Integrity, Indigenization, and (Artificial) Intelligence

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Off of the heels of our recent national academic integrity conference, the Canadian Symposium for Academic Integrity (CSAI), one of the topics on the forefront of many of our minds is the growing impact of Generative Artificial Intelligence tools on our students' assignments.

The rise of platforms like ChatGPT and other similar tools — that allow students to create written works rapidly with minimal input or understanding of the required material — present a clear challenge to instructors and institutions as we continue to try and design effective learning and assessments for our students. However, within this challenge is also an opportunity to rethink how we teach and learn in a broader way.

During his session "Don't fear the robot: Future-authentic assessment and generative artificial intelligence," Dr. Phill Dawson of Deakin University in Melbourne laid it out quite plainly: for instructors and institutions, there is no quick fix to assessing around or blocking these tools; the only long-term solution is to change how we design assessments (and indeed our courses) from the ground up.

Here is where our opportunity comes in — the opportunity to Indigenize our methods of education and assessment.

Indigenous ways of being and knowing provide a fantastic lens for reshaping how we think about learning — and how we design our courses and our assessments. Currently, our assessment design is often outcomes-focused (what do we want the student to be able to do at the end of the course?) and reliant largely on Bloom's taxonomy structure. This, in a vacuum, is clear and effective. Hence why it has persisted since its development in the 1950s.

However, this does not capture the full picture, both of Bloom's work and of the current digital landscape that students find themselves in today.

The most well known of Bloom's taxonomies of learning is actually only one of the original domains: the cognitive. Traditionally, in our colonial education system, this is where we've focused most of our effort. Building cognitive understanding in our students' educational journey is crucial. They still need to leave us with all the domain-specific understanding and cognitive ability they will need to find success in the wider world, but it does not end there.

When we look closely at Indigenous pedagogy, we start to see a more holistic view of our students and we can begin to think of their learning as more than just a cognitive journey.

From an Anishinaabe perspective, our students' ways of learning can be looked at in four quadrants: the Intellectual, Physical, Emotional, and Spiritual.



Image source: Switching from Bloom to the Medicine Wheel: creating learning outcomes that support Indigenous ways of knowing in post-secondary education by Marcella LaFever

When we consider our students across all four of these quadrants of learning, we can develop more nuanced assessments and assignments that become much harder for artificial intelligence tools to be used in.

It's important that when we look at the quadrants from this perspective, we shift from seeing them as a top-down hierarchy and move to a more relational view — with skills in one blending into and strengthening skills in the others.

By building things like space for interaction, student experience, and community engagement into your course and assignments, you can encourage this more nuanced and relational understanding of the material — while simultaneously making your performance assessments more realistic to a students' professional context, and harder or artificial intelligence tools to emulate.

It is worth noting that three of these domains (cognitive, emotional, and physical) actually were present in the initial system proposed by Bloom, but by adding the spiritual — the ideal of respect for the material, the land, and one's impact in the world — the wheel is complete and we can help shape more accountable and engaged students.

By focusing on building our learning not only across all these domains, but relationally between them, we can develop stronger courses, stronger assessments, and more well rounded learners.

Many programs here at Seneca are currently undergoing a large scale Curriculum Integration project — to bring in elements of Indigenous pedagogy, sustainability, and equity into their courses. If you would like to do any further learning in this area, you can register for sessions on MyPD or continue you reading with some of the resources linked below:

From Bloom to the Medicine Wheel

Assessment for Inclusion in Higher Education

Re-thinking assessment in a digital world

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