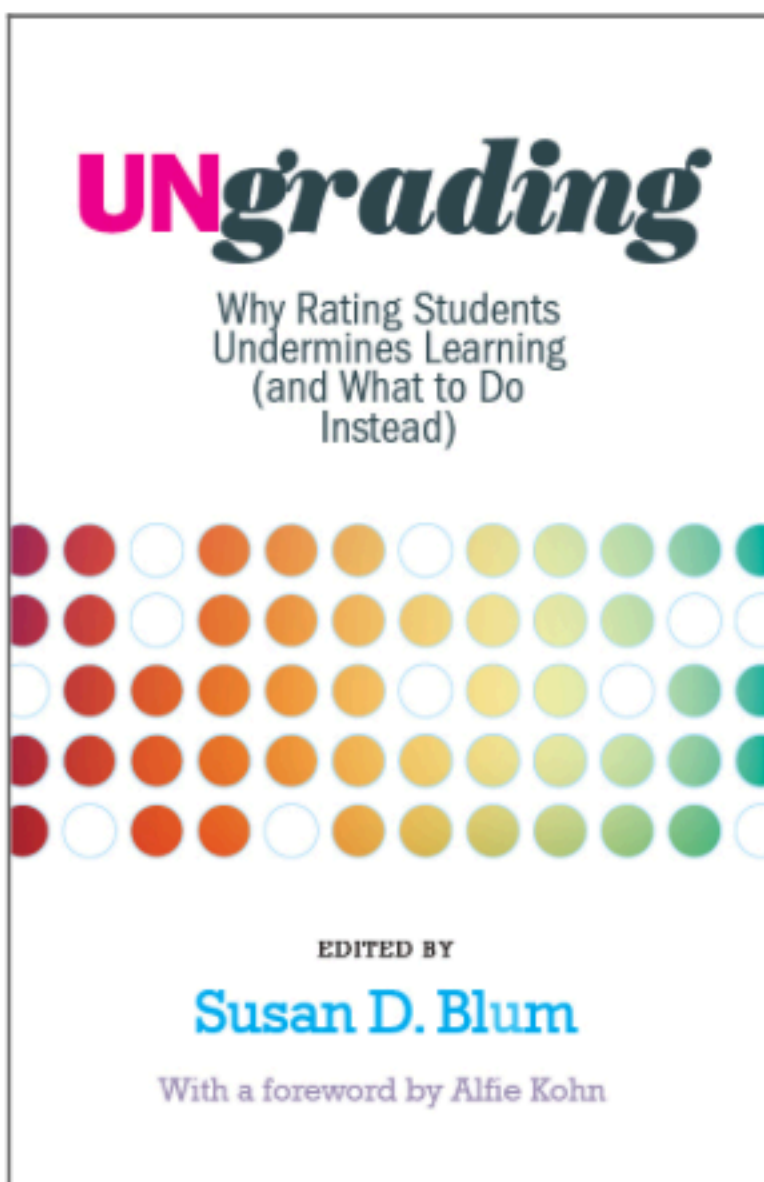
Want to know more?



Ready to dive in?



Have questions?



## 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

# What can you do next?



Skeptical?



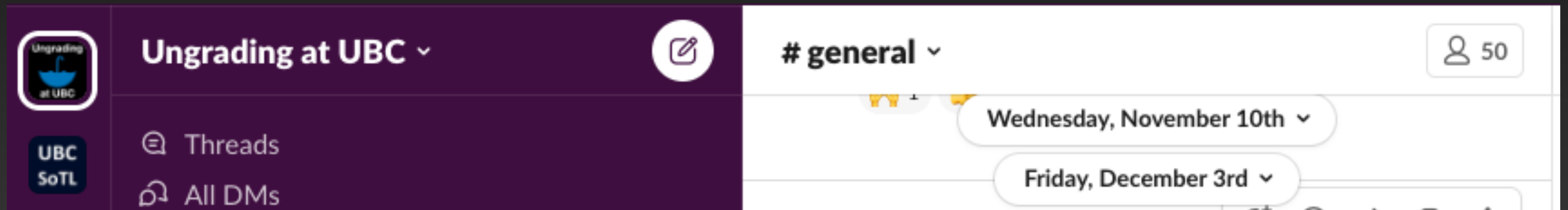
Want to know more?



Ready to dive in?



Have questions?



[https://join.slack.com/t/ungradingatubc/shared\\_invite/zt-rjfxgvnl-reMnwPwhoQbhf0LCfC8WPA](https://join.slack.com/t/ungradingatubc/shared_invite/zt-rjfxgvnl-reMnwPwhoQbhf0LCfC8WPA)

Please take a moment to complete this brief survey:

[https://ubc.ca1.qualtrics.com/jfe/form/SV\\_9QrDiXt5snsqTUq](https://ubc.ca1.qualtrics.com/jfe/form/SV_9QrDiXt5snsqTUq)

Thank you!

UBC Skylight (Science Centre for Teaching and Learning)  
<https://skylight.science.ubc.ca/online-teaching-series>

On Mastery learning, Courses Transformed by the Pandemic,  
and more ...

Stay tuned!



Thank you for coming!!

Some of us will be around after the session if you want to stay and chat.

Happy Holidays!

Skylight Online Teaching Series

UBC Skylight (Science Centre for Teaching and Learning)  
<https://skylight.science.ubc.ca/online-teaching-series>

**How to get students to stop  
thinking about grades, and focus  
on learning instead**

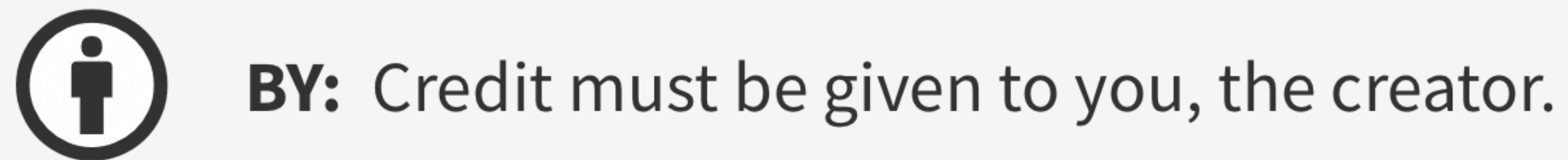
Firas Moosvi (CMPS, UBCO), Celeste Leander (BOTA/ZOOL, UBCV), Jackie Stewart (CHEM, UBCV), Brian Hunt (IOF, UBCV), Caitlin Donnelly (BOTA, UBCV), Marcia Graves (MBIM, UBCV), Montserrat Rueda-Becerril (CHEM, UBCV), and Taylor Wright (CHEM, UBCV)

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**Slides from previous  
related talks/workshops**

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# 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?”](#)