Communities of Integrity: Engaging Ethically Online for Teaching, Learning, and Research

Closing Keynote Address
European Conference on Academic Integrity and Plagiarism 2021
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Abstract
The COVID-19 crisis challenged us to learn, teach, and work in ways we never had before. As we move further into 2021 more educational institutions are thinking about how online teaching and learning can become a permanent way of offering programs. However, there are still ethical considerations that merit deeper consideration. Before the pandemic, there was 20 years of research from various countries to show there was less misconduct in online courses than in face-to-face courses, yet during COVID-19 academic and research misconduct increased dramatically around the world. So, what happened? And how do we move forward from here? Join us for an evidence-informed keynote about how to support ethical teaching, learning, and researching in online and blended contexts in 2021 and beyond.

Keywords: academic integrity, academic misconduct, online, ethics, teaching, learning, research

Supplementary materials: 29 figures; 117 references

Welcome

Figure 1

Slide 1: Welcome
Welcome to Communities of Integrity: Engaging Ethically Online for Teaching, Learning, and Research. Thank you for joining us.

I begin with an acknowledgement of the land, which has become customary among many peoples where I live.

**Territorial Acknowledgment: Part of our Ethical Practice**

I join you today virtually from my home in Calgary, Canada, located on the traditional territories of the people of the Treaty 7 region in Southern Alberta in Canada. These include the Blackfoot Confederacy (comprising the Siksika, Piikani, and Kainai First Nations). It also includes people from the Tsuut’ina First Nation and the Stoney Nakoda, who include the Chiniki, Bearspaw, and Wesley First Nations. Calgary is also home to the Métis Nation of Alberta, Region 3.

**Figure 2**

Slide 2: Territorial Acknowledgement

As Canadians, take the time at the beginning of ceremonies and public events to acknowledge the land and the people who have lived on it for millennia as part of meaningful practice to acknowledge history of colonialism, and the violence and unethical treatment of Indigenous peoples that resulted because of colonialism. (Native Land, 2021). For many of us, academic integrity is about more than student conduct. It is about ethical decision-making. We begin with a territorial acknowledgement as part of our ethical practice in the ways in which we engage with the land and its people.
During this conference, my colleague and friend, Keeta Gladue, also from the University of Calgary, gave a presentation on academic integrity through an Indigenous Lens. If you didn’t see her session in real time, I encourage you to watch the recording. You may find, as I did, your understanding of academic integrity forever changed after listening to Keeta.

So, even though this closing keynote is about creating communities in online spaces I invite you to take a moment to reflect on the land upon which you are situated and those who have been its caretakers for generations, those who have had their land taken from them, and those who have been exploited or mistreated, particularly through colonialism. These are essential considerations for those of us who dedicate our work and ourselves to ethics and integrity.

Gratitude for our Community

Speaking of those who dedicate their lives to ethics and integrity, please join me in extending appreciation to the conference organizers and everyone who has volunteered to contribute to the conference in various ways. It is no small feat to organize a conference and those held on line require just as much time and effort, if not more, than a traditional face-to-face conference. Thank you to all of you who made this event possible.

Figure 3

Slide 3: Extending our Gratitude
At the Gala Dinner yesterday, Sonja Bjelobaba said that when she found the academic integrity community, it felt like coming home. I’m paraphrasing here, because I don’t remember the exact words, but this was the sentiment.

**Figure 4**

Slide 4: Reflecting on Community

![Reflecting on Community](image)

This is a feeling many of us share, I think. The people in our academic community aren’t just researchers, or educators, or practitioners, or students, or policy makers, or activists. We simultaneously have multiple roles, and we cannot separate them. Our work is a labour of love. When you do this work, you cannot simply punch a time card at the end of the day and “clock out”. A commitment to ethics isn’t simply something one does, it is part of who one is.

And one is not part of this community because they parachute in for a special event and then leave again. That might make someone a celebrity for a day, but it does not make them part of a community. Being part of a community means showing up, day after day, doing the hard work, laughing together, sometimes crying together, and committing to those who are part of our community, including our colleagues and our students. Being in community with each other is a life’s work.
My Positionality

As a qualitative researcher, I have been trained to reflect upon and declare how I am situated within my work, including strengths, weaknesses, and biases (Walshaw, 2011).

Figure 5

Slide 5: My Positionality

I have an interdisciplinary background in humanities and social sciences, with my first two degrees in languages and literatures and a PhD in educational leadership, policy, and governance. I have taught in higher education in 1994 and for the first 22 years of my career, I was what is known as a “precariously employed academic”, a lecturer who works on contract from one semester to the next without a permanent job, without job security or benefits. It was not until 2016 that I secured a full-time position at the university and could start my own programme of research. I had been introduced to academic integrity the year before I started my full-time role by a now retired senior administrator of our university. When I finally got a full-time job, I knew what I wanted to study. It was academic integrity. I knew, because... it felt like coming home.

During more than two decades prior to that, I often contemplated the ethical underpinnings of academia that continues to propagate systems of exclusion, hierarchy, and privilege. One result of being a precariously employed academic is that you teach a lot. You teach any course you can get, at any university or college that will hire you. I taught undergraduate courses and well as professional development, continuing education, and community-based courses. I was never afraid of technology and when I was first offered an opportunity to teach course via the Internet in 2005, I took it. Since then, I have taught more than 100 online courses. When I was finally hired into a full-time tenure-track role in 2016, I had extensive experience teaching online and I liked it. As a result, I have continued to teach online, and now rarely teach face-to-face any more. The school of education where I work has a large graduate program, with over 900 students enrolled per year, many of whom study in online and blended...
programs. I have now supported more than 125 master of education students to successfully complete their capstone research projects online, and have (or have had) the privilege of supporting 9 doctoral students, who have done at least part of their studies online. Supervising graduate students online has been part of my normal daily work for several years now.

Academic integrity was not an area of study that was available to me as a student and I am inspired to see so many students attending this year’s conference.

You will be among the first generation of students to graduate having completed your studies during COVID-19 and whether you wanted to or not, you will have experienced emergency remote learning during a time of crisis. I use this term, “emergency remote learning”, deliberately because the kind of teaching and learning that has happened during the pandemic differs dramatically from the experiences of people like me, who have had training and experience working in online environments for years.

Emergency Remote Learning Versus Online Learning

Prior to the pandemic, those of us who taught and learned online did so because we chose to do so. There are lots of reasons people opt to learn online, and prior to the pandemic we engaged in this form of education voluntarily, even if not our preferred way to learn or teach. That has certainly not been the case during emergency remote teaching.

Figure 6

Slide 6: Emergency Remote Learning Versus Online Learning
People like me regularly take professional development training and workshops about how to teach and assess students online. For us, educational technology is not only about a set of tools, but includes theory, practice, and even philosophical and conceptual underpinnings. Our students also receive orientations about what to expect as an online learner and we generally provide support to them about the kind of computer, accessories and Internet connectivity they will need to be successful.

Of course, this has not been the case during COVID-19 when so many of you – and your students, and in some cases, your own children – were catapulted into an online environment with little to no preparation, inadequate tools, and sometimes poor connectivity. There was almost no way for you to have an optimal experience. You have had no time to prepare and I am guessing that your administrators and bosses never told you what mine told me when I first started teaching online... That you could reasonably expect to put in eight (8) hours of preparation for every one (1) hour of online class time. (I am not sure if that number is based on evidence or practice, but I remember receiving that advice from one of my employers and I have remembered it.) You may not have had professional elders who shared with you pearls of wisdom such as, you know an online experience is successful when the technology itself becomes invisible to the extent that your learners are so absorbed in their learning that they forget their experience is being mediated by technology. And that the more visible and present the technology itself is through audio, video, or connectivity trouble, the less learning that will happen.

Of course, you know these things now. Now, it is obvious, but before you started your emergency remote learning or teaching, these ideas may never have occurred to you because you did not need to think about them.

When you regularly teach online, you come to view learning management systems and synchronous tools such as video conferencing as your classroom. I have had a virtual office for years and although the technology platforms have changed over time from Skype to Blackboard Collaborate to Adobe Connect to Zoom, part of my daily practice for years has been meeting students individually and in groups in virtual online spaces that remained stable for the duration of a course or semester. If you were engaged in emergency remote teaching, you were subjected to rapid changes and constant pivots and perhaps held the hope that next month or next semester you would go back into your classroom. In this case, your classroom represents a stable and generally safe environment where you and your students know what to expect. For me and my students, our virtual classrooms have been a safe and stable environment where we know what to expect because we chose this form of education; we trained for it; and we learned from experience just how much time and effort goes into making online learning and teaching seem effortless.
If you weren’t trained in how to teach online you might not have heard about frameworks such as the Community of Inquiry model, proposed by Garrison, Anderson, and Archer more than two decades ago. Although it is not perfect, this model offers us a framework to understand online learning though three overlapping “presences” that make up an educational experience. The social presence has to do with humans’ connections to one another in the learning environment. Connected to this is cognitive presence, where learning is stimulating and challenging. Overlapping with both of these is teaching presence, where the educator is actively engaged with learners guiding them through their learning with meaningful content that is carefully selected, setting the stage for and supporting discourse that promotes learning and setting a climate for respectful interactions. When an online learning experience includes a vibrant social presence, that challenges learners to be cognitively present and pay attention and the experience is guided by a dedicated educator who provides teaching presence, online learning can be a powerful educational experience.

But if all you know about online learning is what you have seen during the pandemic, your experience might not have been anywhere close to optimal.

Let’s turn our attention away from online learning for a moment and think about academic integrity.
Academic Misconduct: Pre-COVID 19

We know from decades of research prior to the pandemic that there are a variety of individual and contextual factors that can affect academic misconduct.

Figure 8

Slide 8: Factors Affecting Academic Misconduct (Some Highlights)

<table>
<thead>
<tr>
<th>Individual</th>
<th>Contextual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maturity level</td>
<td>Pressure to perform</td>
</tr>
<tr>
<td>Stress levels</td>
<td>Competitive learning environment</td>
</tr>
<tr>
<td>Unsure of expectations</td>
<td>Instructional expectations unclear</td>
</tr>
<tr>
<td>Personality</td>
<td>Perception of peers</td>
</tr>
<tr>
<td>Self-regulation / self-control</td>
<td>Instructor attitudes</td>
</tr>
</tbody>
</table>

Among the individual factors are a person’s maturity level, with more mature students being less likely to engage in misconduct. We know that during periods of peak stress that people may make poorer decisions leading to misconduct. We know that if people are unsure what is expected of them, they may make a misstep, and that personality, self-efficacy, and self-regulation play a role, along with associated skills such as time management.

Contextual factors include pressure to perform. Parents and caregivers who punish children for poor academic performance, including withholding love and affection unless the student achieves high grades can drive the students to misconduct in order to get the high grades that will result in parental or familial approval. We know that competitive learning environments can lead to a “cheat to compete” approach in which students may feel the need to do whatever is necessary to succeed. Teachers who do not communicate expectations clearly to students can end up being accessories to misconduct when students engage in accidental plagiarism, for example. We also know that if students believe their peers are cheating they themselves are more likely to engage in misconduct. Finally, we know that when teachers care about ethical decision-making and integrity and talk with their students about it, then students are more likely to make better decisions. None of this is new and you are no doubt already familiar with the research I’ve summarized here. Of course, there are other factors and these are just some highlights.
Most of this research, however, was conducted in face-to-face learning environments. What does the research say about academic integrity in online environments? Well, if you listen to the media, the jury of public opinion seems hell bent on insisting that there is more misconduct in online courses, but when we look closely at the research, we can see that the evidence is quite inconclusive on this point.
Yes, there have been studies that have shown there is more misconduct in online environments, but there are an equal number if not more studies that have compared the same or similar courses offered in online and face-to-face contexts that have shown consistently that there has been less misconduct in online versions of these courses. However, these studies have some things in common. In every case, students had a choice about their mode of learning and chose the online option for themselves. Also, students enrolled in the online versions of courses were typically more mature than their on campus peers.

To highlight one example, in the Kidwell and Kent (2008) study, 78% of face-to-face students self-reported to have engaged in cheating behaviors at least once; while only 35% of their online peers self-reported similar behaviors; however, there was a significant difference in the average age of students in both groups. There was, on average, more than 13 years separating the online and face-to-face students. The average age of the online students was 35.8 years, compared with an average age of 22.4 years of the face-to-face students.

So, as you can see, those individual and contextual factors play a role in both face-to-face and online environments.

In addition, there are studies that showed no difference in rates of academic misconduct among online versus face-to-face students, or were inconclusive on the matter. So you can see that overall, the results have been mixed and we cannot say with any certainty that the online environment itself is responsible for increases in misconduct. But there are some things we can learn from this.
We know that even peer-reviewed studies vary greatly in quality. We must understand what counts as quality in research. Examining aspects of research such as sample size, methodology, reliability and validity testing, as well as credibility and trustworthiness are important. It is important to resist the temptation to take the results of any single study as being universally applicable, but instead look at the results of multiple studies conducted over time. In addition, we must recognize that not all researchers are ideologically agnostic and some research is conducted with the idea of proving a conclusion that has already been reached before the study began. We must be attentive to the possibility of confirmation bias and other kinds of bias in research.

As students, practitioners, researchers and decision-makers, our job is to understand the debates in the field, to know what research has been conducted and to know what counts as quality in research.
I’d like to tell you about a project we did at the University of Calgary prior to the pandemic related to academic integrity and online learning.

Figure 12

Slide 12: Our Project: Academic Integrity Online – Developing Support Mechanisms for Online Graduate Students to Understand Plagiarism - Context

I mentioned that I work in a school of education with over 900 graduate students in blended and online programs. Together with some colleagues, I identified that those students were at a disadvantage compared with our on-campus students, as all of our academic integrity supports were on campus. We do not have a campus-wide academic integrity tutorial and even though our school of education is recognized as being a leader for online learning, we had completely ignored providing any kind of academic integrity supports to almost 1000 of our students studying in blended and online courses.
Our project: Academic integrity online: Developing support mechanisms for online graduate students to understand plagiarism

- Funded through a University of Calgary Teaching and Learning Grant (2017)
- Goal: To improve access to academic integrity education for online and blended students
- Our work followed in the footsteps of Bernstein & Bass (2005) who “wanted to discover what we needed to know about the relationship between teaching and learning to make intelligent decisions about the relationship of technology to learning” (p. 38).

This is where advocacy meets education meets research. We applied for and were awarded an internal teaching and learning grant to build an academic integrity tutorial for our online students and to research how well it worked. Our goal was to improve access to academic integrity education for online and blended students.

Our work followed in the footsteps of Bernstein & Bass (2005) who “wanted to discover what we needed to know about the relationship between teaching and learning to make intelligent decisions about the relationship of technology to learning” (p. 38).
We developed our project using McKenney and Reeves’s three stage model for design-based research (DBR), starting with exploration, followed by design and development, then onto evaluation and reflection.
We started with a scan of what resources already existed within the university, including interviewing everyone on campus whose work included academic integrity education and support for students. We then repeated the process by conducting a scan of other universities, primarily in our own country to find out what we could learn from others’ work in this area. Then, we invited internal stakeholders to an event to offer their ideas on how we should approach the development of our online tutorial. The photo in the slide shows a sticky-note activity we conducted with our on-campus stakeholders.
We then moved into the design and development phase. We built the tutorial within our existing learning management system (LMS) as a stand-alone, self-paced tutorial that students could take on their own time. The topics were specific to the field of education, such as a module on APA referencing and citation.
We then recruited students to take the tutorial and provide us with feedback about their experience. We had 987 graduate students registered in our online and blended programs that year. As per permissions granted by our research ethics board, participation in the research was voluntary. We are not permitted to make participation in research mandatory for any student. We used seven different methods to recruit students to our study.

1. announcement invitations at grad student orientations;
2. notices in e-newsletters for grad students;
3. bookmarks with tutorial info given out at events;
4. faculty sharing information about the tutorial in classes;
5. an article in the university-wide daily e-newsletter;
6. an invitation shared with the graduate students’ association in education, who then sent it on to their members; and
7. a web page with information about the project posted on the faculty’s office of teaching and learning website.

Voluntary participation \((n = 21 \text{ or } 2.1\%)\)
Findings and Discussion

Student feedback:
- Most reported an increase in skill development (e.g., APA skills, paraphrasing).
- Students noted that instructors were inconsistent in discussing academic integrity topics such as plagiarism, guidelines on group work and collaboration, and citations.
- Students wanted to talk to someone and ask questions not just have a one-way transmission model of academic integrity education.

Community of Inquiry

Image source: https://coi.athabascau.ca/coi-model/

Despite these efforts, we were only able to recruit 21 students (2.1%) to take part in our research. We collected the data anyway, using pre-and post-test surveys that included Likert scale questions and open-ended questions. Students told us that they felt they had improved skills related to academic integrity such as citing and referencing. They also told us that their course instructors were inconsistent in the ways in which they talked about academic integrity in class. Some instructors were open and approachable, while others never mentioned the topic. Interestingly, students told us they wanted to be able to talk to someone about academic integrity, and that the self-paced tutorial felt impersonal.

We realized that we had not followed the Community of Inquiry model. We had created a tutorial focused on cognitive presence, but without paying attention to social or teaching presence.
Figure 19

Slide 19: Key Project Takeaways

Key project takeaways

- Students needed time to learn and reflect on the content.
- Students craved interactivity, not one-way transmission of content.
- Need for an institutional commitment of resources to support academic integrity in online environments.
- A “set it and forget it” model for academic integrity education does not work.
- Students wanted to be part of a learning community, not learn in isolation.

In other words, despite being a school of education known for excellence in online learning, when it had come to developing an academic integrity tutorial we left out two of the three presences that we know make for an optimal online learning experience for our students. Our students let us know that they needed time to process what they were learning and to practice skills such as citing and referencing. They wanted to be able to talk with someone not only about skills, but also about many of the grey areas of academic integrity. This of course, would have cost the university a lot more money and that level of resource commitment was not available. The key takeaway for us was that a “set it and forget it” model of academic integrity education is not effective. Our students wanted to be part of a learning community that included their peers and teachers.
We can relate these findings to emergency remote learning during COVID-19. We know that our learning communities have been disrupted during the pandemic.

**Slide 20: Academic Integrity Online – During COVID-19**

![Academic Integrity Online: During COVID-19](image)

- Rapid changes to online learning and teaching - learning communities disrupted
- Increases in reports of academic misconduct globally
- Normal online behaviour regarded as deviance or academic misconduct
- Commercial enterprises adapt and increase business


We have seen increases in reports of misconduct across the globe. This was complicated, in particular, by students sharing in online environments in ways they would not have done in their face-to-face classrooms or exam halls. Sharing in online environments is normal... We share photos, status updates, and various kinds of files. Suddenly, what is normal behaviour in online environments was regarded as misconduct in online learning environments. As we have heard during various sessions in the conference, even members of our academic community are trying to reconcile how sharing can be done ethically in online learning contexts.

While tens of thousands of teachers and millions of learners worldwide were scrambling to figure out emergency remote teaching and learning, predatory companies, in particular contract cheating and file-sharing companies have been capitalizing on the chaos.

So we must ask ourselves, what has happened during the period of COVID-19 that has changed how and why breaches of academic integrity have escalated during this time. To do that, let’s go back to the factors affecting academic misconduct and look at them through the lens of COVID-19.
I contend that in addition to looking at individual and contextual factors, we can layer on an additional set of compounding and complex factors that point to shifts in society in general.

With regards to the individual factors, we now have students of all ages learning online, in many cases, without any choice in the matter. In terms of stress, well that has been through the roof for everyone during the pandemic. As students moved into emergency remote learning for the first time we know that they were unsure of what was expected of them because everything was new. We also know that if students struggled with self-regulation and things like time management when they were in a classroom environment, that didn’t get any better when they shifted to emergency remote learning.

In terms of the contextual factors, those students who were under pressure to perform before COVID-19 still had to achieve during the global pandemic. Although some schools temporarily adapted their grading systems during COVID, students themselves may still have been under pressure from parents to achieve no matter what it took to do so. Competitive learning environments that continued during the pandemic may have worsened when instructors who were not trained to teach online were themselves unclear about how to teach or assess students under these conditions.

We have anecdotal evidence to show that students and instructors believed there was more cheating in online classes and I suspect this became a self-actualized belief. We know that some teachers worked hard to maintain integrity no matter what, while others gave up as they were overwhelmed during the pandemic.
In addition, we know that students’ lives are inherently more complex today than they have ever been in decades past. More students have multiple and competing priorities including jobs and family caregiving responsibilities. This has been exacerbated during COVID-19, as students have been helping their families to cope with the pandemic in a variety of ways including taking on more paid work to help out the family, caring for family members who are ill or caring for younger members of the family who were healthy, but whose parents were ill or who needed to work different or longer hours during the pandemic. We know that the level of complexity in our daily lives, including our work and caregiving responsibilities has changed in ways none of us anticipated, as we continue to live through extended period of chaos, rapid pivots, and uncertainty. Those with high tolerance levels for uncertainty and ambiguity have no doubt coped better than those who those who become more anxious and unsettled when they do not know what to expect next.

We now find ourselves in a position where many schools and educational systems are contemplating continuing with some form of online or blended learning going forward with terms such as “hybrid learning”, “high flex courses” (also called “hyflex learning”) and “post-pandemic education” being used more often. It is reasonable to anticipate that multiple modes of learning that involve both face-to-face and online experiences might continue in some form, particularly as schools and governments deal with the economic fallout of the pandemic and look for even more ways to save money.

We can see how multiple risk factors come into play when it comes to academic misconduct. One thing is for sure, we can see that there is little to no evidence to substantiate the myth that the online environment itself is to blame for increases in breaches of ethics and integrity. People do not simply lose the ability to act ethically because they are online; however, more effort is required to develop and
cultivate trust and community online. We also know that creating enjoyable and high quality online experiences requires technology resources such as hardware, software and even infrastructure. It requires time to plan for what we would like to see happen and also to plan for contingencies. It requires effort, including uninterrupted time to concentrate, which is a luxury that has been limited for many of us during the pandemic.

But it is not impossible. Take this conference for example. ECAIP 2021 has been a tremendous success due to the time, effort, and commitment of everyone involved. So let’s turn our attention to the conference and what we have learned this week.

**Our Academic Integrity Community**

This word cloud offers a visual representation of the words and ideas that have emerged during this year’s conference. I generated this word cloud by collecting the titles of all the conference sessions including the pre-conferences, keynotes, presentations, workshops and Pecha Kucha sessions into a document. I then input the titles into NVivo, which is a qualitative data analysis software, indicating words to exclude from the word cloud such as “and”, “the”, and so on. The larger the word appears in the cloud, the more often it was used in titles. Of course, the words “academic” and “integrity” are most prominent, as we would expect.

**Figure 23**

Slide 23: Highlights from the European Conference on Academic Integrity and Plagiarism (ECAIP) 2021

After that, you may find your eyes drawn to the words “students”, “research”, and “university” for example. The conference sessions included a rich diversity of topics from across many disciplines, with participants attending from many countries. I for one, was excited to see many names on the programs
of people whom I did not know, in addition to those I do. I extend a special shoutout to those presenting at an academic integrity conference for the first time. We welcome you into our community and appreciate the time and expertise you have shared with us during the conference.

There, is a caveat to this, however.

In some of my previous research on academic integrity in my own country, I found that sometimes people publish one paper or present one conference on academic integrity and are never heard from again (see Eaton & Edino, 2018). The reasons they do not continue with the work are unclear, but if you are first-timer or a relative newcomer, I encourage you not to view the conference as merely an event, but rather as a gathering of a global community with members dedicated to ethics and integrity over the long term.

**Figure 24**

Slide 24: Characteristics of Our Academic Integrity Community

Our work is transdisciplinary and spans multiple boundaries including geographical borders and professional classifications, among others.
Let’s look at this transdisciplinary nature of academic work for a minute.

**Figure 25**

Slide 25: Academic Integrity Work as Transdisciplinary

There are no universally accepted definitions of terms such as inter-disciplinary, multi-disciplinary or transdisciplinary. I draw from Lawrence’s (2010) work in my understanding of transdisciplinary scholarship, which he defines as addressing complex problems from diverse and heterogeneous domains which cannot be solved by any one group alone. We must work together across academic disciplines and even across multiple stakeholder groups that includes researchers, educators, professionals, policy-makers, students, and others. We need the cross-fertilization of knowledge and experiences from diverse groups as we draw from different methodologies and theories to develop action-oriented solutions.

We transgress and transcend the boundaries of the traditions of the disciplines in which have been trained to work with others who have been trained and think in different ways.
This can be uncomfortable. I can attest to this personally, because a couple of the projects I’ve co-presented on during this conference have been transdisciplinary in nature. I’ll highlight one example. In 2020, I partnered with colleagues from our faculty of science to collaborate on a data-mining project to help address incidences of misconduct in large, STEM courses with upwards of 800 students. Our project team consisted of five of us, from the fields of mathematics and statistics, physics and astronomy, biology, and education. This kind of collaboration was new for me I will be honest and say that there were moments I found myself simultaneously impressed and intimidated working with colleagues whose other research involves collaborations with the Canadian Space Agency and NASA. The statistical data-mining and analytics techniques they used were completely foreign to me as a scholar trained in literary theory and qualitative research methods. Conversely, they felt a little lost when it came to understanding academic integrity as an area of scholarship, as they were unfamiliar with the research literature and the development of our field.

Our project was conceptualized and undertaken entirely during COVID-19, and we worked via e-mail and Zoom, with children and pets popping into our research meetings, an experience that is now common for all of us. In this case, what prevented us from working together in person was not geographical borders, but public health regulations that obliged us to work from home. As a result, even though we are all from the same university and live in the same city, I have yet to meet three of my collaborators in person, something I look forward to doing when we return to campus.

We worked together as colleagues, creating a level playing field where any of us could ask any questions in a safe and collaborative working relationship, acknowledging and respecting that none of us had any of the answers, but that we could do more by working together than any of us could alone. We quickly
learned that to engage in transdisciplinary research, we needed to trust one another, acknowledge our expertise and limitations, engage in discussions with humility and be tolerant and compassionate. I expect our experience is not unique and you likely have some stories of your own about collaborating with colleagues during the pandemic. There is no doubt that COVID-19 has simultaneously put up barriers and opened up new possibilities, including the opportunity to engage in transdisciplinary inquiry to create action-oriented ways to uphold academic integrity.

Figure 27

Slide 27: Some Transdisciplinary Project I’m Working On

<table>
<thead>
<tr>
<th>Project</th>
<th>Academic disciplinary experts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data mining of online quiz log files: Creation of automated tools for identification of possible academic misconduct (Spanswick et al.)</td>
<td>Mathematics and statistics; Physics and astronomy; Biology; Education</td>
</tr>
<tr>
<td>Fake degrees and credential fraud (including text mining and blockchain research) (Carmichael &amp; Eaton)</td>
<td>Engineering and Education</td>
</tr>
<tr>
<td>Impact of GPT-3 on academic integrity (Mindzak et al.)</td>
<td>Applied linguistics (NLP) and Education</td>
</tr>
<tr>
<td>Agent-based modelling and academic integrity (Brennan et al.)</td>
<td>Engineering and Education</td>
</tr>
<tr>
<td>Contract cheating in Canada (Eaton et al.)</td>
<td>Education; Law; Criminal justice</td>
</tr>
</tbody>
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Here are some new projects I’ve been working on since the pandemic started. There’s the data mining one I just described. There’s the other project I presented on during the conference with Jamie Carmichael relating to fake degrees and credential fraud. I’ve got another project with some applied linguists looking at Generative Pre-trained Transformer 3, and we are looking at the ways machine learning and artificial intelligence are affecting writing and our notions of authorship. I’ve been working with another colleague in engineering at my university who is doing some agent-based modelling around academic misconduct. Finally, I’m partnering with colleagues in the fields of law and criminal justice to advance what know and what we can do about contract cheating in Canada. All of these projects are transdisciplinary in nature. I can’t do the work without my colleagues and they can’t do the work without me. Or perhaps more accurately, we can work better when we work together.

I encourage you to work on projects that take you out of your comfort zone, too. We can’t just keep researching what we’ve always researched. It’s time to push our boundaries, challenge dominant discourses and move our work into new areas.
There is no place for intellectual elitism in academic integrity work. Others have pointed out that academic integrity is a field of scholarship that is less mature than other areas of educational research, such as assessment, for example (Macfarlane & Zhang, 2014). Areas of professional practice have also continued to evolve. We need evidence-informed practice and practice-informed scholarship. The field has developed significantly over the past fifteen years or so, thanks in part to the efforts of people like Tracey Bretag, whose approach was inclusive, appreciative, and courageously tolerant. People like Tracey created the community of which we are now the caretakers.

As we move forward with our academic integrity work, it is safe to say that the online environment is here to stay. This includes teaching, learning, researching, and so many other ways that we connect and collaborate with one another.

As we have heard throughout different sessions in the conference, technology will continue to advance and in doing so, challenge us to think about the intersection between ethics, integrity, and education in new ways. If you did not attend the sessions that addressed topics such as blockchain, machine learning, artificial intelligence and surveillance technologies, I encourage you to watch the recordings if they are available, because these are emerging areas that urgently demand our attention as they will bring increasing levels of complexity to our work in the coming years.

I hope by now you are convinced that we must disrupt and challenge traditional notions of academic integrity as being related only to matters of student conduct. Integrity and ethics extend to teaching, learning, research, administration, leadership, and every aspect of education and science, including...
decolonization. We cannot have an ethical future if we do not attempt to right the wrongs of an unethical past.

We, the academic integrity community, will continue to lead this work into the future and we have a big responsibility to ensure that ethics and integrity are top of mind not only today, but for generations into the future. None of us can do this work alone. We will continue to see more collaborations across countries, sectors, and disciplines. This brings both opportunities and challenges. We know that work in our field is generally underfunded and under-resourced, but there are still some who have better access to resources, funding, and support to this work than others (Eaton & Edino, 2018). We can do more and do better by “doing” together.

Call to Action

And so I conclude with a call to action.

Figure 29

Slide 29: Call to Action

Engage: This is our community. It is up to us to be its stewards and caretakers. We cannot sincerely care about integrity if we do not care about one another. Creating community means showing up regularly in whatever way we can, cultivating relationships over time, and seeking opportunities not only to work with one another but to care about one another.
Extend: COVID-19 has taught us that we can leverage technology to our advantage. Of course we look forward to the time when we can meet together in person, but we know by now it is not a case of online or in-person, but rather online and in-person. We can continue to use technology to our advantage to connect, collaborate, and care about one another. If you have not done so already, I challenge you to use technology to reach out to and connect with at least one new person from the conference. Use e-mail, Twitter, LinkedIn, or any social platform you feel comfortable using. Reach out to a presenter to let them know what you learned from their session. Reconnect with a colleague to set up a virtual tea or coffee meeting. Send an e-mail to the organizers to thank them for the hours and effort they put into preparing for this conference.

By using technology to our advantage we can extend our reach beyond our borders. Remember, when the technology is invisible, the connections – both human and technological – are the strongest. I was thinking the other day about a particular academic integrity colleague, trying to remember at which conference I last saw them. I finally figured out, I have never seen them in real life, but we have come to know one another so well using technology-mediated communication that we are genuinely connected. I have every confidence that there will be many of us who, when we see one another in person for the first time, we won’t be meeting for the first time, but rather greeting one another as old friends.

Empower: Create opportunities others. This includes those who are junior in their career, as well as students. We know that in a global community some of our colleagues may be working in difficult economic, social, and political conditions. It is important to extend invitations to those who work in developing countries, and those who may have had less opportunity to excel in their profession despite their best efforts. As a community of educational ethicists and integrity advocates, we must be attentive to equity, diversity, and inclusion in our own work. In doing so, we will continue to ensure that our academic integrity community is strong and sustainable into the future.

I close with thanks to you, my friends. You are part of my community and I am part of yours. ENAI brought us together through this beautiful conference and I know I am not alone when I express my gratitude for this wonderful opportunity to be in community with you all. I can’t wait to meet you again, in person and online.

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Communities of Integrity: ECAIP 2021 Closing Keynote


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