To: Dr. Erika Paterson

From: Kashish Garg

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Subject: **Proposal for Determining the Feasibility of Transitioning Biology Lab Courses to an Ungraded Approach**

**Introduction**

Grades and the traditional grading approach (receiving a letter grade or percentage throughout a course) have become an important part of the education system. Getting a letter grade or a percentage allows students to get a snapshot of the proficiency of their work throughout a course. The graded approach is used to measure academic success and helps to inform decisions of whether to accept or deny students for post-secondary education programs. Furthermore, grades help to distribute scholarships to hard-working students and can provide information to employers about an individual’s work ethic and competency. There are many reasons why grades and the traditional grading approach have now become ingrained in the education system.

**Audience Description**

Meigan Aronson, Dean of the Faculty of Science at UBC

**Statement of Problem**

Most biology lab courses at UBC follow the traditional grading approach as it is useful for the aforementioned reasons. Although the graded approach serves important functions, it is not necessary for students to receive quality education, and can actually hinder certain aspects of learning. Grades can cause avoidance of challenging work (Harter, 1978) and lead students to cheat (Anderman, 1998). Grades can be a source of anxiety and promote performance-avoidance goals (a desire to avoid poor performance due to a fear of failure); rather than promoting intrinsic motivation to gain knowledge, grades promote extrinsic motivation in the form of performance-avoidance goals (Pulfrey et al., 2011).

**Proposed Solution**

One possible solution for biology lab courses at UBC following the traditional grading approach is to transition the courses to an ungraded approach. An ungraded approach allows students to receive written feedback throughout the course as opposed to a letter grade or a percentage. Then, at the end of the course, students write a self-assessment, evaluating their own learning and justifying a final grade (in the form of a letter grade or percentage), which is reviewed by the instructor and adjusted accordingly (if need be). The ungraded approach emphasizes that students reflect on their own work and learning (Guberman, 2021).

**Scope**

To assess the feasibility of transitioning all biology lab courses to an ungraded approach, I plan to pursue five areas of inquiry:

1. Did instructors who have taught with an ungraded approach have a positive experience? Did their students have a positive experience?
2. How difficult for instructors is the process of transitioning a course from a graded approach to an ungraded approach?
3. Does teaching with an ungraded approach require more work for instructors?
4. Would an ungraded approach work well for all biology lab courses at UBC?
5. What are the benefits and drawbacks of an ungraded approach to student learning?

**Methods**

My primary data source will come from an interview with Celeste Leander, a professor at UBC who teaches BIOL 342, a biology lab course that has recently been following an ungraded approach. Another primary data source will come from a survey with Biology students to collect their opinions on ungraded biology lab courses. Secondary sources will include peer-reviewed research that discusses the benefits and drawbacks of an ungraded approach to learning.

**My Qualifications**

I am a fourth-year student in the biology program at UBC, and have experience with a graded approach to learning in biology lab courses. I am also currently enrolled in BIOL 342, a biology lab course that follows an ungraded approach, allowing me to also have first-hand experience with an ungraded approach to learning. My association with Celeste Leander as my instructor for BIOL 342 gives me the opportunity to carry out an in-depth feasibility study.

**Conclusion**

Biology lab courses would benefit from a transition to the ungraded approach; this would allow these courses to avoid the aforementioned drawbacks of a graded approach. By accessing the five areas of inquiry mentioned earlier, I can determine the feasibility of transitioning biology lab courses to an ungraded approach. With your approval, I will immediately begin research.

**References**

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