

---

**Creative Assessments in the COVID-19 times**  
**L'Évaluation Créative au Temps de la COVID**  
(Org: **Andie Burazin** (Toronto), **Lauren DeDieu** (Calgary) and/et **Miroslav Lovric** (McMaster))

---

---

**SAMANTHA-JO CAETANO**, University of Toronto

*Trump vs. Biden - who will win?*

Fall of 2020 has been riddled with hardships. One thing that unites us, is our general interest in following the 2020 American Federal Presidential election. Rohan Alexander and I are currently instructing a third-year "Surveys, Sampling and Observational Studies" course at the University of Toronto, and the final problem set due in our course has our students using data and statistical modelling to predict the outcome of the 2020 election. In this presentation I will go over the specific requirements of this assessment, some of the positive feedback received and some of the obstacles we faced in the creation and implementation of this problem set.

---

**AMENDA CHOW AND IAIN MOYLES**, York University

*Choose your own adventure in a multi-variable calculus course for engineering students*

We focus on the various styles of final assessments used in a multi-variable calculus course. Between both presenters, we have taught this course several times since 2016. For the pandemic influenced semester (Winter 2020), students had to complete a subset of carefully crafted word problems that required students to recognize the concept in the course that would solve it. For the semester following (Summer 2020), the final assessment was a group project, which required groups to come up with one practical real world problem and solve this using the mathematical concepts taught in the course. We will present samples of these assessments and discuss student reactions to these more creative styles of final assessments compared to traditional questions found in an in-person proctored written final exam. We also discuss how we used these styles of assessments to gauge the depth of student learning and student dishonesty, and whether our time spent implementing them was worth it.

---

**GENERAL DISCUSSION,**

---

**SEAN FITZPATRICK**, University of Lethbridge

*Deconstructing Exams for Remote Learning*

The shift to remote learning has come with many challenges, not least of which is designing authentic assessments that are less likely to encourage academic misconduct. One thing was clear: large, high stakes exams weren't going to work, unless one was willing to use intrusive surveillance techniques. (I wasn't.)

My considerations were as follows:

- I want assessment to be a learning tool, not a measuring tool. I want students to learn from their feedback and believe growth is possible.
- I have too many students and too few resources to do something like mastery grading.
- I'm not so great at designing highly engaging problems, but pretty OK at course design.

With this in mind, I decided to "deconstruct" my exams (in the culinary sense, of taking them apart). A midterm and final became 5 chapter tests. The single day timed test became a week-long cycle, with several components: a chapter review, an individual test, a group test, and a test "wrapper".

I'll describe each of these components, and why I chose them, and discuss the effectiveness of this approach, for both academic integrity and student success.

---

**ANTON MOSUNOV**, University of Waterloo

*Let's Think Together: Using Oral Assessments to Develop Students' Thought Process*

MATH 135 is one of the fundamental courses in the Faculty of Mathematics at the University of Waterloo. It is the course where students learn how to prove mathematical statements rigorously. Since the goal is to teach students a particular thought process, I decided to hold an oral midterm to give students an opportunity to reflect on problems that they have never seen before along with their instructor. In my presentation, I will tell you more about this experience, and share my personal view on the advantages and disadvantages of this approach. If time allows, I will also give a demonstration of the midterm, which was held using the Bongo platform.

---

**JERROD SMITH**, University of Calgary

*Peer and Open-ended Assessment in Linear Algebra and Intro Proof Courses*

I'll talk about my experiences, and my students reactions, to some peer-assessment activities and open-ended questions in a second course in linear algebra and a first-year honours course introducing students to mathematical writing. Rubrics used to assess these activities (and some ideas on how to improve them) will also be discussed.

---

**DAN WOLCZUK AND PAUL MCGRATH**, University Of Waterloo

*Using Virtual Escape Rooms to Promote Student-Student Interactions*

Even during the best of times a common concern in online courses is the lack of student-student interactions. Given that the majority of our incoming first year science students have only online courses this term, we made it a priority to get the students to work collaboratively in our calculus course. Rather than using typical group projects, which many students dread, we came up with the idea of creating something different and fun: virtual escape rooms.

In this presentation, we will first give a quick overview of our virtual escape rooms and how we used these to encourage the students not only to work together but also to form term-long study groups. We will then discuss the students' view of our virtual escape rooms based on the results of three surveys and the unsolicited feedback we received.