Editorial

Further Contemplations: Inaugural Canadian Symposium on Academic Integrity

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Abstract

This editorial shared the contemplations of three symposium participants who are also scholars and educators in the field of academic integrity: Jennie Miron, PhD, Brenda M. Stoesz, PhD, and Brandy Usick, MEd. We share our individual reflections that underscores our optimism and enthusiasm for the future of the field of academic integrity scholarship within Canada.

Keywords: academic integrity, Canada, Canadian Symposium on Academic Integrity

Opportunities to meet as a collective to transfer knowledge, share ideas, current best-practices, research, and future opportunities are just a few of the many reasons to hold a symposium focused on the topic of academic integrity. Higher educational organizations across Canada, and in fact the world, continue to be plagued with efforts that undermine the integrity and mission of post-secondary education. In April 2019, the first Canadian Symposium on Academic Integrity (2019) devoted to the topic of academic integrity was held in Calgary, Alberta, Canada and welcomed researchers, educators, and practitioners from across the country to participate in discussions about opportunities in the field of academic integrity. The following are reflections from three symposium participants who are also scholars and educators in the field of academic integrity.

Jennie Miron, PhD

As an educator in a professional course of study, the importance of acculturating students to the values of academic integrity is of paramount importance. The values of honesty, trust, fairness, respect, responsibility, and the courage (International Center for Academic Integrity, 2014) required to consistently live and demonstrate these values aligns with
many professional codes of ethics. The merit of setting expectations to these values in studies is amplified when we consider how these values are demonstrated through actions. Consider the importance of trusting in the integrity of the engineer who builds the bridge you travel on every day to work, the nurse who is caring for your critically ill loved one, the primary school teacher responsible for your child’s foundational educational experience, the researcher searching for a cure or treatment for a deadly disease, or the business analyst providing you with advice about your financial investments. These are but a few practical examples of how these values, once established in the educational setting, would influence graduates in professional and industry practice.

The symposium offered me an opportunity to learn something, reflect on what I already know, and collaborate with like-minded educators and professionals around best-practices, current research, effective teaching strategies, and challenges to academic integrity that we continue to face across the educational sector. A deeper dive into one current challenge, contract cheating, was a high point for me and provided me an opportunity to hear first-hand from international experts and researchers in the content area, like Dr. Tracey Bretag and Dr. Thomas Lancaster. Their presentations and the ensuing discussions inspired me to continue the discussions at my home educational organization and with the provincial group I belong to that is focused on promoting academic integrity across postsecondary settings in Ontario (Academic Integrity Council of Ontario, AICO, n.d.). Additionally, the opportunity to be part of a national discussion inspired my continued research efforts that aim to understand the national narrative here in Canada. While inspiration can be influenced in a number of ways, the importance of such efforts like the Canadian Symposium should be recognized for the incredible networking and learning opportunities they provide.

Brenda M. Stoesz, PhD

The Canadian Symposium on Academic Integrity provided an opportunity to learn from key experts in the field of academic integrity. Specifically, hearing from Dr. Tracey Bretag (University of South Australia) and Dr. Thomas Lancaster (Imperial College London) about their research findings on contract cheating and other work they are doing to bring awareness of academic misconduct and the damage rampant cheating is having to student learning was important for understanding the issues more deeply. Conversations with Bretag, in particular, led me to think more about the teaching and learning of academic integrity in primary and secondary education in Canada. As students graduate from high school and make plans to enter post-secondary studies, it is becoming increasingly apparent that many students have insufficient knowledge and skills in writing, citing, and studying (among other skills), and are unsure of the expectations for acting with integrity. The expectations for academic work and assessment can be dramatically different between
the two education levels. A high school principal once told me that academic integrity was not an issue for high school students and educators because students were just becoming scholars by grade 12. I argue that this way of thinking disadvantages students and does not prepare them for lifelong learning.

The motivation to officially launch the Manitoba Academic Integrity Network (MAIN) (n.d.) came when attending a session facilitated by Andrea Ridgley, Jennie Miron, and Amanda McKenzie (2019). The presenters described the history and current activity of AICO and then asked attendees to form small groups based on the province of their institutions. Attendees from Manitoba and Saskatchewan came together to discuss the initiatives we were involved in and how we could come together to work on common projects. The Manitobans around our table talked about the Academic Integrity Inter-Institutional Meeting (AIIIM) (2017) that the University of Manitoba launched in 2017 and how it had continued to be hosted by other Manitoba post-secondary institutions. We discussed the possibility of forming MAIN and how this network could support the continuation of AIIIM and be involved in spearheading provincial projects (Stoesz et al., 2020). We then shared our ideas with the larger group and attendees from British Columbia showed particular interest in attending AIIIM and learning from us as we began MAIN.

**Brandy Usick, MEd**

I have worked in the field of academic integrity for many years (see Taylor, Usick, & Paterson, 2004) and to me the Canadian Symposium on Academic Integrity was a high water mark for those who are engaged in this work as educators, practitioners, and researchers. The quantity and quality of the presentations spoke to the promise of maturity in this still young field in Canada and the representation of participants from across the globe highlighted that we as a country have something meaningful to contribute. It was quite remarkable to hear about cutting edge research being conducted in Australia and the UK and also hearing about innovative programming and inquiry at the national and regional levels. I left feeling immensely proud and very inspired by the work being done across Canada. Events like the Canadian Symposium on Academic Integrity serve to bring colleagues together who share a common purpose, to share original research as well as share novel program ideas and models, and to spark ideas that contribute to ongoing progress in the area.

My own personal contemplations on the symposium also led me to reflect on the original goals that Dr. Sarah Elaine Eaton and I had when we set out to create this open access journal. In my inaugural editorial, I highlighted the challenges we face working in this field (Usick, 2018). These challenges included working in a siloed way both within and across institutions; the lack of Canadian literature that speaks to our specific contexts; and the
persistent trend of practitioners not publishing their work. It is remarkable that in two short years how much progress we, collectively, have made in all of these areas. The work of Dr. Eaton warrants special recognition. She has been a driving force behind these successful initiatives - inaugural Canadian Symposium on Academic Integrity and the Canadian Perspectives on Academic Integrity journal and has led or collaborated on several original research projects that has furthered the research agenda on academic integrity within Canada.

She was recently formally recognized for her achievements by being selected as the 2020 recipient of the Canadian Society for the Study of Higher Education (CSSHE)'s Research and Scholarship Award. She was honoured for her contributions to research and scholarship about academic integrity in Canadian higher education. This is a national-level award conferred once a year on a mid-career scholar who “has a significant publication record, and an established reputation for publishing research on aspects of Canadian higher education” (CSSHE, n.d.).

I am pleased that in Volume 3, Issue 1 we feature seven excellent submissions that further contribute to the Canadian literature on academic integrity and help to support the work being done by researchers and practitioner scholars across the country. In their comprehensive review of the literature on academic integrity in Canada, Eaton and Edino (2018) identified a lack of collaborative research and concluded with some key recommendations one of which is to build up research on a national scale. Many of the articles in this issue were prepared by group authors from across the county that highlights the collaborative nature of this work and speaks again to the advancement of our field.

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**Text-matching Software in Post-secondary Contexts: A Systematic Review Protocol**

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**Abstract**

This protocol outlines the methods for our systematic review on commercial text-matching software (TMS). We propose to use Joanna Briggs Institute’s (JBI) Methodology for Mixed Methods Systematic Reviews. This systematic review will provide insights into how TMS is used in post-secondary contexts, highlighting evidence relating to how well such software reduces incidences of plagiarism, and also how it can be used for educational purposes to support student learning at the undergraduate and graduate levels.

**Keywords:** academic integrity, Canada, plagiarism, plagiarism detection, systematic review, text-matching software

Systematic reviews have become an established method in medicine and health sciences to inform policy and practice decisions (Torgerson, 2003). Even though educational researchers were among the first to use systematic reviews (Torgerson, 2003), their use in the field of education has remained limited when compared to their proliferation in health and medical sciences.

Writing and publishing a protocol is an established first step in the systematic review method (Newman & Gough, 2020; Torgerson, 2003). Systematic reviews differ from narrative literature reviews in that their methods are explicit and “open to scrutiny” (Torgerson, 2003, p. 6). Having the protocol itself peer-reviewed and published (as in this case) helps to establish the overall credibility of the systematic review (Torgerson, 2003).

The objectives of the protocol, as established in the methodological literature, are to establish: (a) the conceptual and empirical background for the review; (b) the research questions; (c) and the objectives and scope of the review, including the methods for
screening, searching, extracting data, and synthesizing the results (Torgerson, 2003). This protocol follows these objectives.

**Background**

Post-secondary learning is more complex than ever before; so too, are skills related to citing, referencing, information literacy, research, and writing. Plagiarism continues to be a major issue in post-secondary education (Edwards et al., 2019; Gasparyan et al., 2017). In recent decades, researchers and educators have called for a move away from punitive approaches to address plagiarism and other forms of academic misconduct (Bertram Gallant, 2008). A marked epistemological shift occurred in research and educational contexts when McCabe popularized the term “academic integrity,” reframing the behavioural focus on academic misconduct to a values-based focus on integrity (McCabe, 1993, 2005; McCabe et al., 2001; McCabe & Pavela, 2004). This shift in thinking corresponded with an intensification of research about breaches of academic integrity, although the field remains under-developed in comparison with other areas of educational research (Eaton & Edino, 2018; Macfarlane et al., 2014).

A particular topic of debate among academic integrity researchers has included the impact of the Internet on plagiarism. Some scholars assert there has been a cause-and-effect relationship between the development of digital technologies and an increase in copy-and-paste practices, leading to more plagiarism (Batane, 2010; Ison, 2015; McMurtry, 2001; Oliphant, 2002; Stephens et al., 2007). Others argue that plagiarism has existed for centuries and there is little empirical evidence to support the idea that the Internet itself is responsible for increases in academic misconduct (Moore Howard & Davies, 2009; Panning Davies & Moore Howard, 2016). Regardless of whether a causal link can be empirically proven, ample evidence exists to suggest a correlation between evolutions in technology and the ease of copying and pasting text digitally from one source to another (Baruchson-Arbib & Yaari, 2004; Edwards et al., 2019; Sayed & Lento, 2015). The emergence of the copy-and-paste culture, which has propagated an online sharing culture, has also resulted in more unintentional plagiarism, as the gap widens between socially acceptable sharing practices among friends and customary source attribution practices in post-secondary contexts (Blum, 2009, 2016).

The emergence of text-matching software (TMS) (also called “plagiarism detection”, “anti-plagiarism”, or “plagiarism prevention” software) has coincided with advances in learning technologies, contributing to scholarly debates in the field. Some have suggested such software provides an easy and effective means to detect and deter plagiarism (Batane, 2010; Braumoeller & Gaines, 2001; Culwin & Lancaster, 2001; Strawczynski, 2004). Others have pointed out the potential for TMS to be used as a formative assessment tool to provide
students with feedback about how to improve their writing and offer opportunities for academic integrity education (Bischoff & Ábrego, 2011; Buckley & Cowap, 2013; Edwards et al., 2019; Halgamuge, 2017; Kloda & Nicholson, 2005; Zaza & McKenzie, 2018). However, such software is not without limitations. TMS can be costly and the results can be misleading, including false positives and false negatives (Weber-Wulff, 2016). In addition, there has been robust debate about the complexities of TMS, including moral and legal implications, particularly with regards to intellectual property and copyright, privacy concerns, and the erroneous assumption that such software relieves educators entirely from the complicated task of detecting plagiarism themselves (Foster, 2002; Moore Howard, 2013; Strawczynski, 2004; Stommel, 2015; Zaza & McKenzie, 2018).

Text-matching software can be classified in a number of different ways. One classification includes open source or open architecture software (Butakov & Shcherbinin, 2009; Culwin & Lancaster, 2001). These are often developed by research groups or partnerships, usually specializing in computer science, with an interest in sharing openly accessible tools with fellow scholars and educators.

More recent innovations include the Trust-Based Authentication & Authorship e-Assessment Analysis (TeSLA) tool, an EU-funded initiative developed by a consortium of 18 partners (Baró-Solé et al., 2018; Edwards et al., 2019). The TeSLA tool was designed to improve e-assessment, with specific capabilities relating to authentication and authorship confirmation. While the TeSLA innovation may have the potential to be a disruptive technology for academic integrity, as yet it is immature when compared to more established tools (Edwards et al., 2019).

Another category includes the large-scale commercially available products, which can sometimes be integrated with institutional learning management systems (LMS). Such products include, but are not limited to, Turnitin, iThenticate, Copyscape, CopyCatch, SafeAssign, and Urkund (Culwin & Lancaster, 2001; Edwards et al., 2019). It is this final category that we have chosen to focus on. Despite the increased use of commercially available TMS, there seems to be little evidence-based guidance available for institutions, administrators, or individual educators considering its adoption about how to make evidence-informed decisions about the potential value and limitations of the available tools.

**Previous systematic reviews**

In this section we present a brief overview of other recent systematic reviews in the field, explaining how ours differs from them.
Recently, Foltýnek et al. (2019) published a systematic literature review focusing on academic plagiarism detection. Their review sought to critically appraise “the capabilities of computational methods to detect plagiarism in academic documents” and to identify “current research trends and research gaps” (p. 111). This study is noteworthy as it provides a comprehensive overview of the mechanics of and computational possibilities for academic plagiarism detection. The authors determined that there are different computational detection methods for different forms of plagiarism.

Our proposed systematic review does not focus on the how of detecting plagiarism; rather, we are approaching our review from a teaching and learning framework, and are interested in uncovering ways in which TMS is used in post-secondary contexts to reduce incidences of plagiarism and its effectiveness as an educational intervention. We will not be reviewing the literature for examples of computational methods such as machine learning. Rather, we want to explore educational interventions that use TMS to teach students about their academic integrity responsibilities. The Foltýnek et al. (2019) review “excluded papers addressing policy and educational issues related to plagiarism detection to sharpen the focus of our review on computational detection methods” (p. 112). Our systematic review will address the educational issues, with an aim to inform policy.

Other recent reviews (Awasthi, 2019; Macfarlane et al., 2014) have investigated academic integrity. Macfarlane et al. (2014) discuss the academic integrity research within three themes: teaching, research, and service. The researchers determined that a wide range of research methodologies are utilized to study academic integrity, including both quantitative and qualitative methods. Questionnaires/surveys and documentary analysis were the most common research approaches. As these researchers conducted a literature review, rather than a systematic review, they did not critically appraise each included study. Further, their review encompassed all aspects of academic integrity, and did not specifically address the use of TMS as an educational intervention for academic integrity. Our proposed systematic review addresses this gap.

Awasthi (2019) stated that she conducted a systematic review and included anti-plagiarism software in her analysis. However, the search was very limited and did not include all possible variations of keywords. Specifically, she only searched the keywords “academic misconduct” and “plagiarism”. Further, only one database, Scopus, was searched. Therefore, we expect that her review missed relevant studies. As well, the researcher noted that 408 articles were “considered relevant for the study” (p. 95). However, only a small number of studies are discussed in the review; the reference list only has 52 citations, not 408 as indicated by the number of relevant studies. As well, the author did not critically appraise the studies included in her review. Our proposed systematic review will be comprehensive by searching 15 different databases with an exhaustive search, designed by
an expert librarian, that incorporates a wide range of relevant keywords and subject headings. We will also critically appraise the literature.

Rationale

Knowledge synthesis is an umbrella term for a variety of review styles and approaches specifically focused on the systematic collection, summary, assessment, and synthesis of all available evidence on a specific research topic. Knowledge synthesis approaches are quite distinct from literature reviews in that the review styles subsumed under the heading of knowledge synthesis are a unique set of research methodologies where the evidence under investigation is composed of an analysis of ongoing work on the topic of interest. In other words, the data being collected for analysis consists of published studies and conference proceedings, as well as various forms of documentation and grey literature. The most comprehensive manifestation of the knowledge synthesis methodology is the systematic review because, as the name suggests, a systematic review aims at a robustly structured, systematic, and transparent approach to data collection, evaluation, and synthesis. A salient part of the long and deliberate process that ensures transparency, replicability, and accountability is the creation of a protocol, which not only serves as a guide for the researchers, as a regular research proposal would, but is also peer reviewed and often published. “The review protocol sets out the methods to be used in the review. Decisions about the review question, inclusion criteria, search strategy, study selection, data extraction, quality assessment, data synthesis and plans for dissemination” are included (University of York, 2009, p. 6). This feature distinguishes a protocol from a normal proposal; the purpose of publishing a protocol is both to promulgate the research being initiated as widely as possible, to ensure transparency, and avoid bias. “For similar reasons as have been proposed for randomized trials, systematic reviews should be registered and have published protocols” (McKenzie et al., 2016, p. 635) since “[a]n open registry of reviews captured at the protocol stage would facilitate good practice in systematic reviews by providing transparency of the review process and outcomes” (Booth et al., 2011, p. 108). Thus, the publication of the protocol is an integral component of the provision of transparency and future replicability of the proposed review.

The purpose of this systematic review is to understand how commercially available TMS is used in post-secondary contexts.

Objectives

Research Questions
The specific question we will address is: How is text-matching software used in post-secondary contexts?

- Sub-RQ1: What is the effectiveness of such software in reducing incidences of plagiarism?
- Sub-RQ2: What is the effectiveness of such software as an educational intervention?

**Methods**

A number of terms mentioned in this protocol are explained in the glossary at the end of the article.

**Design**

Our review will be guided by the Joanna Briggs Institute’s (2014a) (JBI) Methodology for Mixed Methods Systematic Reviews. This framework integrates both quantitative and qualitative research into a single systematic review. We recognize that both the published literature and grey literature in the area of TMS will include different research methods as well as theoretical and expert opinion papers. Pluye and Hong (2014) suggest “the main rationale for conducting a mixed studies review is to better understand complex interventions, programs, and phenomena” (p. 36). Further, research focused on TMS is still emerging, and different study perspectives need to be captured in our review. Therefore, “by including diverse forms of evidence from different types of research, mixed methods reviews attempt to maximize findings – and the ability of those findings to inform policy and practice” (JBI, 2014a, p. 5).

JBI’s framework for mixed method reviews suggests that synthesis of data from qualitative and quantitative studies be conducted separately in a “segregated approach” (JBI, 2014a, p. 19) and then aggregated. However, we will take an adapted approach, as we do not expect the quantitative data to support a meta-analysis. Study selection will be conducted simultaneously for all study designs. We will then separately appraise the evidence from qualitative, quantitative, and textual/theoretical studies using appropriate critical appraisal tools for each study design. Data synthesis will be guided by Popay et al.’s (2006) narrative approach. We ultimately aim to provide a holistic and comprehensive analysis of the use of TMS in the post-secondary environment. Our systematic review protocol was developed in light of the PRISMA-Protocols checklist (Shamseer et al., 2015).
Eligibility Criteria

Through this review, we seek to understand the use of text-matching software in post-secondary contexts. We will use the PICo mnemonic to frame our research question and inclusion/exclusion criteria. This mnemonic “identifies the key aspects Population, the phenomena of Interest, and the Context” (JBI, 2014b, p. 12, emphasis added).

Population

The population under study are undergraduate and graduate students. This is because the research team is concerned with matters relating to academic integrity in post-secondary contexts. We made a decision to limit the scope of our work to this population.

Phenomenon of Interest

Studies will be included if they explore commercially available TMS. For the purpose of our review, we situate TMS as an intervention used to help students avoid plagiarism and learn how to write more effectively and help faculty identify possible instances of plagiarism in student work and provide formative feedback to students. We will also include studies that investigate TMS from a legal or theoretical perspective when situated within a student context. Studies that investigate the use of TMS for identifying or reducing plagiarism amongst faculty/instructors/other academics will not be included in our review; specifically, the intervention, TMS, must be focused on students to be included. Further, proprietary, open access software, or text-matching programs that are not commercially available will be excluded.

Context

Studies will be included in our review if they involve stakeholder groups in a post-secondary context. We adopted the definition of “post-secondary” as being inclusive of “universities, community college, trade and vocational training centres” (Statistics Canada, 2018). Post-secondary stakeholder groups include faculty, students (both undergraduate and graduate), instructors, researchers, student support staff, librarians, and others who are directly involved in supporting or guiding student success and academic work.

Outcomes

The PICo framework does not always identify outcomes. This review will investigate all outcomes from the included literature. We expect two possible outcomes will be present, but anticipate other outcomes will be identified.
1. Reduction in the number of instances of plagiarism found in students’ academic work as a result of using TMS.

2. Increased awareness and understanding among students and faculty about what plagiarism is and how to avoid it, as well as how to improve academic writing skills.

Study Design

The review will include all study designs and types: qualitative, quantitative, mixed methods, and theoretical or opinion. There will be no restrictions on language, date of publication, or geographic location. We will not include popular media, blogs or social media postings, how-to articles, product information or advertising, and text-matching software used in the production of a source (i.e., if a manuscript was run through the software). Conference presentations will only be included if a full-text version is available (i.e., not just an abstract).

Information Sources

As our review is focused on discovering and exploring the use of commercially available TMS in post-secondary contexts, both subject specific and interdisciplinary databases will be searched in order to ensure that the search is comprehensive (Table 1). Grey literature will also be searched (Table 1).

Table 1. Information Sources

<table>
<thead>
<tr>
<th>Published Literature</th>
<th>Subject Specific Databases</th>
<th>Interdisciplinary Databases</th>
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<tbody>
<tr>
<td>ABI / Business Premium Collection</td>
<td>Academic Search Complete</td>
<td></td>
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<tr>
<td>(Business)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Source Complete (Business)</td>
<td>International Bibliography of the Social Sciences (IBSS)</td>
<td></td>
</tr>
<tr>
<td>CINAHL Plus with Full Text (Nursing)</td>
<td>Scopus</td>
<td></td>
</tr>
<tr>
<td>CiteSeerX (Computing Science)</td>
<td>Web of Science</td>
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</table>
Compendex (Engineering)
Education Research Complete (Education)
ERIC (Education)
Library and Information Science Abstracts (Library Science)
Library & Information Science Source (Library Science)
MEDLINE (Medicine and Health Care)
PsycInfo (Psychology)

**Grey Literature**

<table>
<thead>
<tr>
<th>Conferences</th>
<th>Other Sources</th>
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<tbody>
<tr>
<td>Asia Pacific Forum on Educational Integrity (APFEI)</td>
<td>ProQuest Dissertations &amp; Theses Global</td>
</tr>
<tr>
<td>International Center for Academic Integrity (ICAI)</td>
<td>Ethos e-theses online service (UK)</td>
</tr>
<tr>
<td>International Society for the Scholarship of Teaching and Learning (ISSOTL)</td>
<td>Open-Grey</td>
</tr>
<tr>
<td>Plagiarism Across Europe and Beyond</td>
<td>OAIster</td>
</tr>
</tbody>
</table>

**Search Strategy**

A preliminary scan indicated that the majority of the literature is situated within post-secondary contexts. Therefore, in order to maximize results, the search strategy will include only the Phenomenon of Interest: “text-matching software”. The search will be developed in ERIC, an educational database, and then adapted for other databases. Both keywords and subject headings will be used for the concept. Keywords will be constant across databases and subject headings will be responsive to the controlled vocabulary of each database. Table 2 outlines the proposed search strategy, developed by two librarians.
(KAH, BL). Snowball searching will also be used to ensure exhaustiveness of the data collection. Specifically, reference lists and “cited bys” of included studies will be searched.
Table 2. Provisional Search Strategy (ERIC)

<table>
<thead>
<tr>
<th>#</th>
<th>Query</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>S16</td>
<td>S8 OR S15</td>
<td>495</td>
</tr>
<tr>
<td>S15</td>
<td>S9 OR S10 OR S11 OR S12 OR S13 OR S14</td>
<td>366</td>
</tr>
<tr>
<td>S14</td>
<td>(Turnitin* or iThenticate or SafeAssign or CrossCheck or Copyscape or CopyCatch or Urkund)</td>
<td>83</td>
</tr>
<tr>
<td>S13</td>
<td>&quot;text match*&quot; N5 (software or tool* or program* or computer* or online or internet or product*)</td>
<td>11</td>
</tr>
<tr>
<td>S12</td>
<td>anti-plagiarism N3 (software or tool* or program* or computer* or online or internet or product*)</td>
<td>8</td>
</tr>
<tr>
<td>S11</td>
<td>anti-plagiarism N3 (software or tool* or program* or computer* or online or internet or product*)</td>
<td>13</td>
</tr>
<tr>
<td>S10</td>
<td>(plagiarism or cheating) N3 (software or tool* or program* or computer* or online or internet or product*)</td>
<td>226</td>
</tr>
<tr>
<td>S9</td>
<td>(plagiarism or cheating) N3 detect*</td>
<td>187</td>
</tr>
<tr>
<td>S8</td>
<td>S4 AND S7</td>
<td>268</td>
</tr>
<tr>
<td>S7</td>
<td>S5 OR S6</td>
<td>2,362</td>
</tr>
<tr>
<td>S6</td>
<td>SU &quot;Cheating&quot;</td>
<td>1,630</td>
</tr>
<tr>
<td>S5</td>
<td>SU &quot;Plagiarism&quot;</td>
<td>1,178</td>
</tr>
<tr>
<td>S4</td>
<td>S1 OR S2 OR S3</td>
<td>54,461</td>
</tr>
<tr>
<td>S3</td>
<td>SU &quot;Information Technology&quot;</td>
<td>16,927</td>
</tr>
<tr>
<td>S2</td>
<td>SU &quot;Computer Uses in Education&quot;</td>
<td>22,890</td>
</tr>
</tbody>
</table>
Data Management

All search results will be exported to Covidence, a web-based platform for systematic reviews. Covidence deduplicates search results and facilitates screening (i.e., study selection).

Study Selection

Study selection will be conducted by content experts in two phases. The first phase involves screening records by titles and abstracts in Covidence. Prior to commencing the screening, the content experts will pilot screen 50 records to be sure that they are consistently applying the inclusion/exclusion criteria. If required, the inclusion/exclusion criteria will be further defined and described. After pilot screening, two content experts (KC, SEE) will independently screen the titles and abstracts of all retrieved records. Results will be compared, and disagreements resolved through consensus and, if necessary, a third content expert (LAP). Studies identified as meeting the inclusion criteria, as well as those that are potentially relevant or for which more information is required, will be included in a second phase of screening.

The second phase of screening involves reviewing the full text of each study, again applying the inclusion and exclusion criteria. Two content experts (SEE, KC) will independently screen the full texts. Disagreements will be resolved through consensus and a third reviewer (LAP).

The PRISMA Flow Diagram (Moher et al., 2009) will be used to report study selection from all search results to the final records included in the synthesis.

Data Extraction

JBI guidance (JBI, 2014a) suggests utilizing different extraction details for different types of studies (quantitative, qualitative, text/opinion) that are integrated into the JBI SUMARI online resource. However, in order to simplify the data extraction process, as our review is not using SUMARI, one standardized data extraction template will be developed in Excel to integrate the components from different study types.
The template will be piloted on five purposively selected included studies (i.e., qualitative study, quantitative study, mixed methods study, theoretical) to be sure that all categories for data extraction have been identified. The content experts (SEE, LAP, KC) will first meet and jointly work through extracting the data for five studies to be sure that everyone understands the data extraction template. The data extraction template will be revised as required to best meet the data elements for each type of study. The remaining studies will then have data extracted independently by the two content experts (KC, SEE). Disagreements will be resolved through consensus or discussion with a third content expert (LAP). Table 3 presents the provisional data extraction components.

**Table 3. Provisional Data Extraction Components**

<table>
<thead>
<tr>
<th>Component</th>
<th>Description (Data to be Extracted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Citation Information</td>
<td>Author, Year of Publication, Endnote #, Title of Article, Type of Publication, Language</td>
</tr>
<tr>
<td>Design / Characteristics</td>
<td>Aim, study design/study type, recruitment, sample size</td>
</tr>
<tr>
<td>Setting</td>
<td>Country/geographical location (note institution), other setting details provided in study</td>
</tr>
<tr>
<td>Participants</td>
<td>Age, gender, program, year of study</td>
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<tr>
<td>Intervention</td>
<td>Description of the intervention, how it was developed, used, implemented and evaluated</td>
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<tr>
<td>Data Collection</td>
<td>Details on how data was collected; variables measured, who conducted data collection; attrition rate; instrument used (reliability and validity of instrument)</td>
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<td>Argument</td>
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<td>Outcomes</td>
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<td>Conclusions</td>
<td>Author(s) conclusions / impact</td>
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<td>Limitations</td>
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<td>Bias</td>
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Quality Assessment

Due to the various typologies of the literature under review, there is no one single tool ideal for appraising all types of articles. For this reason, two critical appraisal tools, the Mixed Methods Assessment Tool (MMAT) (Hong et al., 2018) and the JBI Checklist for Text and Opinion (JBI, 2017) have been selected. To better understand and pilot these tools, a critical appraisal of four articles on text-matching was undertaken using these two tools. Three content experts from this team (KC, LAP, SEE) reviewed papers, with two reviewers appraising each of the four articles. They independently selected the most appropriate tool for the text and then followed the protocols outlined in each tool. They then all came together to discuss results. Through this trialling and discussion, they agreed on the suitability of the two appraisal tools for this systematic review.

The MMAT is useful for appraising the majority of texts and can be used with qualitative, quantitative, and mixed-method studies. It is designed to assess the quality of five categories of studies: qualitative research, randomized control trials, non-randomized control trials, non-randomized studies, quantitative descriptive studies, and mixed methods studies (Hong et al., 2018, p. 1). This tool is ideal for assessing the quality of empirical studies; however, it is also effective for appraising non-empirical research such as theoretical or review papers.

There are two parts of the MMAT: the checklist and the criteria. The tool also provides instructions on its use and screening tests to determine whether it is the most appropriate tool for a particular paper.

Data Synthesis

Our systematic review will first present the extracted data and quality assessment in tabular form to summarize each included study. As previously noted, we do not expect to be able to conduct a meta-analysis for the quantitative studies. Therefore, a narrative synthesis for all types of studies, guided by Popay et al. (2006), will be undertaken. Popay et al. (2006) define narrative synthesis as “an approach to the systematic review and synthesis of findings from multiple studies that relies primarily on the use of words and text to summarise and explain the findings of the synthesis” (p. 5). The researchers outline four elements for the narrative synthesis process:

- developing a theory of how, why, and for whom the intervention works,
- developing a preliminary synthesis of findings of included studies,
• exploring relationships in the data, and
• assessing the robustness of the synthesis (p. 11).

Until data synthesis is completed, it is unknown if we will be able to develop a theory as to how TMS works as an intervention. However, the three remaining elements will be conducted during the narrative synthesis.

Discussion

The aim of our mixed method systematic review is to understand how commercially available TMS is used in post-secondary contexts. To the best of our knowledge, no other truly systematic review has investigated TMS. We anticipate that the findings from our review will inform both practice and policy within post-secondary environments for the implementation and use of text-matching programs. In addition, our review may inform the design and development of further studies focused on TMS.

Glossary of Terms

**Data Management Strategy**: a plan for the creation, storage, and management of data.

**JBI Methodology**: the Joanna Briggs Institute is one of the several established organizations that offer robust frameworks for conducting review studies such as systematic reviews. JBI Methodology utilizes evidence-based methods for conducting replicable and transparent review studies.

**PICO**: a mnemonic device for the formulation of research questions (P stands for Patient or Problem; I stands for Intervention; C stands for Comparison; O stands for Outcome).

**PRISMA**: a checklist of items to be reported in a systematic review.

**Search Strategy**: a carefully formulated plan for finding information; a search strategy usually involves the development of search terms, synonyms that express the main concepts of the research question, and a list of databases and sources where the search will be implemented.

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Building a Regional Academic Integrity Network: Profiling the Growth and Action of the Academic Integrity Council of Ontario

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Abstract

Since 2008, the Academic Integrity Council of Ontario (AICO) has provided a forum for academic integrity practitioners and representatives from post-secondary institutions in Ontario to share information, and to facilitate the establishment and promotion of academic integrity best practices. This article is a summary of a presentation given at the Canadian Symposium on Academic Integrity, which was organized and held at the University of Calgary in April 2019. The creation, operation and role of the Council, and how it serves to connect post-secondary institutions in Ontario on academic integrity-related matters is described. This will include the benefits that such an association brings between institutions, and some of the accomplishments to date, like the establishment and ongoing work of a contract cheating sub-committee. The most recent achievement of mobilizing academic integrity practitioners at a national level is also described.

Keywords: Canada, Ontario, Academic integrity, networks, mobilization, regional development, Academic Integrity Council of Ontario, Council of Universities, Ontario Council of Academic Vice Presidents, collaboration

Establishment of the Academic Integrity Council of Ontario (AICO)

In Ontario, all 22 publicly funded universities are part of the Council of Ontario Universities (COU). The COU “provides a forum for Ontario’s universities to collaborate and advocate in support of their shared mission to the benefit and prosperity of students, communities and the province of Ontario” (COU, n.d.). A number of groups exist under the various divisions of the COU such as: academics, institutional planning, administration and finance, registrars, secretaries, and research. The academic division of the COU is overseen by the Ontario Council of Academic Vice-Presidents (OCAV). AICO is one of a number of OCAV affiliates that reports directly to OCAV.
Affiliate groups of COU “may be established by the Council or created on the initiative of others. Normally an affiliate would have some executive power delegated to it, explicitly or implicitly, by the Council. Affiliates are responsible to the Council with respect to those of their interests and functions that fall within the scope of the activities of the Council” (COU, n.d.).

AICO originated in 2008 when a number of academics and staff interested in academic integrity from Southern Ontario universities informally formed the Academic Integrity Ontario Group (AIOG). Members from these original institutions identified others who were working in academic integrity and contacted them by email, with an invitation to meet as a larger group. These meetings emphasized information sharing and knowledge transfer amongst practitioners across institutions. The initial mandate of this group was “to facilitate the establishment and promotion of academic integrity best practices in Ontario post-secondary education” (AICO, 2011). In fall 2009, AIOG formally adopted the name the AICO. A proposal was submitted to COU in 2011 petitioning for an affiliate status. In 2013, OCAV’s constitution and bylaws were ratified by COU, and AICO was granted its affiliate status (Appendix A).

Operation and Management of AICO

Although AICO is an affiliate of COU, there are no dedicated financial or human resources to support this group. This being said, organizational members can join AICO at no cost. The operation of AICO, therefore, relies solely on the time and effort of volunteers and their associated institutions.

AICO is currently managed by an Executive Committee consisting of a Chair, Secretary/Outreach Coordinator and College Liaison. The Chair is the official representative of the Council and leads the Executive. The Chair is responsible for preparing the annual report on the activities of AICO that is submitted to OCAV, securing potential host organizations for the AICO meetings, and assisting with the planning of the meetings. The Secretary/Outreach Coordinator serves as the liaison with the representative from the COU. They work closely with the Chair and College Liaison to promote and enhance participation in the membership of AICO, as well as plan and host bi-annual meetings. Similarly, the College Liaison works to enhance college participation and engages in AICO meeting preparation.

It is important to note that these positions are a departure from the constitution and have evolved based on the needs of AICO membership. In 2014, AICO members discussed the positions outlined in the constitution and determined that they did not fit with the needs and activities of the Council. For example, the position of Chair rotated to whomever was
the lead in the host organization for the next AICO meeting. This format was based on holding an annual meeting, however AICO members identified a preference to hold semi-annual meetings. Therefore, the practice of holding semi-annual meetings with the rotation of a Chair based on the meeting location proved impractical.

In keeping with the constitution, “one representative from each university in Ontario shall be designated as the voting member for that institution; in consultation with the academic integrity practitioners employed by the institution, the Council representative shall be determined by the institution’s OCAV representative” (AICO, n.d.). Although, there is a voting process in place, the Council rarely uses the formal process that involves the voting member of each institution. This is typically only invoked when determining changes in positions on the Executive Committee (i.e., voting in new committee members or extending the term of a member). The majority of other business and activities undertaken by AICO is based on the consensus of the membership.

The inclusion of a position dedicated to colleges was a departure from the original membership of the Council. In 2013-14, the members decided that it was important to collaborate and work closely with our colleagues across higher education. Hence, colleges were invited to participate in the AICO meetings and to become members of AICO. Given that colleges are not included in the formal constitution, college members are non-voting members. Apart from voting status, colleges have full participation in AICO activities and work.

Currently, AICO meetings are organized bi-annually and rotate between academic institutions. In addition to these regular meetings, AICO stays in touch with its membership through a moderated email listserv, which has been graciously maintained by Queen’s University for over 8 years. This listserv has over 124 subscribers from both colleges and Universities. The AICO executive has also created a website (academicintegritycouncilofontario.wordpress.com) and maintains a Twitter account (@AICOIntegrity)

**Function & Growth of AICO**

The objectives for AICO are: to provide a forum for representatives from Ontario higher education institutions to promote academic integrity principles, support and encourage collaboration and an exchange of ideas and resources, conduct and share research on academic integrity matters, and encourage and offer professional development amongst members.

Earlier priorities for AICO included: adopting a governance document that outlined the
various roles of council members and their terms of service, building connections with colleagues from provincial colleges, promoting cultures of integrity at post-secondary institutions through educational outreach and increased academic integrity awareness, and establishing guidelines for best practices in promoting academic integrity. More recently, AICO has focused on a targeted membership drive, formalizing new member onboarding procedures, and building education and prevention initiatives to combat contract cheating across Ontario.

In 2011, the newly formed AICO had 22 members from across 14 universities (including Royal Military College) and one college (Canadian Memorial Chiropractic College). By 2015, there were 51 individuals from 15 universities and 10 individuals from 10 colleges who were members of AICO. Currently, there are 58 individuals from universities and 37 individuals from colleges. 17 (out of 22) publicly funded universities and 14 (out of 24) publicly funded colleges are represented in AICO.

Early attendance at AICO meetings consisted of a small but dedicated group of individuals. Semi-annual meetings regularly rotated amongst universities in the earlier days and are now hosted by both universities and colleges. Attendance at AICO meetings has grown immensely over the past few years with a record attendance of over 100 people at the most recent meeting hosted at Mohawk College on November 8, 2019.

AICO has increased its involvement in international activities such as promoting and participating in the annual International Day of Action Against Contract Cheating on October 16th. This day coincides with Global Ethics Day (n.d.). Additionally, AICO members regularly participate and present at the International Center for Academic Integrity (ICAI) and the Plagiarism Across Europe and Beyond annual conferences. Members of AICO were instrumental in creating the Canadian Consortium, which runs in tandem to the ICAI annual conference, and provides Canadian post-secondary participants, with an interest in academic integrity, to meet and discuss what is current and important on a national level.

The most current efforts of AICO members include work related to eradicating contract cheating. According to the Quality Assurance Agency for Higher Education (QAA), “contract cheating happens when a third party completes work for a student who then submits it to an education provider as their own, where such input is not permitted” (QAA, 2017, p. 2). Contract cheating has become a rising concern across higher education institutions around the world. In 2018, AICO members responded to this increasing problem by developing a contract cheating sub-committee which focuses on ways to tackle this issue in Ontario post-secondary organizations. Members from six different academic institutions created this group and developed an action plan that aims to rally higher education institutions to work against contract cheating. Furthermore, the sub-committee members are exploring
legislation that would be directed at predatory, for-profit contract cheating agencies, to outlaw their marketing efforts to students on college and university campuses.

Benefits of a Provincial Group

Since AICO’s formation 12 years ago, there have been a number of benefits across institutions. First and foremost are the invaluable connections that have been built between colleagues interested and working in the field of academic integrity. Knowledge sharing and knowledge translation have created strong relationships that have benefit members of different higher education organizations, including students, faculty, staff, and leaders. These reciprocal relationships have enabled institutions to work collaboratively on larger issues and approach matters related to academic integrity holistically, as well as network with knowledgeable experts, practitioners, and researchers focused in the field of academic integrity. Foundational to AICO’s ongoing work and efforts are the awareness of the importance of robust policy, the need for ongoing research, and the continued collegial work across and within post-secondary organizations. One example of such work is the aforementioned contract cheating sub-committee. This sub-committee provided a unified voice and helped organize and strengthen efforts by bringing together stakeholders and experts with a common interest and purpose related to the curtailing of contract cheating. This may not have happened without an official organizational approach through AICO.

The formalized nature of AICO also allows the organization and its members to support other important efforts that include ongoing support and mentorship to isolated practitioners, and initiatives that aim to raise awareness of the topic and strategies to support the maintenance and promotion of academic integrity with those in senior management roles in higher education. Anecdotally, we know that individuals working on efforts related to academic integrity have received funding and protected work time to pursue these efforts because of the support, advice, and recognition of AICO as an affiliate organization to OCAV.

AICO members also recognize the merit in sharing academic integrity resources, like effective tools, best practices, strategies, updated policies and procedures, and proposed collaborative research ideas or current completed research. An example of such sharing occurred in 2018, when a promotional tool that was developed at Humber College Institute of Technology and Advanced Learning was disseminated and used broadly as a template to raise awareness about the International Day of Action Against Contract Cheating (which coincides with Global Ethics Day).
Mobilizing AI practitioners across Canada

Perhaps some of the most exciting work has occurred most recently with AICO's influence on mobilizing other academic integrity practitioners on a pan-Canadian level. Through the first ever Canadian Symposium on Academic Integrity held in Calgary, Alberta, in April 2019, AICO members presented information about the organization to colleagues across the country with a shared interest and passion for academic integrity.

Part of the presentation invited participants to group together colleagues from their geographic area and begin discussion on common ideas, desires, and strategies to create similar networking organizations. Presenters divided the room into groupings of people from the following regions: Manitoba and Saskatchewan, Alberta, British Columbia and Ontario. These groups were then asked to discuss a number of questions (Appendix B). Each group recorded their responses on flip chart paper so that the larger group could participate in a review of different ideas and approaches. This work allowed protected time and a collaboration of efforts to begin to understand how each province or region might create a networking organization, like AICO, in their geographical area. It also allowed them an opportunity to consider potential barriers and problem solve some of these potential obstacles so that they could be situated to succeed with their efforts as they moved forward. Participants eagerly engaged in conversation and were enthusiastic about the opportunity to work with other like-minded experts in the field. Flip chart notes were then retrieved by the presenters and transcribed by one of the presenters (AM), and circulated to the workshop participants. Subsequently, this transcribed information, and the rich discussion led by the presenters resulted in the new networks in Alberta and British Columbia and renewed initiatives in the province of Manitoba.

While individual efforts by committed and interested people are always important with any initiative, the merits of an organized collective cannot be disputed. The work of academic integrity remains an essential effort that will strengthen the mission of post-secondary institutions. The prolific growth of academic integrity organizations across Canada will hopefully continue, particularly, expansion into the Maritime Provinces on the east coast of Canada. In addition, these groups will be brought into the fold of pre-existing agencies such as ICAI Canada, and its parent group, ICAI.

**Future AICO Initiatives**

Heading into 2020, AICO plans to start a new subcommittee on educational resources, continue to recruit and expand membership, build AICO’s professional development offerings, further grow the AICO website, and increase collaboration with similar networks in other provinces.
AICO also plans to move ahead with the implementation of the action plan developed by the contract cheating sub-committee. In November 2019, three members of the sub-committee gave a presentation on contract cheating to the Provosts and Academic Vice-Presidents of OCAV. There was rich discussion and sharing amongst the group. There seemed to be support to move forward with initiatives against contract cheating, particularly exploring legislation to ban the advertising of contract cheating services. The success of this initial presentation resulted in an invitation to replicate the presentation and encourage additional conversation with the Ontario Council of Graduate Studies, a subgroup of OCAV.

In addition to raising awareness of contract cheating with OCAV, the members were able to highlight the work of AICO and reinforce the importance of academic integrity, especially regarding how it connects to the undergraduate and graduate degree level expectations that OCAV developed. We are hopeful that these presentations will encourage more participation in AICO and increase our membership.

**Conclusion**

AICO is one example of a grass-roots initiative that evolved into a productive and influential group, focused on the promotion of academic integrity efforts across the post-secondary sector of Ontario. It is important to continue and build on the narrative related to academic integrity and continue to shine a light on initiatives that will help to establish, maintain, and strengthen this important work.

**References**


Appendix A

ACADEMIC-INTEGRITY COUNCIL OF ONTARIO

Constitution and Bylaws of the Academic-Integrity Council of Ontario Article I: Name

The name of the organization shall be the Academic-Integrity Council of Ontario (AICO), hereafter referred to in this document as "the Council".

Article II: Affiliations

The Council is affiliated with the Ontario Council of Academic Vice-Presidents (OCAV), which is itself affiliated with the Council of Ontario Universities (COU).

Article III: Mandate and Objectives

The mandate of the Council shall be to facilitate the establishment and promotion of academic integrity best practices in Ontario universities by providing a forum to share information among academic-integrity practitioners, i.e. persons responsible for the administration of academic integrity policy and/or responsible for academic-integrity promotion/education on their campuses, from all universities in Ontario.

The Council shall:

a) promote academic-integrity principles and best practices throughout Ontario universities;

b) represent and advocate for, on behalf of universities, academic integrity in Ontario postsecondary education to other educational institutions and external organizations;

c) provide advice on academic-integrity matters to Ontario Council of Academic Vice Presidents (OCAV), the Council of Ontario Universities (COU), other educational
institutions, and external organizations;

d) conduct research focused on academic-integrity matters, and develop publications to help introduce and/or improve best practice related to academic integrity;

e) build partnerships with other educational systems and institutions, government and other relevant organizations for the benefit of members and the province;

f) support and encourage collaboration and exchange of information and ideas among university faculty, staff, and students;

g) encourage and stimulate professional development and excellence among its members; and

h) encourage interaction and collaboration with other national and international academic integrity organizations in any mutually agreed endeavours to fulfill the respective objectives of the organizations.

**Article IV: Membership**

Membership shall be open to all academic-integrity practitioners (defined in Article III) who support the aims and objectives of the Council, and whose Executive Heads are members of the Council of Ontario Universities.

There shall be two membership categories:

a) Voting - One representative from each university in Ontario shall be designated as the voting member for that institution; in consultation with the academic-integrity practitioners employed by the institution, the Council representative shall be determined by the institution’s OCAV representative.

b) Non-Voting - All other members shall be non-voting members with full participatory privileges.

Matters requiring votes pertain to the activities of AICO in the collective in fulfillment of its mandate and objectives as specified in Article III. AICO does not direct or enforce activities within any university nor do decisions by AICO bind universities to a specific action.

**Article V: Powers**

The Council shall have the power to establish its own bylaws and to appoint committees or task forces in order to fulfill its aims and objectives.
Article VI: Bylaws

Bylaws may be adopted, amended, suspended or rescinded by a simple majority of voting Council members.

Article VII: Constitutional Amendments

This constitution may be amended by a two-thirds majority of the voting members present at any meeting, provided that written notice of the proposed change or substance thereof be sent to the entire membership not less than five working days prior to the date of the meeting and provided that at least two-thirds of all voting members are in attendance or alternatively that quorum is declared and two-thirds of all eligible voting members have votes counted either at the meeting or prior to it via electronic means.

Article VIII: Dissolution of the Council

The Council may be dissolved by a two-thirds majority of voting members present at any meeting, provided that written notice of the proposed dissolution be sent to the entire membership not less than five working days prior to the date of the meeting and provided either that at least two-thirds of the voting members are in attendance or alternatively that quorum is declared and two-thirds of all voting members have votes counted either at the meeting or prior to it via electronic means.

Article IX: Relation to Council of Ontario Universities

The Council shall report on its activities annually, or upon request, to the Council of Ontario Universities through OCAV, with respect to those interests and functions that fall within the Council’s mandate.

BY-LAWS

Bylaw 1: Officers

The officers of the Council shall be:

a) the Chair, who shall host the forthcoming scheduled meeting of the Council and is responsible for the following duties: · preparing, organizing, and hosting the next Council meeting; · consulting with members in the preparation of the meeting agendas; · distributing the agenda at least five working days in advance of meetings; and · maintaining minutes of meetings and distributing the approved minutes to the entire membership.
b) an immediate Past-Chair, who hosted the last scheduled meeting of the Council and who shall serve as an advisor to the Chair in order to provide continuity between meetings of the Council, and

c) a Chair-Elect, who shall host the Council meeting following the meeting hosted by the Chair and is responsible for the following duties:

  o organizing communications with the Officers and the membership as required;
  o performing necessary secretarial and communications duties internally;
  o fulfilling the Chair’s duties should the Chair be unable to do so.

d) Additionally, any positions (ex officio) appointed or elected for specific tasks or projects as designated by Council shall be created as needed according to normal voting procedures.

**Bylaw 2: Committees**

a) Executive Committee

There shall be an Executive Committee to be composed of the Chair, immediate Past-Chair, and the Chair-Elect.

The Executive Committee shall be the first point of contact with respect to any external organizations; it will represent the Council and its views in any liaisons with the COU, OCAV, or any other external organizations.

The Council in session or the Executive Committee may appoint other ex-officio Executive Committee members as may be deemed necessary to effectively carry out the objectives of the Council. The voting rights of such ex-officio members shall be determined at that time.

b) Other Committees

The Council in session or the Executive Committee may establish or dissolve standing or ad-hoc committees as may be deemed necessary to effectively carry out the objectives of the Council.

**Bylaw 3: Term of Office**

The term of office for the Chair, immediate Past-Chair, and Chair-Elect shall be determined by the frequency of regular Council meetings.
The term of office for any other appointed or elected positions as designated by Council or the Executive Committee shall be determined at that time.

**Bylaw 4: Meetings**

There shall be at least one regular Council meeting each year, the time and place of which shall be established by the Council in session.

Ad-hoc council meetings may be called by the Chair, Executive Committee, or Council at any time. To call an ad-hoc meeting, written notice of the proposed meeting shall be sent to the entire membership not less than five working days prior to the date of the meeting.

The meetings of any committee shall be set as needed.

**Bylaw 5: Definition of Quorum**

For meetings of the Council, quorum is defined as 50% of all eligible voting members of Council plus one.

For meetings of all committees, quorum is established as 50% of the members on the committee.

**Bylaw 6: Voting**

*Decisions at Council Meetings*

All voting members may vote in person at a Council meeting.

A voting member who cannot attend the meeting may submit his/her vote electronically before the meeting. Such a vote shall be sent confidentially to the listserv administrator, who will ensure that the vote is counted during the formal Council vote. Alternatively, a voting member may delegate his/her voting rights to another member from his/her institution (Bylaw 7).

*Decisions Outside of Council Meetings*

For matters that must be decided outside of a Council meeting, any member of the Council may propose a motion to the Chair. The proposed motion shall be reviewed by the Executive Committee for appropriateness; if approved by the Executive Committee, the Chair shall send the proposed motion to the entire membership, after which the voting members of Council shall have 10 working days in which to vote electronically. All votes shall be sent confidentially to the listserv administrator, who will report the final result to
the Council. In this case, a simple majority of votes cast shall be considered equivalent to a simple majority of voting Council members present, provided quorum is achieved.

**Bylaw 7: Delegation of Voting Rights**

Any voting member of the Council who is unable to attend a meeting may delegate his or her voting rights to another member from his or her institution.

**Bylaw 8: Bylaw Amendments**

By-laws may be amended at any time, according to the following:

*Amendments at Council Meetings*

Any Council member who wishes to propose a motion to adopt, amend, suspend, or rescind a bylaw at the next Council meeting shall do so by sending the proposed motion to the Chair not less than 10 working days prior to the date of the meeting. The Chair shall send a written notice of motion to the entire membership not less than five working days prior to the date of the meeting. To adopt, amend, suspend or rescind a bylaw, the majority of all voting members must be in attendance at the meeting or alternatively a quorum must be declared at the meeting and the majority of all eligible voting members have votes counted either at the meeting or prior to it via electronic means.

*Amendments Outside of Council Meetings*

If an amendment concerning a bylaw must be made outside of a Council meeting, the Chair shall send the proposed motion, as approved by the Executive Committee, to the entire membership, after which the voting members of Council will have 10 working days in which to vote electronically.

All votes shall be sent confidentially to the listserv administrator, who will report the final result to the Council. In this case, a simple majority of votes cast shall be considered equivalent to a simple majority of voting Council members present, provided quorum is achieved.

**Bylaw 9: Listserv**

The Council shall maintain an electronic mailing listserv for the benefit of the members and to serve the Council's aims and objectives. The listserv shall be housed with a current institutional member and a listserv administrator from that institution shall be appointed by the Council with the administrator's agreement. The listserv administrator shall also maintain a current list of Council members and update the membership as necessary.
Should the institution housing the listserv no longer be able or willing to serve in this capacity, a motion to appoint another institutional member to house and maintain the listserv shall be brought before the Council by the listserv administrator.

This institution housing and maintaining the listserv shall also serve as the central repository for all Council Minutes.

Original constitution drafted, 12 October 2011 Approved and enacted by OCAV, 12 October 2011

Revision approved by the COU Executive Committee, 8 March 2013 Ratified by the Council of Ontario Universities, 31 October 2013

Appendix B

Questions posed to participants of the Building a Regional Academic Integrity Network: Profiling the Growth and Action of the Academic Integrity Council of Ontario workshop presented at the Canadian Symposium on Academic Integrity in April 2019.

- What body oversees universities & colleges in your province or region?
- What committees or councils do they have?
- Where could AI fit into any of these or perhaps develop a new committee or council like AICO?
- Discuss the opportunities and obstacles/challenges to organizing and collaborating with other institutions in your own province or region?
- How could you overcome the challenges?
- How and with whom could you start developing a group today?
Creating a Collaborative Network to Promote Cultures of Academic Integrity in Manitoba’s Post-secondary Institutions

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Abstract

In this article, we, as representatives from several post-secondary institutions across Manitoba and British Columbia, describe how sharing knowledge and experiences across institutions has informed and enhanced academic integrity initiatives at our respective institutions. We outline how participation in provincial, national, and international teaching and learning events as a collective has informed our work in academic integrity and led to the emergence of the Manitoba Academic Integrity Network (MAIN) in May 2019. We discuss the benefits of collaborating within a provincial network and next steps for expanding the reach of the network across institutions by engaging faculty, staff, and students.

Keywords: academic integrity, academic misconduct, Canada, higher education, network, organization

Background

Although academic integrity was an important topic of discussion in 1998 at the Canadian Conference on Student Judicial Affairs, the conversation was elevated when Canadians attending the 2013 International Conference of the International Center for Academic Integrity (ICAI; an organization based in the United States) formed the Canadian Regional Consortium (McKenzie, 2018). More recently, Dr. Sarah Elaine Eaton, a Canadian academic integrity researcher, made a strong case for growing and strengthening the academic integrity agenda in Canada by forming local and national communities of practice, networks, and research collaborations (Eaton, 2019a, 2019b; Eaton & Edino, 2018). In partial response to Eaton’s call for formalized networks, and after several years of formal and informal conversations with administrators, educators, and researchers at several post-secondary institutions in Manitoba, the Manitoba
Academic Integrity Network (MAIN) was officially launched. In this article, we describe this process and the emergence of MAIN.

The Building of a Provincial Network

University of Manitoba

Activities related to promoting academic integrity at the University of Manitoba originated within Student Advocacy, a Student Affairs unit. Student Advocacy provides confidential services to assist students in the resolution of complaints and grievances resulting from academic or discipline decisions, including those related to academic misconduct. In addition to the workshops that Student Advocacy staff facilitate (often with colleagues from academic support units), the unit launched the inaugural academic integrity week in 1997 to engage the community in discussions about academic integrity (Usick & Morris, 2006). One key activity was the fielding of Don McCabe’s academic integrity survey in 2002 and 2012 (see McCabe, Butterfield, & Treviño, 2017). In 2004, Student Advocacy partnered with the University Teaching Services (renamed The Centre for the Advancement of Teaching and Learning) for their third annual teaching symposium that featured Don McCabe as the keynote speaker. The symposium provided opportunities for staff and faculty to discuss responses to academic misconduct through teaching and learning approaches, and present key findings from their original research (e.g., Usick & Thordarson, 2004). The University of Manitoba and its approach to academic integrity have also been featured in the media (e.g., CBC’s DocZone documentary Faking the Grade; Merit Motion Pictures & CBC-TV, 2015). The University of Manitoba has been instrumental in promoting academic integrity at national and international levels by participating in dialogue and presenting at various conferences.

In response to the growing need for coordinated and systematic academic integrity efforts at the University of Manitoba, the Academic Integrity Advisory Committee (AIAC; formerly the Academic Integrity Working Group) established in 2013 to recommend direction to the University community on institution-wide academic integrity initiatives. With the adoption of a teaching and learning approach (Bertram Gallant & Drinan, 2008), two academic integrity-focused positions were also created within The Centre for the Advancement of Teaching and Learning and Student Affairs. Dedicated academic integrity positions have facilitated the development of new resources, initiatives, and research (see Gervais, 2018; Gervais & Stoesz, 2019; Stoesz & Los, 2019; Stoesz & Yudintseva, 2019; Usick, Stoesz, & Gervais, 2016).

In early 2017, an idea to host a conference specifically for academic integrity educators was discussed amongst AIAC members. Within a month, the Academic Integrity Inter-Institutional Meeting (AIIM) 2017 was born and planning was underway. Individuals working in teaching and learning centres at publicly funded post-secondary institutions...
across Manitoba were contacted to determine the level of interest in attending a meeting to discuss successes and challenges in promoting academic integrity and preventing academic misconduct at their respective institutions. The initial response to the idea was overwhelmingly positive and a date was set to host the event in late spring at The Centre for the Advancement of Teaching and Learning at the University of Manitoba.

AIIIM 2017 attracted 42 individuals, including teaching and learning centre directors, faculty specialists, educational developers, librarians, student advocates, instructors and faculty members, and graduate students from 9 publicly funded colleges and universities in Manitoba. The one-day event was organized into three sessions, each beginning with a lead presentation followed by cracker barrel format discussions. The session on *Institution-Wide Approaches to Academic Integrity* centered on building cultures of integrity grounded in responsibilities that organizations have as a whole and encouraging all individuals within an organization to lead by example. In the *Faculty Support for Academic Integrity* session, presenters shared their research and classroom (both face-to-face and online) experiences regarding academic misconduct and the resources that can be used to promote academic integrity in various teaching and learning environments. The day wrapped with discussions about *Student Support for Academic Integrity* and why students may find it difficult to avoid making decisions that lead to allegations of misconduct. A theme in the final session was the sharing of activities to help students learn to write and cite their sources with confidence. Engagement in discussion was meaningful and valuable for all attendees. As the event closed, attendees expressed a desire for AIIIM to continue as an annual event, and representatives from Assiniboine Community College (ACC) in Brandon, Manitoba conveyed their interest in hosting AIIIM 2018.

**Assiniboine Community College**

The importance of academic integrity was elevated at ACC with the cooperation of the Library and the Learning Curve, an academic support centre. Early supports for students on plagiarism and citing were contextualized within academic integrity throughout 2016, and were informed by faculty and student surveys, research, and the organization of other interested ACC staff. Participation in events such as AIIIM and ICAI coincided with an educational campaign, revised academic integrity training for students, and supports for faculty beginning in 2017. The Library and Learning Curve were officially united in the wider Learning Commons department, which came to include other members of a multidisciplinary team that presented at provincial conferences and internal staff development events on academic integrity in 2018 and 2019. Recognizing that the institutional momentum for academic integrity at ACC was occurring in parallel to the provincial momentum, ACC was eager to host AIIIM 2018. Outreach activities and advertising were directed towards participants from the first event, and provincial college and university staff with responsibilities related to
academic integrity and internal ACC employees known to have involvement or interest in academic integrity. A promotional video featuring staff, faculty, and the President of ACC was created and sent out as a welcome prior to the meeting. The end result was a sold-out event of 60 attendees with presenters from four of Manitoba’s colleges and universities.

By October 2019, resources and events ranged from student-focused initiatives such as an academic integrity escape room and online modules for academic integrity, to assignment redesign workshops for faculty and a contract cheating website blocker project (a similar project is underway at the University of Manitoba and Red River College [RRC]). An Academic Integrity Advisory Committee was recruited in late 2019 to help inform the initiatives of the Learning Commons team. Ultimately, academic integrity has proven to be a successful platform for positive and proactive collaboration within the ACC learning community and on a provincial scale as a member of MAIN.

Booth University College

Booth University College (Booth UC), based on its “approach to learning anchored in academic excellence” (Booth University College, n.d.) and its commitment to high ethical standards, has focused on academic misconduct prevention. At the beginning of their studies, students are required to complete a 30-minute online plagiarism tutorial program and participate in a 30-minute in-class presentation facilitated by Booth UC’s Academic Learning Centre. In addition, the Director of Library Services leads 30-minute in-class seminars about academic integrity in scientific research and the APA citation guidelines required by Booth University College. The Q&A sessions at the end of these brief seminars provide a great opportunity for many first-year students to become acquainted with the expectations regarding academic integrity in their curriculum. These learning opportunities are focused primarily on the theoretical background of academic integrity and the various academic misconduct categories.

Furthermore, the increasing number of online courses represent a brand-new challenge to the Booth UC faculty and administration. They are in the phase of developing new policies and guidelines regulating the special approach to academic integrity, exam supervision and course management required by the peculiar field of online teaching. Further understanding of the issues surrounding academic integrity and academic misconduct occurred when a Booth UC faculty member (Laszlo Markovics) attended AIIIM 2018 at ACC in Brandon. At the end of the conference, Booth UC volunteered to organize AIIIM 2019, which was held on May 29, 2019, with approximately 40 attendees from many publicly funded and some private institutions for higher education in Manitoba and one from British Columbia. After the welcome address from Booth UC President, Dr. Marjory Kerr, two sessions consisting of a lead presentation and three cracker barrel presentations were held, along with a professional development session. AIIIM 2019 closed with the announcement of MAIN and its first official board meeting.
resulting in formal commitment from five institutions in Manitoba to further develop this network.

Red River College

AIIIM 2017 coincided with an internal project at RRC involving a quantitative and qualitative exploration of academic misconduct among international students. Attending AIIIM 2017 established a connection between RRC and the research and teaching and learning practices at other Manitoba post-secondary institutions. In 2018, when findings from the project at RRC were presented at AIIIM, it sparked interest in attendees from the University of Manitoba, who noted that there was a lack of research on post-incident outcomes for international students. Further research on this topic is now underway. Cross-institutional partnerships continued to strengthen when several academic staff from post-secondary institutions in Manitoba, including Lisa Vogt from RRC, attended the Canadian Symposium on Academic Integrity 2019 at the University of Calgary. When the idea to form MAIN emerged (as described below), staff from RRC were eager to be a part of it.

Working with other MAIN members, RRC began to explore the rate at which contract cheating and file sharing websites were being accessed on institutional networks (described in Seeland, Stoesz, and Vogt, submitted). RRC Information Technology Services and Deans had been digging into this information as well, and the questions posed through MAIN helped to unify the conversation at RRC. With other MAIN institutions sharing information, RRC could make institutional comparisons as well as connections to the latest research and recommendations. A strong case for blocking contract cheating websites was developed and senior leadership approved. The blocking of contract cheating websites on the college network began in early March 2020.

RRC was the designated host for AIIIM 2020, with staff in Library Services and the Academic Success Center planning the event. In February 2020, the registration capacity of 60 seats had been filled and the call for proposals brought forward many interesting ideas. Although RRC does not have one central unit for delivering academic integrity education for students and staff, preparations for AIIIM 2020 served as a catalyst for greater collaboration within RRC as various departments and services, including support staff, academic staff, and leadership, worked together to host the fourth provincial academic integrity event. Unfortunately, in mid-March, Manitoba public post-secondary institutions announced a move to online program delivery due to COVID-19 and AIIIM 2020 was postponed indefinitely.
Manitoba Academic Integrity Network (MAIN)

MAIN was initially bounced around as an idea on the whiteboard of Brenda M. Stoesz’ office in the early winter of 2019. MAIN seemed like the logical next step as academic integrity partnerships were developing at a rapid rate between the University of Manitoba, RRC, and ACC. The formation of MAIN was necessary to continue the momentum and encourage collaborations between all post-secondary institutions in Manitoba. In April 2019, several staff members from various post-secondary institutions in Manitoba attended the Canadian Symposium on Academic Integrity held at the University of Calgary (Eaton, 2019a). At one interactive session, Ridgley, Miron, and McKenzie (2019) described the formation of the Academic Integrity Council of Ontario (AICO) and encouraged audience members to gather together as provincial groups to discuss actions they could take to drive the academic integrity agenda forward in their provinces. Stoesz suggested the formation of MAIN and the Manitoba group agreed. This idea and the established annual provincial conference, AIIIM, was shared with the larger group. After the session, the group from British Columbia was interested in learning more about how we planned our provincial conference. Tod Dunham (Thompson Rivers University [TRU]) expressed an interest in attending AIIIM 2019 and was invited to be a provincial liaison to MAIN.

Thompson Rivers University

Promoting academic integrity has always been a high priority at TRU, and we were challenged with the idea to enhance collaboration with other institutions towards this goal in 2019. TRU sent five representatives to the Canadian Symposium on Academic Integrity, held at the University of Calgary in April 2019. It was at this event where we met several academic integrity enthusiasts from Manitoba and first heard about AIIIM 2019. We were excited to hear about this annual event in Manitoba and immediately wanted to attend to see what we could learn. Sending a representative to attend AIIIM 2019 at Booth UC in May 2019, and consequently the inaugural meeting of MAIN, was inspiring, and the representative arrived back in British Columbia with a renewed excitement towards getting something similar going in BC.

TRU hosted the first ever British Columbia Academic Integrity Day (BCAID) on October 18, 2019. BCAID was attended by over 70 representatives from across BC and as a result of this day, the British Columbia Academic Integrity Network (BCAIN) was formed. Our hope is that BCAID will become as successful an annual event that AIIIM is in Manitoba, and we are honoured and excited to be working with our colleagues in Manitoba as an out-of-province member of MAIN.
Conclusions

Sharing ideas, challenges, and successes at AIIIM and MAIN have enabled each of us to acquire further support at our individual institutions to develop resources and strengthen the academic integrity agenda in Manitoba. And there is more work to do. One of MAIN’s next steps is to formally connect with other provincial networks, such as the AICO (Ridgley et al., 2019), the Alberta Council of Academic Integrity (ACAI; Eaton, 2019b), and BCAN, to develop and participate in national initiatives to promote academic integrity in higher education across Canada. Gathering for national events, such as the Canadian Symposium on Academic Integrity (Eaton, 2019a), allow those involved in academic integrity work to share current knowledge gained through research and practice.

One must not forget the importance of involving students in the academic integrity conversation. Although students have been a focus of many investigations for decades, particularly in areas related to academic misconduct (Eaton & Edino, 2018), research on student involvement in initiatives to promote academic integrity in Canada is absent from the literature. Moreover, their involvement on campuses as drivers of change in the culture of academic integrity is largely unknown. This is unfortunate, as the post-secondary student voice and influence is important for the promotion of academic integrity; formal and informal day-to-day interactions between peers play a significant role in shaping the overall student experience (Peregrina-Kretz, Seifert, Arnold, & Burrow, 2018) and behaviours, including the push to do right or wrong (Pan & Stiles, 2019). Thus, a challenge for MAIN and other academic integrity networks across Canada will be to involve students in academic integrity projects and programs in meaningful ways to have a greater impact on the culture of integrity.

Lastly, an important challenge for MAIN is to acquire support from higher levels of leadership within institutions, and from provincial governments, to tackle significant issues related to academic integrity and academic misconduct. Examining serious issues, such as contract cheating — which is plaguing higher education around the world (Clarke & Lancaster, 2006; Lancaster, 2019) — and inspecting existing academic integrity policies (e.g., Stoesz, Eaton, Miron, & Thacker, 2019), should be priorities in Manitoba. Little is currently known about the extent of the contract cheating problem in our province and whether our policies sufficiently address this issue. We must acquire a deeper understanding of the factors that drive contract cheating and other forms of academic misconduct in order to develop effective policies and implement strategies to support academic integrity and prevent academic misconduct. Findings from high quality academic integrity research will provide educators, administrators, and government with the information needed for policy and program development and revision.
The future of academic integrity in post-secondary education in Manitoba and across Canada is bright as collaborations between institutions reenergize and motivate those involved in initiatives that foster cultures of integrity at individual institutions (Eaton, 2019b). Researchers suggest that when people within and across organizational boundaries who share common values come together to share knowledge, resources, and ideas, good things can happen (Caimo & Lomi, 2015; Hung, Durcikova, Lai, & Lin, 2011). This is certainly true for individuals working in the areas of academic integrity and higher education in Manitoba.

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Creating a User-based Website to Support Academic Integrity at the University of Waterloo

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Abstract

The University of Waterloo identified a redesign of their existing academic integrity website as an important step in creating a culture of integrity on campus. This article details how the new website supports students, instructors, and staff by utilizing best practises and approaches suggested in academic integrity research. Next steps will include exploring how to increase engagement with the site and determining the impact of the site on the campus community.

Keywords: academic integrity, Canada, values, website design

Background

The University of Waterloo (UW) Office of Academic Integrity (OAI) is a support unit that promotes and educates students, staff, and instructors on the importance of integrity in all aspects of campus life. The OAI promotes academic integrity initiatives, evaluates academic integrity practices, and identifies gaps and barriers in building a culture of academic integrity on campus. Recent focus groups and surveys done by the OAI on academic integrity knowledge and awareness highlighted that students want increased and ongoing academic integrity support throughout their studies from their instructors and University services. Moreover, many students were not aware that there is an academic integrity website with an extensive list of resources and supports, or that an Office of Academic Integrity existed on campus.

Survey feedback identified a website redesign that aligned with current academic integrity research and best practices as a key step in strengthening ongoing support for students, instructors, and staff. According to Griffith (2013), if academic integrity websites “include reader-centered text, have a pedagogical thrust, differentiate amongst audiences, use image-based components purposely, and are accessible and well maintained, academic integrity efforts made at other institutional levels will be further bolstered” (p. 17). While our former academic integrity website had a number of resources listed for the campus community, it needed to be improved based on the above principles. The goal of the website redesign was to create a comprehensive, well-organized repository of academic
integrity supports for students, staff, and instructors in order to ensure the campus community utilized the site.

Google Analytics indicated that historically, approximately 2,500-5,000 users visited the University of Waterloo's academic integrity website each month, with increased traffic during the first two months of each term. Approximately half of all users each month came to the website from a search engine, and the other half came directly (i.e., from a bookmarked site or by typing in the website URL). The website had a high bounce rate (approximately 70%), with users spending on average less than two minutes on the site. The website re-design aimed to increase traffic and decrease the high bounce rate by having users spend more time reading and accessing the resources.

**Organization**

The redeveloped website makes a clear distinction between academic integrity and academic misconduct by separating introductions into different sections. Young, Miller and Barnhardt (2017) note that while academic integrity strategies create a sense of awareness and fear in students that are effective at decreasing academic misconduct, they lack a “principled philosophy that morally grounds students’ sense of academic integrity” (p. 14). The academic integrity section focuses on the fundamental values from the International Center for Academic Integrity (ICAI): honesty, trust, fairness, respect, responsibility, and courage (ICAI, 2014, p.16). This part of the website also explains why academic integrity is important for students and for the institution more broadly. Conversely, the academic misconduct section points students to the academic misconduct policies and procedures. Separating academic integrity from academic misconduct aims to shift away from negatives conceptions of AI towards a positive standard everyone on campus should aspire to.

The website is divided into sections for different user categories: students, instructors, and teaching assistants (TAs), and staff. Users visit the academic integrity website for a variety of reasons (e.g., to access the academic misconduct policy, to find referencing resources, to find instructor support, etc.), and thus the goal of compiling and organizing resources specific to each user category is to improve the user's navigation experience. Site visitors are able to click on their category, and then are presented with a number of sub-categories that may be relevant to them.
The sub-categories under each user group do not focus on offences such as plagiarism and cheating, but on positive behaviours and skills. Bretag, Mahmud, East, Green, and James (2011) argue that by focusing on “…what is right, rather than what is wrong, the spirit of the policy can take a dramatically different and more positive direction” (p. 4). For example, the student section includes information on academic advice and tutoring, group work, referencing and research skills, and stress and time management. Much like separating academic integrity and academic misconduct in the introduction sections, this aims to highlight that academic integrity is comprised of positive traits. Information about avoiding academic misconduct is weaved within each section but is not the overarching principle.

Content

Policy on academic integrity and misconduct can be written within a legalistic framework, making it challenging for students understand. A goal of the website was to make it user-friendly, written specifically for each audience. Neufeld and Dianda (2007) recommend moving away from legal jargon towards clear, unambiguous messaging that gives students practical information (p. 5). The website provides clear definitions, examples, and advice, always referring to the reader in first person. The student group work section reads, “For example, you may have assignments in which the instructor permits collaboration during all stages of an assignment, or during certain stages. You may also have assignments in which no group work is permitted. If you are not sure if collaboration is permitted, it is best to work alone and check with your instructor.” A user-friendly website, written specifically with each of the audiences in mind, aims to ensure the user feels represented and supported, and not burdened by searching for material or trying to understand complicated information.

Each category in the student section connects students with the numerous resources available on-campus to address each of their needs, including our Student Success Office, the Writing and Communication Centre, the Library,
and Campus Wellness. The website also includes links to helpful external resources, such as Purdue Owl. Beyond connecting students with resources, each category introduces the topic with important takeaways, emphasizing that students should always ask their instructor if they are unsure. For example, the introduction in the Referencing and Research Skills section begins, “Academic scholarship involves properly acknowledging sources. It shows readers where your ideas came from and gives them the details to find the source themselves. If you are unsure which citation style you should use, or what needs to be cited, check with your instructor.” Encouraging students to ask their instructor for clarification, permission, or assistance aims to avoid instances of inadvertent academic misconduct and reinforces to students that their instructors are there to support their success.

The section for instructors and TAs similarly connects users with a number of resources across campus for both themselves to use (e.g., Centre for Teaching Excellence workshops and online resources), and supports to which they can refer students to. Each category includes an introduction with important points, emphasizing that instructors need to be explicit about academic integrity expectations and instructions. For example, the Referencing and Research Skills section begins, “It is important to discuss citation expectations with your students, and not assume they know how to cite. Instructors should provide information on how to credit academic sources and refer students to resources for additional support.” Encouraging instructors to give students clear instructions and encouraging students to ask questions in the student sections of the website, aims to bridge the gap and create a culture of integrity in the classroom.

Currently, there is no uniform training for TAs across campus and thus TAs were identified as an important group to target and support. TAs play a varied and important role in courses, including grading, proctoring midterms, and exams, running classes, seminars, and tutorials, and holding office hours for students. As a result, it is critical for TAs to know what constitutes academic misconduct, what to do if they suspect misconduct, and academic integrity best practices, resources, and support. The “Academic Integrity for TAs” sub-category covers these topics, which are also captured in a document that instructors can give to their TAs.

The section for campus staff (e.g., academic advisors, coordinators, schedulers, food services, etc.) encourages staff members to familiarize themselves with resources for instructors and students. Staff members often interact with instructors and students on a daily basis, and so it is important that they are aware of the resources they can connect both groups with. Further, this section encourages staff members to take the core Organizational and Human Development Workshop “Integrity Matters”, which was developed and is co-facilitated in partnership with the OAI. Though not focused on
academic integrity, the workshop explores what the International Centre for Academic Integrity values look like in action and gives participants the opportunity to explore how their own personal values influence their everyday interactions and decisions.

**Next Steps**

It is important that the academic integrity website is well-maintained over time. The website is a reference point and redirects the user to other sites and resources, increasing the potential for broken links. Griffith (2013) noted that broken links were an issue for multiple years on many academic integrity websites in Ontario, leaving the user to wonder how seriously students and the institution take academic integrity (p. 17).

The new website has a wealth of advice and resources for students, instructors, TAs, and staff. Feedback from our surveys evidenced that students were not aware of the OAI or the academic integrity website, and thus a key goal of the OAI is to ensure the campus community is aware of what the Office does and how to access and utilize the website. Both are now more prominently featured in the presentations the OAI gives to undergraduate and graduate students during orientation and throughout the semester, which include a website overview and tutorial. The website will also be highlighted in the mandatory Graduate Academic Integrity Module (Grad AIM) that new graduate students are required to complete. Similar training is in development for undergraduate students, and the academic integrity website will also be highlighted in the module. Further, the OAI will be visiting department meetings to talk to instructors about academic integrity best practices and the redesigned website. The OAI will be evaluating these efforts using Google Analytics by monitoring areas such as web traffic, bounce rates, average session duration, page views, and pages per session on the website. We will continue to explore different ways to promote the website as a tool to educate and support the entire campus community.

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Preventing Online Shopping for Completed Assessments: Protecting Students by Blocking Access to Contract Cheating Websites on Institutional Networks

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Abstract

Contract cheating or “the outsourcing of student work to third parties” (Lancaster & Clarke, 2016, p. 639) is a type of academic misconduct that is growing and changing due to advancements in technology and the emergence of a lucrative, multi-million dollar per year industry that targets students relentlessly (Lancaster & Clarke, 2016). In an effort to protect students from engaging in contract cheating, three postsecondary institutions in Manitoba (i.e., Assiniboine Community College, Red River College, and the University of Manitoba) launched initiatives to block access to websites that offer contract cheating services from their networks. This initiative facilitated a preliminary examination of student activity on institutional networks. In any given month, a relatively large number of students (i.e., up to 3,519 unique users) were attempting to access websites identified as providing contract cheating services. We recognize that a single initiative will not eliminate academic misconduct, however, by combining various educational, protective, and preventative strategies, the likelihood that students will make ethical decisions regarding their academic work can be increased.

Keywords: academic integrity, Canada, cheating, college, contract cheating, intervention, Manitoba, university

Introduction

Contract cheating (also known as essay mills, paper mills, or ghostwriting) is defined as “the outsourcing of student work to third parties” and is a type of academic misconduct that is both growing and changing rapidly (Lancaster & Clarke, 2016, p. 639). Contract cheating often involves “the act of payment [which makes it] deliberate, pre-planned and intentional” (Newton, 2018, p. 2). Outsourcing work, however, does not always involve
formal contracts or the exchange of money (Bretag et al., 2019), but can involve students asking classmates, parents, siblings, former students, tutors, and students in similar programs at other educational institutions to write their assignments for them in exchange for favours or halting bullying. To make matters worse, academic staff (at all educational levels) are largely unaware of the enormity of the problem (Awdry & Newton, 2019; Eaton, Chibry, Toye, & Rossi, 2019) and effective technologies for detecting contract cheating are not yet broadly available (see Rogerson, 2017) making this type of cheating an attractive option for some students.

Contract cheating is not new to academia. However, the speed and ease with which students worldwide are able to access pre-written assessments or people willing to complete their work for them instantly is a more recent phenomenon. The internet greatly facilitates the locating and purchasing of contract cheating services from any country around the globe. For example, Kenya has been identified as a country from which contract cheating services are often sold to students in other countries (Bertram Gallant, 2019). Canada was once among the top four “countries from which students bought academic work online” and it is currently tied for second place for “countries where students engage in contract cheating” (Toye et al., 2019).

Sophisticated business models (Ellis et al., 2018; Yorke et al., 2020) in this illicit industry play an important role in the rapidly changing landscape of outsourcing scholarly work. The issue of contract cheating is further complicated in Canada because such companies are not considered illegal. In other jurisdictions (Australian Government, 2017; Newton & Lang, 2016; Quality Assurance Agency for Higher Education, 2017), however, legislation making the provision of these services illegal has been introduced or passed in an attempt to curb contract cheating. Adding fuel to the fire is the aggressive advertising of contract cheating providers (Kaktins, 2018), often through social media (Lancaster, 2019), and particularly targeting the growing number of international students in Canada. These students may already face several hurdles in their educational journeys because of language barriers and other challenges related to moving to a different country to study (e.g., Bretag et al., 2017). Not only do all students run the risk of not learning the required knowledge and skills for their chosen fields and future professions, they risk being blackmailed by the contract cheating service providers that they have hired to complete their academic work for them (see Yorke et al., 2020).

**WHAT can we do?**

Hatfield and Wise (2015) stated that practitioners “appreciate learning about what they can do right now or what has worked at other institutions to address common challenges” (p. 42). At an institutional level, blocking access to website URLs of contract cheating
companies on campus networks to protect students from making poor decisions regarding their academic work is fairly simple, concrete, and can be done “right now.” This recommended strategy (Australian Government: Tertiary Education Quality and Standards Agency [TEQSA], 2017; Quality Assurance Agency for Higher Education, 2017), when used in combination with other campus-wide and classroom educational and preventative approaches, can also be used to educate students that outsourcing their assessments is unacceptable and can have dire consequences. Education and prevention strategies for faculty can also be offered for faculty and administration, tying in a wide variety of factors from assessment design to policy review. In the sections that follow, we outline how the initiatives at each of our three postsecondary institutions unfolded, what we learned during the process, and how we plan to move forward in our approaches to promote academic integrity and discourage academic misconduct in Manitoba’s postsecondary institutions.

**HOW did the initiatives unfold?**

*University of Manitoba*

The University of Manitoba (enrolment ≈ 30,000 students) has a history of approaching academic integrity with a teaching and learning approach (Bertram Gallant & Drinan, 2008), which has been described elsewhere (Stoesz et al., accepted). Stoesz, along with assistance from academic integrity experts at other postsecondary institutions in Canada and Australia (S. E. Eaton, personal communication, May 9, 2019; T. Bretag, personal communication, May 9, 2019), populated a list of companies providing contract cheating services. Searching for contract cheating companies was accomplished using phrases such as “write my essay for me” and locating blatant statements on website landing pages that advertised services for completing students’ assessments for them (see Figure 1). A list consisting of over 930 URLs was then shared with authors Seeland at Assiniboine Community College and Vogt at Red River College.
Figure 1. Screenshots of messages on the landing pages used to identify contract cheating websites. Searches for sites were conducted using Google and phrases such as “write my essay for me.”

After conversations about the 2019 Canadian Symposium for Academic Integrity, contract cheating, and URL blocking with members of the leadership team at The Centre for the Advancement of Teaching and Learning, University of Manitoba, the decision was made to request support from the IST department to block access to the identified URLs from on-campus network connections. A pop-up message was also written to communicate to students that the URLs that they were attempting to access were in violation of the academic integrity policy. The message also included a link directing students to learn more at the university’s academic integrity website (see Figure 2). Blocking access to identified websites began in August 2019 and a high-level report of activity (unique users per month) during the months of September through December 2019 was generated.

Figure 2. The message that users see when they attempt to access a site identified as a contract cheating website. The message included a link directing users to learn more at the university’s academic integrity website.
Assiniboine Community College

At Assiniboine Community College (enrolment ≈ 2,200 students), the Library has long offered group instruction for students on plagiarism and citing, whereas the Academic Support Centre delivered writing workshops and individual assistance for students. Recent growth in recruiting international students served as a catalyst to contextualize these issues within academic integrity, and to move from what research dubbed a negative, punitive, and reactive approach to one of integrity (Bertram Gallant, 2011; Whitley & Keith-Spiegel, 2002). Rather than focus on the issues in a solely academic context, academic integrity education and promotion centred around both the related values and the context of societal safety, which was especially suitable for students in programs such as nursing, early childhood education, civil technology, and trades programs, where properly trained workers perform their jobs safely for the benefit of all. As Okoro (2011) suggests, “academic integrity is critical to the sustainability of a civil society and to the democratic process” (p. 177). Students learned about appropriate/inappropriate collaboration, plagiarism, cheating, duplicate submissions, fabrication of data, and facilitating academic misconduct. An early survey showed that many students appreciated “open dialogue [as it] reassure[d] the diligent student that academic integrity is taken seriously” (Rogerson, 2017, p. 14) at the college, and that policy is enforced fairly. Faculty and staff, meanwhile, were provided with professional development sessions on reducing plagiarism through assessment design as well as general awareness on academic integrity.

Contract cheating was specifically addressed with students at the beginning of the 2019-2020 academic year in the form of proactive interventions unique to different programs and assignments. The industry’s illicit nature, marketing techniques, questionable products, propensity for blackmail, and subsequent risks to both student and institutional reputation, along with society at large (Khan et al., 2020), were discussed using anonymized case studies and student application of school policy to them (as per Rogerson, 2017). Professional development opportunities were also offered to faculty and administration to help them understand the issues, and how to detect and differentiate plagiarism, purchased, and traded work (collusion), and mistakes in citing (Rogerson & Bretag, 2015; Sharkey & Culp, 2005). Professional development on academic integrity is crucial for identifying competency gaps and developing ways to promote best practice in teaching and learning among staff and faculty (Lofstrom et al., 2015; Sefcik et al., 2019). Over time, academic integrity has become a collaborative platform for the entire Learning Commons team at Assiniboine Community College, which now includes not only the Library and Academic Support Center, but faculty development coaches and educational technologists.
During this time, plans to block access to contract cheating websites were in development. The combination of the list of URLs from the University of Manitoba and existing filter modules on “plagiarism” and “illegal/immoral” on the Assiniboine Community College network were used to track access for the month of September 2019. Once the names of specific sites and volume of access were gathered, instructors whose assignments were found online were contacted. This began to generate interest for professional development in the area, and these instructors along with many of their administrators and others gathered for a session at Assiniboine Community College’s first event recognizing the International Day of Action Against Contract Cheating (https://www.academicintegrity.org/day-against-contract-cheating/) in October 2019. Here, institutional statistics were shared, best practices for designing assessments with reduced opportunities for cheating were delivered, and an overview of the contract cheating industry was given. Blocking began later the same week with messaging that included the ability to request the addition or deletion of individual sites. Network activity statistics are now delivered on a monthly basis.

Red River College

Red River College (enrolment ≈ 27,259 students) provides free academic support to students through the Academic Success Centre and Library Services. A range of individual, small group, and classroom-embedded supports are offered to complement specific courses and programs. With a growing number of students speaking a first language other than English, a team of English as a Second Language (EAL) specialists and tutors has developed English for specific purposes tutoring to assist students within specific programs. Staff at the Academic Success Centre look for opportunities to teach and fine-tune skills needed by students to demonstrate academic integrity, including time management, study skills, paraphrasing, summarizing, and citations. Library Services also offers workshops on research practices for students and classrooms.

In April 2019, Vogt (an EAL specialist) attended the Canadian Symposium on Academic Integrity and heard keynote speaker Tracey Bretag describe file sharing websites, such as Course Hero. Further investigation showed that Red River College students were actively using these sites to share course materials. Realizing the extent to which online services were drawing students into a fee-structure on the premise of “helping,” a discussion session was held to help educate faculty at Red River College about this growing industry, and that many of their assessments could likely be found on contract cheating websites. Further professional development is needed.

In the fall of 2019, the Red River College IST department reported that contract cheating and file sharing websites were not being blocked, but they were investigating file sharing
websites with a faculty group. All parties were concerned that students were sharing completed coursework, often revealing students’ names and the names of courses and instructors within the documents. IST was already blocking several categories identified by the network security system, Cisco Sourcefire, that are deemed inappropriate for the college environment, including gambling and pornography. An option was available to also block websites identified as “cheating” by simply checking a box. However, file sharing websites Chegg and Course Hero, would not be blocked by this category because they were identified as “online shopping.” These findings were communicated to the Senior Academic Committee, with details on the content available through contract cheating and file sharing websites, as well as the number of unique IP addresses accessing these sites from the Red River College network. Additionally, comparable data obtained through collaboration with MAIN institutions (i.e., University of Manitoba and Assiniboine Community College) was shared, pointing to the need for all institutions to act. The Senior Academic Committee approved the initiative and the blocking of contract cheating websites identified through the “cheating” filter beginning in March 2020. Although the network security system used at Red River College is unable to generate a tailored message for students attempting to access these sites, the plan is to promote support for students through the Academic Success Centre.

Staff were notified of the site blocking initiative through the daily Staff News. Feedback from instructors indicated uncertainty over the definition of a “contract cheating” website and whether citation generating websites were allowable tools. Others wanted to retain access to file sharing websites so they could check if their course materials had been shared. These questions highlight a need for professional development on the constantly evolving range of websites and services that offer academic help to students and the context for which certain services and tools would be permitted in a given course.

WHAT did we learn?

Our three-institution initiative allowed us to take a preliminary look at student activity on our institutional networks. We found that a relatively large number of students (i.e., unique users) were accessing the websites that we had identified as providing contract cheating services. We present the number of unique users who attempted to access contract cheating services by institution and month in Figure 3. Red River College also specifically tracked attempts to access the file-sharing sites known as Course Hero and Chegg (see Figure 4).
Figure 3. The number of unique users accessing websites classified as contract cheating (Assiniboine Community College and University of Manitoba) or cheating (Red River College) websites. Blocking these attempts was active for Assiniboine Community College and University of Manitoba during the months illustrated. Red River College tracked the number of users without blocking websites coded as cheating websites.
WHERE do we go from here?

Given that URL blocking is a practical way to protect students from making poor decisions regarding contract cheating, we embarked on an initiative at our three post-secondary institutions to block access to these websites from our campus network connections. Where possible, we worked closely with our respective IST departments to block access and to develop messages to educate students. These were grassroots initiatives (raised by staff working in the area of academic integrity) that received top-down support at each of our post-secondary institutions. Bertram Gallant (2011) argued that “the most successful on-campus integrity movements begin at the grassroots level and not by administrative fiat. Those with the motivation, inclination, and energy to begin a movement can couple that with smart strategies to involve the right people who will act as champions” (p. 28).

Through this initiative, we were able to learn more about the extent of the issue on our respective campuses, and plan to use this information to communicate with administrators that contract cheating is an important problem that deserves more attention and resources. We stress that a single initiative such as blocking access to websites is not enough to have a significant impact, as individuals who decide to take short-cuts will find other means to access these services. Indeed, in recent months, the novel coronavirus has changed...
education in ways that we might never have imagined. Students are no longer on physical campuses and are completing coursework largely in the virtual world. Contract cheating companies may be taking advantage of the world’s health crisis and capitalizing on students’ stress levels by increasing their marketing tactics (see Figure 5). Our education of contract cheating needs to ramp up. Students need more information about the short and long-term consequences of engaging in cheating practices with these companies, and to think critically about the choices they may make if tempted to engage in this or other forms of academic misconduct.

Figure 5. Screenshots of advertising for contract cheating services (images captured on April 3, 2020). Contract cheating companies are taking advantage of the covid-19 pandemic increasing their marketing tactics to remind students that these companies work remotely and they are here to help. Independent contract cheating providers use Kijiji and Reddit to advertise their services.

Academic integrity scholars recommend strongly that multi-faceted approaches involving institution-wide education, context-specific prevention strategies, and individual remediation are necessary to successfully promote academic integrity and prevent academic misconduct (e.g., Christensen Hughes & McCabe, 2006; Stephens, 2016). Therefore, a URL blocking initiative cannot be the sole strategy to prevent contract cheating. It is important for academic staff who have content knowledge in academic integrity and related topics to “provide a practical and real application of academic policies,
and allow students to ask questions about them to gain a deeper understanding of the principles and application of academic integrity” (Rogerson, 2017, p. 15). There is much confusion surrounding the nature of the contract cheating industry for both students and faculty, thus academic staff can also benefit from professional development in academic integrity, teaching and learning (more generally), and the tools and strategies to support both (Huffman, 2014) to improve their course and assessment designs.

Limitations of the Initiative and Considerations

We recognize that there are several limitations of our URL blocking initiatives. For example, some have argued that implementing this type of strategy is like playing “whack-a-mole;” that is, a continual cycle of blocking one URL only to find that others pop up. While this may be true to some extent and suggests a never-ending cycle of regular identification of new websites and URLs, doing so is not as time-consuming as one might imagine (e.g., 15 minutes to identify 100 URLs). A second limitation is that we did not block online shopping, advertising, and social media platforms that have allowed individuals to post their assessment completion services. For example, one can readily find advertisements from users of Reddit and Kijiji advertising their services to complete others’ academic work (see Figure 5) and we did not block access to these platforms.

Another limitation of our initiative is that file-sharing sites were not originally identified as contract cheating services. For example, Course Hero and Chegg, both of which are extremely popular with students, market their services to students as providing benign resources and study help (Figure 6), and being an “education technology company” (Mckenzie, 2019, n.p). Exploration of the websites suggests that completed assessments and answers are available upon request to students who subscribe to the services or upload their copies of course documents. Their recent partnership with Purdue’s popular Online Writing Lab (OWL) has generated both concern and controversy. These types of companies have also recently begun to market to adjunct professors (known as sessional instructors in Canada) who, like students, are described as busy and in need of fast solutions to their educational and instructional needs (Lederman, 2020). Some of these “study assistance” companies elude existing IT filter software and some are viewed by academic and support staff as appropriate learning resources (Lederman, 2020; McKenzie, 2019), which then requires their individual consideration for being added to the list of blocked URLs.
Figure 6. File-sharing and homework help websites advertising instant homework help.

What some of these file-sharing sites were identified as, however, and which allowed them to elude the filters at one institution, were “online shopping”. This ties into the theory of the commodification of higher education. Bretag (2019) cautions against having education sold as a product to students who are viewed as mere consumers. Earlier research (e.g., Ajoku, 2015) described this same mindset as being transactional rather than transformational in the fact that the focus is simply on receiving grades and credentials rather than appreciating the learning process. A final way of viewing this commodification is by saying that some students are more results-orientated than they are process-orientated (Piascik & Brazeau, 2010), viewing learning as obstacles to overcome in graduating rather than the reason they are students. All these concepts describe an environment where students could feel enabled to simply retrieve their completed coursework from a contract cheating provider. Finally, we were unable to determine the number of students who attempted to access the contract cheating services but ultimately decided against their use.

Recommendations and Conclusions

Although blocking access to contract cheating websites on campus networks does not prevent students from seeking out and accessing these services using other means, doing so on the networks that we can control is one concrete institutional level strategy to communicate that such behaviour may violate academic integrity policies. We recognize that a single initiative will not eliminate academic misconduct. Moreover, the methods used to detect contract cheating (and plagiarism) “do not and cannot prevent students from cheating, but can discourage the practice while being successful in reducing the use of contract cheating behaviours” (Rogerson, 2017, p. 4). As educators, it is also important for us to focus more on the values and ethics of education than rules and policies when we discuss these matters with our students (Morris, 2018; Sefcik et al., 2019). By combining
various educational, protective, and preventative strategies, however, we can increase the likelihood that students will make ethical decisions regarding their academic work.

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Applying a Holistic Approach to Contract Cheating: A Canadian Response

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Abstract

This paper traces the development of a contract cheating action plan, introduced by the Academic Integrity Council of Ontario (AICO), Canada. The action plan offers a holistic response to contract cheating, involving multiple and diverse stakeholders from postsecondary education. Created by an AICO subcommittee, three of its founding members detail the action plan and provide a perspective on its strengths, challenges, and ongoing implementation.

Keywords: academic integrity, academic misconduct, contract cheating, essay mills, higher education, postsecondary education, plagiarism, Ontario, Canada, holistic approach, quality assurance

Introduction

Contract cheating is an issue creating uncertainty in postsecondary institutions around the world. It has been at the heart of media exposés (Bomford, 2016; Jeffreys & Main, 2018), books (Tomar, 2012) and academic scandals, most notably the MyMaster scandal in Australia (Visentin, 2015). As a result of these incidents and publications, contract cheating has garnered attention in the media, inciting strong concerns about educational quality and eroding public confidence in postsecondary education standards. Concerned groups and countries have responded in a variety of ways. The Quality Assurance Association (QAA) in the United Kingdom (UK) has developed a “deterrence framework” (QAA, 2017, p. 7) for institutions to adopt. The Advertising Standards Authority (ASA) has completed several rulings against UK contract cheating websites for misleading advertising (ASA, n.d.). The Tertiary Education Quality and Standards Agency (TEQSA) in Australia developed an advice and best practice guide for institutions, with a “holistic and multi-stakeholder approach” (TEQSA, 2017, p. 8). Academic integrity organizations such as the International Center for Academic Integrity (ICAI, 2019) and the European Network for Academic Integrity (ENAI, n.d.) have also been working on projects and initiatives to address contract
cheating. Furthermore, in New Zealand, Ireland, Australia, and several states in the United States, legislation to regulate the work of contract cheating providers, also known as essay mills, has been passed or enacted.

Canada has also had its share of academic misconduct allegations in the media (Eaton, 2020), several which suggest that Canadian institutions are not immune to contract cheating. According to Clarke and Lancaster (2006), Canada is “among the top four nations where students engage in contract cheating” (Eaton & Edino, 2018, p. 3). Contract cheating occurs when a student outsources their academic assignments to a third party and then submits the work for academic credit or advantage (Clarke & Lancaster, 2006). While it is difficult to quantify the amount of contract cheating that occurs at any one institution, a walk across campus will often reveal the advertisement of explicit contract cheating services (Boisvert, 2019). Anecdotally, academic integrity practitioners are aware of students, graduate assistants, teaching assistants, and faculty being approached on social media and email to contribute to file-sharing sites, essay mills, and tutoring companies. The practice of contract cheating is not new; however, its business practices have changed with advances in technology (Ellis et al., 2018; Rigby et al., 2015), and the rise of social media (Amigud & Lancaster, 2019). Scholars have also questioned whether systemic challenges in academia are influencing the growth of the contract cheating industry, such as teaching work precarity, growing academic workloads, and the commodification of education (Walker & Townley, 2012). These systemic challenges affect the student experience including their satisfaction with the teaching and learning environment, which research has shown is a variable in the likelihood of contract cheating (Bretag et al., 2019).

Advocating for resources to support teaching staff and enhance teaching and learning frameworks benefit all stakeholders. While detection and consequences are necessary, a long-term investment to adequately resource faculty development and support the student experience (well-being and academic success) is considered a priority in a holistic approach.

Canadian postsecondary institutions are starting to acknowledge the issue and respond. One example of this response is that in Canadian postsecondary institutions, academic integrity policies are starting to reflect definitions of contract cheating (Stoesz et al., 2019). Canadian academic integrity practitioners are responding through engaging in greater education and prevention on their campuses. They are also organizing through meetings, symposia, and knowledge dissemination (e.g., University of Calgary, 2019). Canadian researchers in the field are also engaged in cross-institutional research collaborations on academic integrity (see Crossman et al., 2019) and specifically, contract cheating (see Eaton, 2019) in the Canadian context. These collaborations promote shared
understandings about academic integrity (Eaton et al., 2020) and support evidence-informed decision-making regarding policy, procedures, and initiatives across the sector.

In Ontario, the Academic Integrity Council of Ontario (AICO) has developed a Contract Cheating Action Plan. This plan is holistic, with multiple stakeholders with a strong focus on educational initiatives. As noted by Eaton and Edino (2018), “Canada’s philosophical, policy and educational approaches to academic integrity differ significantly from the United States in some respects” (p. 3). A holistic approach (Bretag, 2013; HEA, 2010; Macdonald & Carroll, 2006), moves away from a moralistic and punitive response to academic misconduct, and works towards providing a framework that is educative, inclusive, and engages with stakeholders across the sector. From the authors’ perspective, this holistic approach includes educational and awareness initiatives (for students, educators, staff, academic, and the broader community); prevention and reduction strategies (e.g., course design, assessment design); deterrence and detection strategies (e.g., laws, text matching software, exam invigilators, sanctions); transparent and robust policy and procedures (for students, educators, and staff); and an ongoing engagement to develop and promote a shared understanding of a culture of academic integrity. This paper traces the development of a Canadian holistic response to contract cheating. It shares AICO’s Action Plan and presents the progress and perspectives on its ongoing implementation.

**Background: Academic Integrity Council of Ontario**

Contract cheating is one of the concerns of AICO. Consisting of mostly southern Ontario university institutions at the time of its genesis, AICO has grown considerably over the years and now consists of 31 member institutions across Ontario, including publicly-funded universities and colleges. As of 2013, AICO became an affiliate group of the Council of Ontario Universities (COU). As an affiliate group, AICO is governed by a Constitution (ratified in 2013), and its overall mission has been to “provide a forum for academic integrity practitioners and representatives from postsecondary institutions in Ontario to share information, and to facilitate the establishment and promotion of academic integrity best practices in Ontario colleges and universities” (AICO, n.d.). AICO is an unfunded organization, which relies on voluntary leadership and uses a rotation model for hosting meetings at member institutions. Consistent with best-practice frameworks found in the literature (Bertram Gallant, 2008; Morris, 2016), AICO promotes an approach detailed by East (2009) that includes a “need to align policy, teaching and learning practices” (Bretag et al., 2011, p. 5), and a focus on education to prevent breaches of academic integrity policy and support the teaching and learning experience. Eaton and Edino (2018) suggest that “this includes developing a culture of integrity in which both students and educators are clear on the expectations and processes involved and the focus is on cultivating integrity as an educational process” (p. 1). In May, 2017 a new AICO Executive Committee (Angela
Clark, AICO Secretary/Outreach Coordinator; Andrea Ridgley, AICO Co-Chair; Emma Thacker, AICO, Co-Chair) was elected, and soon after a new aim was realized: to work together to confront the issue of contract cheating at Ontario postsecondary institutions.

**AICO's Contract Cheating Subcommittee**

AICO meets once or twice during each academic year. Typically, these meetings offer an opportunity to network, discuss hot topics, share information, new initiatives, and best practices. During the November 17, 2017 AICO meeting, hosted by Ryerson University, the issue of contract cheating was addressed by the keynote speaker, Christopher Lang, Past Advisory Board President, ICAI. Mr. Lang outlined the phenomenon to AICO members, shared current research, and demonstrated how easy it was for students to access contract cheating services online.

A call to action was put forward for AICO members, and the Contract Cheating Subcommittee was formed in April 2018 which, at the time, consisted of ten members across seven member institutions (college and university), and two external advisors. Subcommittee membership consists of academic integrity practitioners, researchers and scholars, teaching staff, a dean, and members working in governance and quality assurance (QA). This range of educational players has been a tremendous strength. Aligning with AICO’s approach to academic integrity, the subcommittee began with the premise that multiple academic stakeholder groups must be involved to make sustainable, positive change. In addition, given that the problem of contract cheating exists beyond our institutional walls and academic communities, the subcommittee was determined to “align with the growing international movement to reduce the threat of contract cheating in our institutions” (AICO, 2018, p. 2). The subcommittee meets regularly by tele/video conference and in-person to move the action plan forward.

**AICO's Contract Cheating Action Plan**

To develop the action plan, the subcommittee engaged in a review of the contract cheating literature, a member attended a workshop offered by the QAA to gain further perspective, and several meetings and consultations were had to discuss the approach, the development of buy-in, and finally the details of the draft action plan itself. The draft action plan was circulated to the wider AICO membership in a variety of ways to receive feedback and ultimately to seek endorsement. The plan was presented at the subsequent AICO meeting at Seneca College on November 18, 2018. Discussion groups were formed to discuss the plan and to collect feedback. Feedback was also collected via email. This was a critical stage of plan development. AICO members provided many ideas on how to raise awareness and shared information on current practitioner challenges, such as detection and case evidence.
Discussion groups also shared trepidation about the challenges of advocacy work, including the time commitment and expertise required to act reliably on the plan.

The action plan was written with a view that to reduce contract cheating in universities and colleges, diverse stakeholder groups must be engaged. The action plan includes five elements as follows:

1. Raise awareness about contract cheating within all constituencies of our own member institutions (e.g., administration, students, staff, faculty, academic community);

2. Raise awareness about contract cheating with relevant provincial and national education stakeholders;

3. Develop and share contract cheating reduction strategies (e.g., develop guidelines/best practices, engage in research);

4. Explore advocacy for legislation to offer a legal pathway to prosecute contract cheating providers; and

5. Engage with international stakeholders to work collaboratively on initiatives and build international capacity.

**Awareness**

AICO meetings often provide professional development around academic integrity research and issues. As the topic of contract cheating became more common at meetings and professional gatherings, it was apparent that even for those engaged with academic integrity, contract cheating is still largely an unknown. Raising awareness was a critical first step, and this included all members of the academic community. It was determined that to mobilize resources and bring about change, a shared understanding of the issues was needed, taking into account the ecosystem of the academic institution. The approach to awareness includes not just the involvement of all groups (faculty, students, staff, administration, families, associations, broader community), but also to share a range of information. This includes information about contributing factors, student and institutional risks, current research and best practices, and related provincial AQ requirements. To share information, AICO uses social media, a member listserv, a website, and regular meetings for members to network and take back information to their institutions to raise awareness and develop strategies.
Drawing on the QA expertise of subcommittee members, it was decided to leverage the existing provincial QA framework to support the action plan. In 2006, the Ontario Council of Academic Vice-Presidents (OCAV), who is affiliated with the COU, adopted a Degree Level Expectations (DLE) model (OUCQA, 2013). This came into effect in 2008 as part of the QA framework for all Ontario institutions offering degree programs. At the undergraduate level, as part of the DLE category ‘Professional capacity/Autonomy’, the competency reads, “behaviour consistent with academic integrity and social responsibility” (OUCQA, 2013, p. 3). At the graduate level, under the same competencies category, it reads, “The ethical behaviour consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research” (OUCQA, 2013, p. 5). The subcommittee thinks that these QA expectations require heightened awareness and rigour. As such, the expectations have been drawn into various presentations and awareness initiatives to gain traction with the action plan. Where resources may not currently exist for academic integrity initiatives, all institutions will have some resources in place to support QA responsibilities. Tapping into these resources and existing accountability framework supports a holistic approach and folds academic integrity into the fabric and process of program review and development.

In order to raise awareness with relevant provincial and national education stakeholders, members of the subcommittee met with staff at the COU who are focused on policy and sector collaboration. After discussing the issue of contract cheating and outlining the action plan, the subcommittee was invited to present to the OCAV, which took place in November 2019. Here, subcommittee members (from Humber College, Ryerson University, and the University of Waterloo), outlined the risks of contract cheating, current research, and presented the action plan. The group engaged in dialogue and shared concerns for students who are at risk from predatory services. A similar presentation to the Ontario Council on Graduate Studies (OCGS) is scheduled in 2020. Colleges Ontario, an advocacy organization representing the provinces 24 public colleges, has also been approached to meet with the subcommittee. There are other provincial and national organizations that the subcommittee will reach out to, in order to foster communication and possible collaboration, including, but not limited to, the Higher Education Quality Council of Ontario, the Ontario Universities Council on Quality Assurance, and Universities Canada.

Since the drafting of the action plan in 2018, local, national, and international media have invited subcommittee members to participate in many (over 20) media events, including on television, radio, web, and in print (e.g., Ridgley, 2019). While a media strategy is not articulated as part of the action plan, the subcommittee continues to respond to media and provide relevant information. In addition, a holistic approach must extend beyond the internal academic community. As part of the action plan consultation phase, AICO members
indicated that it was critical to ensure that contract cheating issues are reflected with sensitivity and accuracy, and that while being transparent about all known risks, it is important not to lean on media sensationalism and fear to inform. While the media can be a useful tool to disseminate information to a broad audience, it is not without its challenges. Subcommittee members share trepidation about speaking on behalf of a very large group of diverse institutions and the quality of media coverage on a phenomenon that is fraught with complexity and issues of equity.

**Strategies**

In regards to developing and sharing contract cheating reduction strategies, the subcommittee pooled their contract cheating resources and placed it in a single shared online folder, making the folder available to all AICO members. AICO members were also invited to contribute. This folder continues to grow with contract cheating reduction resources such as presentation slides, research papers, best practice reports, and web resource lists.

Several subcommittee members are contributing to research projects on the topic of contract cheating in Canada (e.g., Stoesz et al., 2019; Thacker & Gagne, 2019). These projects vary in size and scope; however, they aim to contribute to knowledge about academic integrity and contract cheating in Canada. Results and analysis will support decision-making around contract cheating reduction strategies for Canadian institutions, for example, by identifying gaps in policy, and faculty development offerings. While we are aware that the QAA and TEQSA have created rich contract cheating reduction strategies aids and guides as mentioned in the introduction, and that these documents provide tremendous value, we are mindful of the Canadian postsecondary education context as guidelines and best practices are developed and implemented in Ontario, Canada.

The subcommittee continues to support existing strategies, such as encouraging member institutions to participate in the International Day of Action Against Contract Cheating (ICAI, 2019), an initiative developed and promoted by the ICAI. The action plan has also been included on the AICO website (AICO, n.d.), and the subcommittee is in the development stage of creating a position statement.

**Legislation**

Another goal is to explore advocating for legislation as a pathway to prosecute contract cheating service providers and to provide a measure of deterrence. Since the action plan was developed, this idea has been explored and discussed, and we note that the AICO membership has not reached consensus. While most agree, including researchers in the
field (Bretag, 2019; Draper & Newton, 2017), that having laws to make contract cheating services illegal sends an appropriate and symbolic message to those undercutting the education system, some AICO members are concerned with unintended outcomes for institutions and students. One view is that Ontario postsecondary institutions have existing policy, procedures, and sanctions that respond to breach of policy and that stepping beyond this is not the role of academic integrity practitioners and administrators. Another view is that continued university and college autonomy around academic misconduct is critical and advocating for regulation may place this at risk. In addition, research indicates that legislation has had little effect on the supply-side of contact cheating (Amigud & Dawson, 2019), raising the question of whether efforts are better placed on the demand side. With academic integrity resources being so limited, some members would prefer to focus energies on more potent education and prevention strategies. The issue of legislation is a conversation that continues to unfold as we raise awareness with provincial groups that represent the colleges and universities (i.e., COU, Colleges Ontario) and the subcommittee continues to discuss, stay informed, and seek advice.

**International Outreach and Collaboration**

The subcommittee members regularly attend the annual conferences held by the ICAI and the ENAI. The AICO Executive presented the action plan at the ICAI Conference in New Orleans, LA (Clark et al., 2019) and at the Canadian Symposium on Academic Integrity in Calgary, Alberta (Ridgley et al., 2019). There are several other international organizations that the subcommittee plans to reach out to including, but not limited to, the QAA, TEQSA, and the ENAI to explore options for working collaboratively on initiatives and research, and to build international capacity.

**Discussion**

The development of academic integrity skills and perspectives is a critical part of the education process. Contract cheating is not just about fair assessment, it disrupts our trust in knowledge, education, and the quality of an academic credential. It also brings to the forefront the challenges and systemic issues affecting the local and international academic landscape. It challenges our notions around academic equity, access, and merit. The subcommittee recognizes a need to act now - to act in accordance with our holistic action plan.

The process of developing the action plan has had several strengths, in that it was the first time the entire AICO membership worked on a shared initiative of this size. This process allowed the AICO Executive and subcommittee to have a fresh understanding of member perspectives, priorities, and expertise. Our plan and work has also strengthened our collaborations, the cross-pollinating of information and the forging of new networks and
strengthened relationships. More Canadian research is needed. Another strength of the subcommittee is the level of interest in and commitment to collaborative research projects. That said, implementation of the action plan, while fueled by passion and commitment from its members is often done off the side of desks, during lunch breaks and over weekends. The unfunded nature of the organization allows for various freedoms; however, it also acts as a constraint. The subcommittee volunteers their time and some take on personal costs to attend events and contribute to initiatives. Not all institutions are organized with formal offices of academic integrity, and this can mean that some members have additional advocacy to do locally, to garner resources, support, and attention. That said, the collaborative nature and diverse membership of AICO is a strength, and this contributes to the development of a shared vision of academic integrity, support for a holistic approach, and a view that we each play a role in the prevention of contract cheating.

**Conclusion**

Contract cheating is a complex phenomenon, requiring institutions to work collaboratively to protect students, the value of programs, credentials, and “the credibility of science” (Bretag, 2019, p. 599). As AICO’s Contract Cheating Action Plan unfolds and evolves, the subcommittee offers a standing invitation. An invitation for Ontario postsecondary academic institutions who are not members to join AICO in its pursuit to support faculty and students and strengthen the foundation of our institutions with a strong holistic framework that reduces contract cheating. We also invite others from around the globe, with similar goals and interests, to reach out in the spirit of collaboration. A holistic approach engages all stakeholders across the academic community and demands proactive and preventative strategies to support inclusive teaching and learning.

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Methodological decisions in undertaking academic integrity policy analysis: Considerations for future research

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Abstract

Purpose: The purpose of this article is to share details of the methodological decisions regarding data collection that a researcher or research team may want to consider when undertaking a policy analysis.

Methods: We have undertaken a meticulous documentation of our decision-making processes throughout the research design process.

Results: We provide narrative evidence of what worked for us as a collaborative research team.

Implications: Understanding the decisions we made throughout our research design and implementation may help other research teams, particularly those working as virtual collaborators and/or those undertaking academic integrity policy analysis.

Keywords: academic dishonesty, academic integrity, academic misconduct, Canada, collaboration, contract cheating, policy, post-secondary, qualitative, research methods

Background

The purpose of this article is to share details of the methodological decisions regarding data collection that a researcher or research team may want to consider when undertaking a policy analysis. We have documented the process we used in our research on academic integrity policy, casting a specific lens on contract cheating. By doing so, we aim to assist others interested in undertaking similar work. Our study involved analyzing policy documents from 22 publicly-funded colleges in Ontario, Canada. Our research team consisted of a team of four individuals, all of whom had subject-related expertise in
academic integrity, and one of whom (Eaton) had previously published policy research. This work was presented at the 2019 International Center for Academic Integrity (ICAI) Conference (Thacker, Miron, Eaton, & Stoesz, 2019) and the Canadian Symposium on Academic Integrity (Thacker, Eaton, Stoesz, & Miron, 2019), and was subsequently developed into a full-length peer-reviewed journal article (Stoesz, Eaton, Miron, & Thacker, 2019). In this article, we expand on the methodological decisions we made as a research team regarding exactly how we conducted our study, so others may learn from what we did to conduct their own policy research.

**Study Design Decisions**

The study was originally conceptualized (by Eaton) in spring 2018 as a nation-wide project in which academic integrity policies from post-secondary institutions across Canada would be examined in a systematic way (Eaton, 2019). A call went out to experts across Canada to engage in an initial conference call to determine what levels of interest and commitment there would be to engage in such a project. Dr. Tracey Bretag, in a personal Skype interview with Sarah Elaine Eaton, offered advice on conducting and leading a policy analysis based on her experience in the Australian context (T. Bretag, personal communication, June 25, 2018).

Although the goal of a nation-wide project was admirable, it became evident during the consultation with Dr. Bretag that the scope of such an endeavour would be unwieldy. As such, the project was scaled back to focus on policies within a single Canadian province. During a call with a larger team, the group agreed to undertake an academic policy analysis of colleges in a single province: Ontario. The intention was that other groups would follow who would analyze policies at Ontario universities, as well as policies for post-secondary institutions in other regions of Canada. Although that idea sounded straightforward in the early stages, as the team who committed to undertake that piece of work, we quickly determined that we needed to make decisions about the research design itself, such as inclusion and exclusion criteria.

**Determining Inclusion and Exclusion Criteria for Institutions**

We engaged in discussions about whether to include publicly-funded colleges and/or privately-run colleges. The research team decided to focus our study on publicly-funded colleges exclusively. The decision to exclude privately-funded colleges was influenced, in part, by the fact that two research members (Miron and Thacker) were employed through public colleges in Ontario. The team unanimously concluded that this lived experience would add credibility to the study and depth of tacit knowledge about the public college
system. This proved to be useful throughout the study, as the professional experience and expertise of these two researchers added insight to our discussions.

A second factor that influenced our decision was the availability of documentation to help us develop a list of publicly-funded institutions (Government of Ontario, n.d.). Based on our decisions about the institutional inclusion criteria, we identified 24 publicly-funded colleges in Ontario, which became the initial set of institutions for our study. We also made an intentional decision to include colleges that were independent institutions, rather than subsidiaries of larger organizations.

**Study Design Decisions Based on Language**

The documents retrieved from 22 colleges were written in English and two were in French. Through the process of ongoing dialogue during the document retrieval process, the team made an intentional decision to limit our data extraction and analysis to the documents written in English, therefore limited to institutions where English was the primary language of instruction. The rationale for this is that none of the research team members thought they had sufficient language proficiency in French to adequately conduct research in that language. Our discussions addressed the possibility of inviting additional team members with native or near-native proficiency in French. Because we had agreed to engage in two independent cycles of coding the data, this would have meant the addition of a minimum of two people with adequate proficiency in French. As a result, the team ultimately decided to proceed with the established team, noting the restriction to English as a limitation of the study.

In retrospect, we could have made the decision around the limitation of language before we began our document retrieval, and if we were to conduct another policy analysis, we would feel empowered to do so from the beginning, based on our experience with this project.

**Decisions Regarding What Tools to Use for Data Collection and Analysis**

Our four team members were situated at different institutions, spread across Canada. Early on in our project we decided to use the Google suite of tools to help us engage in a project that was collaborative, but with tasks assigned to individuals that they could complete asynchronously and independently. We organized our work into a Google folder that included Google Sheets (spreadsheets) and Google Docs. At periodic (though irregular) points throughout the project, different team members individually downloaded copies of materials housed within Google Drive to ensure we had backups stored on local drives.
Decisions Regarding Data Collection

We engaged in two sequential cycles of data collection, which we also called document retrieval. It is important to understand that in policy research, the documents themselves are the data.

First Cycle Data Collection

The team set a timeline goal for collecting as much data as possible within a four-week period. Two team members (Eaton and Stoesz) engaged in the document retrieval process, and as they did so, they noted the exact dates when data was retrieved. The result was that we completed our first cycle of data collection between August 28 and September 22, 2018.

Searches for documents that described academic integrity (i.e., policies, procedures) were conducted through each college’s web search function (typically powered by Google) or by inserting institution name and the words ‘academic integrity policy’ into Google’s search bar.

In only one case, we were able to determine that the documents we were seeking were not publicly available. Once we had evidence of this, based on our initial search, a research team member reached out to the institution to request the documents so we could include them in our project. The institution obliged and we ended up with a complete set of documents from 22 publicly-funded colleges.

Second Cycle Data Collection

A second cycle of document retrieval occurred during data extraction when it was deemed necessary to retrieve documents mentioned in the primary documents; one additional document was retrieved.

Being open to the prospect of two cycles of data collection embedded some flexibility into our research design. Although we made a concerted effort to retrieve a complete set of documents the first time, we proceeded with the confidence to revisit our initial set of what we considered to be a relatively complete set of documents and add to it if we determined it was necessary, which we did.

Decisions Regarding Data Extraction and Coding

All documents were coded independently by at least two different coders. All four team members were assigned to extract the data from the documents of 11 colleges independently. Each coder was assigned as the primary coder for about half of the
documents, and as the secondary coder for the other half. In this way, the data extraction process for each document occurred twice.

Prior to data extraction, the research team agreed to extract information for five categories, including document type, title of document, specific language related to contact cheating (i.e., whether direct or indirect), policy principles, and the presence and clarity of contract cheating definitions. Category selection was informed by the recent literature (Bretag, Mahmud, East, Green, & James 2011; Bretag, Mahmud, Wallace et al., 2011; Grigg, 2010). As part of our collaborative analysis process, all four team members committed to reading the foundational research materials identified above. We debriefed and discussed the readings during team meetings. This allowed us to develop our individual and collective understanding of policy analysis research. Our category selection was made collaboratively during our research team meetings to support consistency and quality assurance throughout the research process.

Next, we calculated the level of agreement in our data extraction for each category. Agreement for the identification of document type and presence of specific definitions was the highest (100%) and was the lowest for coding policy principles (68.2%) identified within the documents. Disagreements between coders were reviewed and resolved by consensus.

Later we discussed how in-depth our analysis should be and then decided to dig deeper in our data extraction process. In the end, we made decisions to limit further analysis due to several factors including time and word limits for publications. Ideas for expanding and extending the research ultimately ended up in the discussion section of the manuscript.

**Developing an Effective Research Team**

In addition to methodological and study design decisions, the team gained additional insights through the collaborative research process that we share here, with the intention of benefitting future research teams.

**Research Team Size and Composition**

In the early stages of conceptualizing the study, Eaton put out a general interest call to assess the level of interest in undertaking a national policy study. During a personal interview conducted via Skype, Dr. Tracey Bretag offered some cautions and insights that influenced the size and composition of the research team (T. Bretag, personal communication, June 25, 2018). Bretag recommended keeping the team small (a maximum of six people) and assigning clearly defined tasks to each team member. Her second
recommendation was to set clear expectations. This included articulating that being a member of the research team would involve active and hands-on work and not simply advising or offering opinions about the project.

As a result, the initial group who expressed interest was refined to a team of four (the authors of this article) who committed to engaging in the research work for the duration of the project. In the call for participation, the project lead (Eaton) had estimated that a commitment of approximately 10 hours per week would be likely, and asked people to invest that time on a consistent basis to complete the project. As a result of clarifying expectations early on, all those who committed to undertake the college policy analysis remained constant throughout the project, with all research team members actively engaged throughout the entire process.

**Developing Trust and Team Identity**

When we began our collaboration, our research team was virtual, with each team member from a different institution contributing individually to the collective. It is not uncommon for members of virtual teams to be “geographically and organizationally dispersed” (Greenberg, Greenberg, & Antonucci, 2007, p. 325). In our case, we were spread across three provinces and three time zones.

We developed trust and relationships with one another throughout the project, though in retrospect, we perhaps ought not to have taken this for granted. Greenberg et al. (2007) note that challenges can arise when team members are dispersed. “There are no conversations at the water cooler, over coffee, or during lunch that help teams form a collective identity and group norms” (p. 327).

The group informally named themselves “Team College”, lending a subtle but powerful identity and sense of belonging to the research team. We would add that the research team naming was not a requirement and nor did we spend much time on it. The naming was informal and unplanned, though it slowly helped us to develop a sense of cohesion and team identity. In retrospect, this proved helpful, given that only two of the four team members had met in person prior to undertaking this project.

For the duration of the majority of our project, the team members never saw each other in person. It was not until the knowledge mobilization phase of the project that team members met face-to-face. The first time the entire research team met for the first time was at the International Center for Academic Integrity 2019 conference in New Orleans, LA, where we presented our findings (Thacker, Miron, Eaton, & Stoesz, 2019).
Success in working as a research team was largely dependent on the team members’ commitment to open and transparent discussion throughout the data gathering and writing phases of the project. The collegial approach facilitated each researcher’s understanding of the extracted data and promoted the ability to safely provide writing critique to support excellence. We found that ongoing dialogue fostered a sense that we were learning together throughout the process. This proved to be important to facilitate each researcher’s understanding of the data that was to be extracted, how we were going to undertake the coding, and how wanted to analyze our data.

The chemistry of this team facilitated drafting of the various sections (i.e., writing without expectation of perfection) and comfort with suggesting changes in interpretation of the data and how the writing flowed. We set deadlines and did our best to meet them, but we were also charitable and forgiving with one another at moments when deliverables were delayed.

**Commitment to Regular Meetings**

At the onset of the work, the research team committed to regular online meetings. We relied mainly on telephone conference calls for our meeting, but occasionally used Adobe Connect, Skype, and Zoom to facilitate synchronous communications. Meetings were scheduled using digital calendaring tools and each person was responsible for ensuring the correct meeting time was in her personal calendar based on her own time zone. Occasionally we engaged in communications to confirm meeting times and dates, given we operated across three time zones.

One person acted as a scribe for each meeting (usually Thacker). Having a scribe to take meeting notes supported seamless and clear communication from meeting to meeting. At the end of each meeting, tasks were assigned to each team member with agreement that these tasks would be completed before the next meeting. An ability to reach out to individual research group members between set meetings allowed for necessary discussion in completing tasks and kept the momentum for the project alive. Meeting notes were archived in our collaborative Google Drive folder. These notes supported knowledge mobilization of the project, such as conference presentations and article writing.

**Building in Milestone Goals**

We found that concrete goals helped us to stay focused and catalyzed our work. For example, we used conference proposal deadlines and presentations to set goals for our project, so we would be prepared to present our findings. All team members committed to
meeting the milestone goals. Over time, the more goals we met, the further the project advanced.

**Conclusions**

As we reflect on this project, we realize that our collaboration may have been one of the first of its kind in Canada for academic integrity research, as our country has been lacking in large-scale collaborative research projects (Eaton & Edino, 2018). We came together as four researchers from different institutions across three provinces who committed to undertaking and completing this work. This was an unfunded project, and yet, it still resulted in three peer reviewed outputs: two conference presentations and one journal article, in addition to this practitioner article. Our project provides evidence that multi-institutional, cross-provincial collaborations are not only possible — they can be successful and lay the groundwork for future projects.

At the time of this writing, two other groups have taken on additional pieces of the larger national project. One group is examining academic integrity policies of Ontario universities and another is looking at Western Canadian universities.

As these collaborations continue to develop and produce peer-reviewed research outputs, they will help to establish a strong foundation of larger scale research on academic integrity in Canada. One key to ensuring the quality of such research is to document and share methodological processes and decisions so others can build their research skills and their understanding of what is required for successful collaborations on a larger scale. Collaborations such as ours provide an opportunity for researchers and academic integrity practitioners to realize and promote a shared approach to academic integrity. A shared understanding and responsibility to academic integrity is critical to the development of a culture of integrity within and across institutions.

**References**


