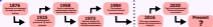


A Novel Assessment Model For STEM Education

In the transition to the new BC public-school curriculum, many teachers have found the task of assigning grades difficult. My research concerns a novel method of assigning grades to students in STEM classes. This model both reflects the intentions of the new curriculum and can be adapted to fit the needs of a class.



Content-Driven Curriculum

Competency-Driven Curriculum

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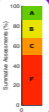
University of Victoria

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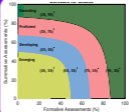
BC K-12 Classroom Assessment Framework

PROGRESS MADE			
EMERGING	DEVELOPING	PROFICIENT	EXCELLENCE
Student beginning to demonstrate understanding of the concept or skill.	Student beginning to demonstrate understanding of the concept or skill.	Student demonstrates understanding of the concept or skill.	Student demonstrates advanced understanding of the concept or skill.

Previous methods of assessment in BC have been driven by **standardized examinations**. A percentage out of 100 would be assigned to a student weighted to their scores on provincial exams, in-class tests, and other measures like lab reports.



A great deal of information about student ability is lost when summarizing performance into a **single number**.



The intention of the new curriculum is to encourage the assessment of **source competencies**. Here, student performance is assessed on the basis of two measures - **formative and summative assessments**. **Formative assessments** are ongoing and reward students for responding to feedback. This might be improvement of lab technique, engaging in discussions, or an inquiry project. **Summative assessment** may be an exam or assignments.

Final grades are determined in terms of the BC proficiency scale, by combining the demonstration of both modes of assessment.