Beyond Detection:

Leading Creative, Authentic Assessment in the AI Era

Marc Gobeil, PhD. SELU Principals' Short Course, July 2026


4 WING

Leaders have the capacity to create conditions and the environment to create change a provide authentic and effective support.

Marnie Ross SPSC July 3 2026 (9:16am)

Let’s Play

Biology 30 Jeopardy: jeopardylabs.com

10 Minutes

One Saskatchewan curriculum outcome. Zero background in Biology. Built with AI.

Step 1: Start with the Curriculum

Go straight to the source: the Saskatchewan curriculum

- Grab one outcome, nothing else
- BI30-GB2: genetic information stored, transmitted, expressed
- No unit plan, no textbook, no background knowledge

Step 2: Set the Scene for AI

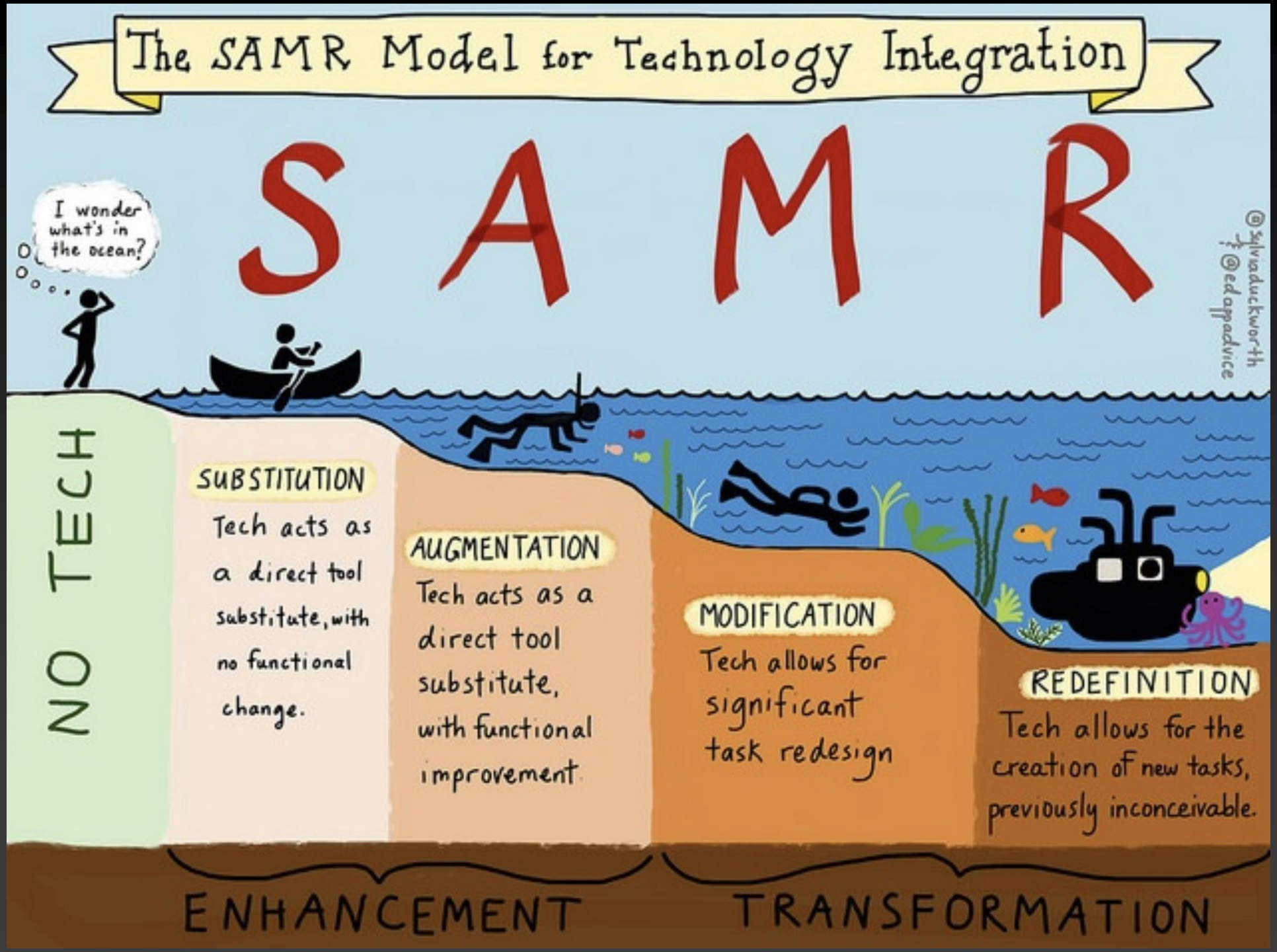
Play a role: the new teacher, or the substitute

- “I have no resources and no background in this subject”
- “Here is the outcome my students are working on”
- “Make something engaging that teaches this outcome better”

Step 3: Shape, Judge, and Own It

AI drafts. You decide.

- Review every question for accuracy and fit
- Push back: harder, funnier, more relevant to your students
- Ten minutes later: a playable, interactive review game


The SAMR Model for Technology Integration
S A M R
I wonder what's in the ocean?
@Sylvaduckworth
@edappadvice
NO TECH
SUBSTITUTION
Tech acts as a direct tool substitute, with no functional change.
AUGMENTATION
Tech acts as a direct tool substitute, with functional improvement.
MODIFICATION
Tech allows for significant task redesign
REDEFINITION
Tech allows for the creation of new tasks, previously inconceivable.
ENHANCEMENT
TRANSFORMATION

Where Does the Game Land on SAMR?

Substitution is irrelevant. Transformation is the goal.

- Substitution: AI writes the same old worksheet
- Modification: the task is redesigned as an interactive game
- Redefinition: a non-expert builds what was previously inconceivable

“The Illiterate of the 21st century will not be those who cannot read and write but those who cannot learn, unlearn and relearn”

Alvin Toffler

Creativity

Think Differently, Design “Unlikely Futures”

What is Creativity?

"The Process of having original ideas that have value, more often than not comes about through the interaction of different disciplinary ways of seeing things"

Ken Robinson

“Our Education System is predicated on the idea of academic ability”

Hierarchies were developed to meet the needs of Industrialism

- The Carnegie Unit 1906
- Standardization to facilitate the college admission process
- Industrialization of Education

Transform and Empower your Teaching

Benjamin Bloom's 2 Sigma Problem

The 2 Sigma Problem: The Search for Methods of Group Instruction as Effective as One-to-One Tutoring

BENJAMIN S. BLOOM
University of Chicago and Northwestern University

Two University of Chicago doctoral students in education, Anania (1982, 1983) and Burke (1984), completed dissertations in which they compared student learning under the following three conditions of instruction:

1. *Conventional.* Students learn the subject matter in a class with about 30 students per teacher. Tests are given periodically for marking the students.
2. *Mastery Learning.* Students learn the subject matter in a class with about 30 students per teacher. The instruction is the same as in the conventional class (usually with the same teacher). Formative tests (the same tests used with the conventional group) are given for feedback followed by corrective procedures and parallel formative tests to determine the extent to which the students have mastered the subject matter.
3. *Tutoring.* Students learn the subject matter with a good tutor for each student (or for two or three students simultaneously). This tutoring instruction is followed periodically by formative tests, feedback-corrective procedures, and

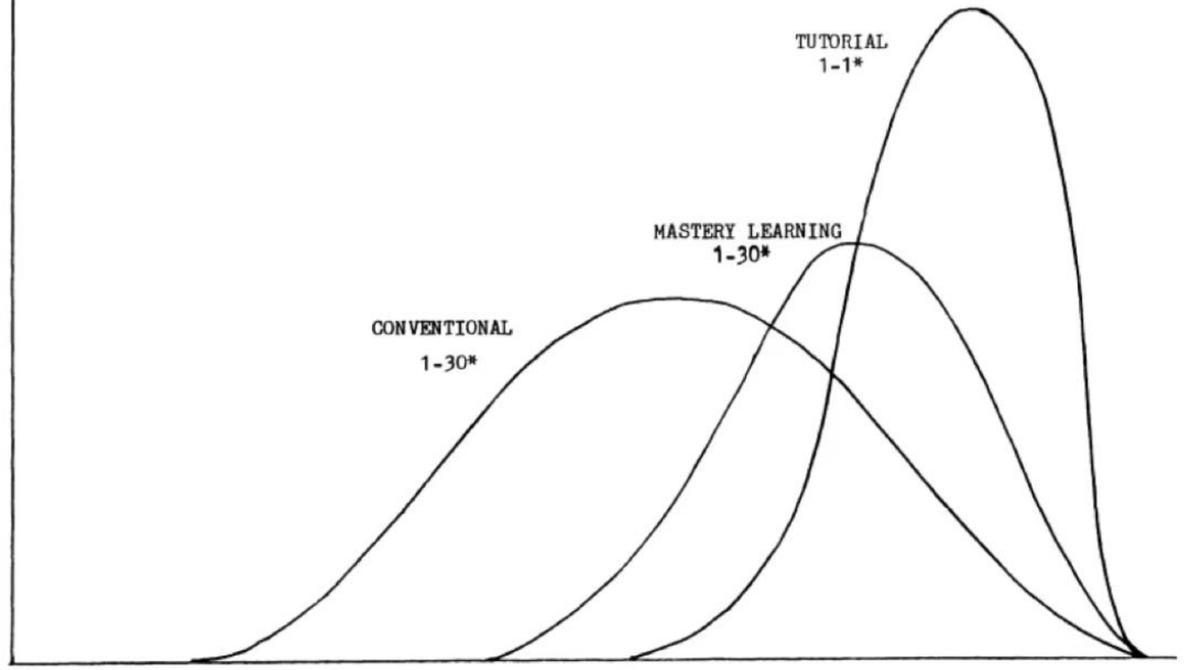
The students were randomly assigned the three learning conditions, and their initial aptitude tests scores, previous achievement in the subject, and initial attitudes and interests in the subject were similar. The amount of time for instruction was the same in all three groups except for the corrective work in the mastery learning and tutoring groups. Burke (1984) and Anania (1982, 1983) replicated the study with four different samples of students at grades four, five, and eight and with two different subject matters, Probability and Cartography. In each sub-study, the instructional treatment was limited to 11 periods of instruction over a 3-week block of time.

Most striking were the differences in final achievement measures under the three conditions. Using the standard deviation (sigma) of the control (conventional) class, it was typically found that the average student under tutoring was about two standard deviations above the average of the control class (the average tutored student was above 98% of the students in the control class).[1] The average students under conventional instructional conditions. (See Figure 1.)

There were corresponding changes in students' time on task in the classroom (65% under conventional instruction, 75% under Mastery Learning, and 90+% under tutoring) and students' attitudes and interests (least positive under conventional instruction and most positive under tutoring). There were great reductions in the relations between prior measures (aptitude or achievement) and the summative achievement measures. Typically, the aptitude-achievement correlations changed from +.60 under conventional to +.35 under mastery learning and +.25 under tutoring. It is recognized that the correlations for the mastery learning and tutoring groups were so low because of the restricted range of scores under these learning conditions. However, the most striking of the findings is that under the best learning conditions we can devise (tutoring), the average student is 2 sigma above the average control student taught under conventional group methods of instruction.

The tutoring process demon-

FIGURE 1. *Achievement distribution for students under conventional, mastery learning, and tutorial instruction.*



*Teacher-student ratio

Bloom, B.S. (1984). The 2 Sigma Problem: The Search for Methods of Group Instruction as Effective as One-to-One Tutoring.

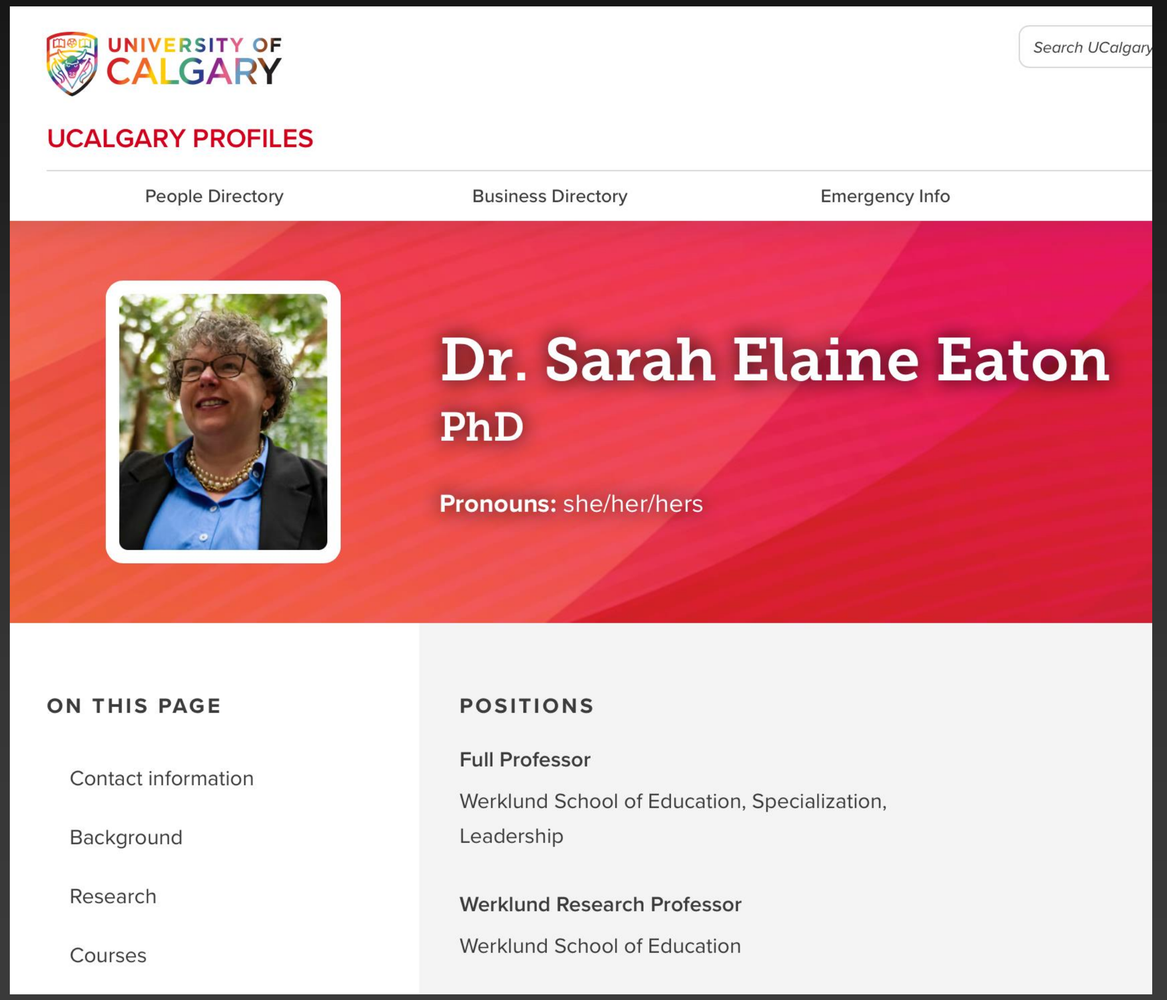
The Elephant in the room

Academic Dishonesty

Our Own Ethical Practices

Dr. Sarah Eaton, Professor at the University of Calgary
Editor-in-Chief of the International Journal for Educational Integrity

White-Texting
Deceptive and Unethical Practices



“Although humans can relinquish control, they do not relinquish responsibility for what is written”

Dr. Sarah Elaine Eaton, University of Calgary

Detection Tool Reliability

Just move on

“To date, Turnitin gives no detailed information as to how it determines if a piece of writing is AI-generated or not"

Michale Coley, 2023

HOW WILL STUDENTS FEEL WHEN WE TELL THEM THEIR WRITING MAY BE WRONGLY FLAGGED AS LIKELY AI?

To help students prepare for the possibilities of false positives, emphasize the importance of the process. Include pre-work, rough drafts, feedback.

Is it fair to ask students to prove their humanity?

How will students know what this means or how to do it?

As AI gets better establishing one's "Voice" may not be enough

LET'S GO BACK TO WHY WE ASSIGN WORK, NOT FOR THE PRODUCT BUT FOR THE THINKING PROCESS

" Writing is a mode of learning. Students develop understanding and insights through the act of writing. Rather than writing simply being a matter of presenting existing information . Writing is a fundamental means to create deep learning and foster cognitive development"

-The Association for Writing Across the Curriculum

“BAN IT, PROBLEM SOLVED”

The New York Times

THE SHIFT

Don't Ban ChatGPT in Schools. Teach With It.

OpenAI's new chat bot is raising fears of cheating on homework, but its potential as an educational tool outweighs its risks.

HOW AI-ABLE IS YOUR SCHOOL?

CAN THE ASSESSMENTS IN YOUR BUILDING BE COMPLETED BY AI? HOW WOULD YOU FIND OUT?

First Moves for Leaders

Practical steps for your first year

- Run this build live at a staff meeting: one outcome, ten minutes
- Start with volunteers and let them showcase what they create
- Ask each department: how AI-able are our assessments?
- Frame every AI conversation around possibility, not policing

Possibility, Not Policing

Give up control, never responsibility. Empower your teachers to think differently.