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Academic integrity and contract cheating policy analysis of colleges in Ontario, Canada

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Abstract

In this study, we analyzed the academic integrity policies of colleges in Ontario, Canada, casting a specific lens on contract cheating. We extracted data from 28 individual documents from 22-publicly-funded colleges including policies and procedures ($n = 27$) and code of conduct ($n = 1$). We analyzed the characteristics of the documents from three perspectives: (a) document type and titles; (b) policy language; and (c) policy principles. Then we examined five core elements of the documentation including (a) access; (b) approach; (c) responsibility; (d) detail; and (e) support. Key findings revealed that specific and direct language pertaining to contract cheating was largely absent from the policy documents, that underlying policy principles lacked clear definition, and that exemplary policy has yet to be developed in this context. We conclude with recommendations for increased policy research in the area of academic integrity and a call for policy revision in Canadian higher education institutions to more explicitly address the issue of contract cheating, as well as provide more support to students and other campus stakeholders to better understand how contract cheating impacts and impedes teaching and learning.

Keywords: Academic integrity, Canada, College, Contract cheating, Higher education, Policy, Post-secondary

Main text

Clear language, ease of access, and transparency around expectations and process are hallmark features of exemplary organizational policy. Educational organizational policies are formal statements of principle that are used to establish boundaries, provide guidance, and outline best practices for educational institutions and should support their mission and values (Freeman 2013; Carnegie Mellon University 2015). Policies communicate the values and expectations for those in learning communities and to the public, “provide guidance as to their observance” (Northwestern University 2018, p. 1), and “promote compliance with laws and regulations” (Carnegie Mellon University 2015, p. 1). Policies are typically accompanied by procedures that when implemented can influence the behaviour of the people within an institution (Clark et al. 2012; Bretag and Mahmud 2016). Thoughtfully and carefully constructed policies are vital for promoting a culture of academic integrity by providing value-based frameworks for managing acceptable and



unacceptable practices in scholarly work (Morris and Carroll 2016), supporting students' learning (Bretag and Mahmud 2016), and affecting how content is adopted into curriculum (Bretag et al. 2011b).

While timelines for reviewing and revising policies may differ across organizations and countries, efforts to ensure consistent and regular review is agreed to be an important endeavour (Bretag et al. 2011a; Freeman 2013; Carnegie Mellon University 2015). This endeavour gains importance given the changing landscape of learning that includes realities like the ease of access to information via the internet, ubiquitous use of technology, and the increasing issue of contract cheating. Such system drivers have elicited a call for policy makers and other knowledge users to collaborate more intentionally with researchers to increase accountability and generate evidence to inform decision-making (Kothari and Wathen 2013). Given the importance of academic integrity policy in higher education, the purpose of the present study was to examine academic integrity policies, with a particular focus on how Canadian colleges have addressed contract cheating.

Literature review

In our review of the literature, we identified major areas of prior scholarship that informed our understanding of the topic. We have organized our literature review into three sections. First, we broadly address the phenomenon of contract cheating. Second, we examine policy research, casting an intentional lens on policy analysis focused on academic integrity. In the third section, we situate our work within the Canadian context and the estimated extent of the problem of contract cheating in Canada. Finally, we conclude our review of the literature by discussing how our study addresses a gap in the existing scholarship.

Contract cheating

Since the term contract cheating was coined (Clarke and Lancaster 2006), scholars have articulated various definitions, with some nuanced differences among them (Clarke and Lancaster 2006; Draper and Newton 2017; Harper et al. 2018). Despite the differences, there is consensus that contract cheating occurs when students outsource their academic work to a third party. This type of academic dishonesty suggests "deliberate, pre-planned, and intentional" deception (Newton 2018, p. 2). We also acknowledge that contract cheating providers attempt to manipulate students by normalizing the cheating behaviour to "lure [them] into transactions" (Medway et al. 2018, p. 23) using various techniques.

The rate of contract cheating among students has been estimated to be 2–18% among high school students (Sisti 2007; Stoesz and Los, 2019) and 3.5–22% of post-secondary students (McCabe 2005; Hosney and Fatima 2014; Curtis and Clare 2017; Newton 2018). The drastic differences in these estimates may be an indication of early-stage inquiries into the topic that have become more refined as empirical research in the field has become more robust and rigorous, and larger in scale. For example, Bretag et al. (2018a) reported that approximately 5.78% of 14,086 students in Australia self-reported engaging in one or more contract cheating behaviours.

There is evidence to show that the phenomenon of contract cheating is present across various academic disciplines (Curtis and Clare 2017; Eaton 2019; Lancaster and

Clarke 2015). Although early investigations into the topic of academic outsourcing focused on computer science (Clarke and Lancaster 2006) and essay mills, more recent research has shown that various types of assignments are outsourced by students, including final assignments, in-class assignments, reflections on practicum experiences, and personalized assessments (Bretag et al. 2018a, b; Bretag 2019). There is further evidence showing that contract cheating occurs in numerous languages beyond English (Eaton and Dressler 2019), which is of particular concern for those in the Canadian context, given that formal education is offered in both official languages – English and French.

Despite the overwhelming evidence to show the depth and breadth of contract cheating as an issue, the response at the level of individual educators and from institutions has been problematic. At the instructor level, assessment design alone is not sufficient to ameliorate contract cheating (Bretag et al. 2018b) and there is little evidence that contract cheating is being identified consistently. One possible reason for this may be that the work submitted is often written by a third party from scratch rather than plagiarized from another source (Lancaster and Clarke 2016). As Amigud and Dawson (2019) point out, “contract cheating is much more difficult to detect as it requires validation of both identity and authorship.” (p. 2). Detection of work completed by third parties can be difficult, requiring the continual development, update, and refinement of tools to detect contract cheating with greater sophistication (Lancaster and Clark 2016). Often the process of the detection is left in the hands of individual educators. Although the task of detection can be complex, educators can be trained to identify signs of contract cheating in student work (Rogerson 2017).

However, the issue of contract cheating is not one that the individual educator can solve. Institutional and systemic approaches to addressing this complex issue are needed (Lancaster and Clark 2016; Australian Government: Tertiary Education Quality and Standards Agency [TEQSA] 2017). Academic integrity advocates call for a holistic approach to promoting academic integrity, addressing violations in a proactive manner, and developing clear and detailed policies and procedures that are applied consistently (Morris and Carroll 2016; TEQSA 2017). This approach can be used to begin to address the issue of contract cheating in Canadian post-secondary institutions.

Academic integrity policy analysis

The call for a holistic approach to combating contract cheating at an institutional level echo similar calls from educational policy researchers who have noted that policy analysis is not merely an academic exercise, but rather, a critical examination of institutional approaches, practices, and norms that have the potential to “support the development of human capacity” and “respect for human dignity and worth” (Ozga 1999, p. 46). Situated within qualitative research paradigms, policy analysis is a values-laden endeavour and those who undertake it do so with “engaged subjectivity” (Ozga 1999, p. 44). As we reviewed the extant literature on academic integrity policy in particular, we noted this engaged subjectivity in the work of others who have come before us.

We noted two overarching subsets of academic integrity policy analysis. The first encompassed broad investigations about post-secondary institutional policies

(Bretag et al. 2011a), as well as large-scale comparative studies (Glendinning 2013; Foltýnek and Glendinning 2015; Glendinning et al. 2017). The second subset of this literature showed that plagiarism has emerged as a topic of particular interest in academic integrity policy inquiry (Brown and Howell 2001; Price 2002; Grigg 2010; Gullifer and Tyson 2014; Foltýnek and Glendinning 2015; Eaton 2017; Hu and Sun 2017). Results have shown that vague or inconsistent definitions of plagiarism are not helpful to students trying to avoid it, or professors or administrators trying to address it after it has occurred (Brown and Howell 2001; Eaton, 2017). Nevertheless, plagiarism is difficult to define in absolute terms and can include a variety of practices from verbatim copying to imprecise citing and referencing (Brown and Howell 2001; Grigg 2010; Gullifer and Tyson 2014; Eaton, 2017). Further, inconsistencies in definitions, policies, expectations, and responses can vary drastically among institutions and across countries, further problematizing the issue (Grigg 2010; Foltýnek and Glendinning 2015; Eaton 2017).

In recent years, recommended practices for policy development have emerged (Bretag et al. 2011b; Bretag and Mahmud 2016; Morris and Carroll 2016). Bretag et al. (2011b) recommended five core elements for writing effective academic integrity policy. The first is *access*, describing policy that is easy to find and understand. The second is *approach*, which refers to infusing policy with an educative process. The third is *responsibility* that articulates clear roles and responsibilities for various stakeholders. The fourth is *detail*, which refers to having descriptions of classifications of terms like integrity, severity of breaches to academic integrity, and policy processes with clear and objective outcomes. The final core element is *support*, which includes procedures, modules, training, and professional development to enact the policy. These core elements of exemplary academic integrity policy served to inform our understanding and analysis for the research completed in this study. Once policies have been written, it is important that they be reviewed and revised on a regular basis to ensure that they remain up to date and current (Morris and Carroll 2016).

Two typical theoretical approaches to policy analysis include problem-solving theory and critical theory (Ozga 1999; Winton and Tuters 2015). While both approaches are evident in existing academic integrity policy research, there is often no explicit allegiance to a particular theoretical approach. We viewed this approach to academic integrity policy research as a strength, rather than as a deficit, demonstrating an overall tolerance of diverse epistemological foundations. We situate ourselves within this emergent tradition of academic integrity researchers who recognize that such policy research can have multiple aims. First, academic integrity policy can aim to address the problems associated with violations of integrity and thus the application of problem-solving theory is appropriate. Equally important is a critical theory perspective that involves the acknowledgement and awareness of how problems are socially constructed. This latter perspective views social and cultural values at play in how these problems are framed. In turn, how problems are framed necessarily influences how they are solved (Ozga, 1999; Winters and Tuters 2015). An in-depth analysis of academic integrity policy is more robust when problem solving and criticality are infused as complementary theoretical foundations of the work.

Situating academic integrity research within the Canadian context

Post-secondary education in Canada encompasses universities, community colleges, as well as trade and vocational training centres (Statistics Canada 2018). In the 2016/2017

academic year, 2,048,574 students were enrolled in post-secondary institutions in Canada (Statistics Canada 2019). To contextualize this number, the total population of Canada in 2016 was approximately 35.1 Million (Statistics Canada 2017). It has been estimated that over 71,000, or 3.5%, based on estimates from Curtis and Clare (2017) post-secondary students in Canada engage in contract cheating every year (Eaton 2018). Until recently, there has been a general lack of awareness about the outsourcing of academic work among Canadian students, which led us to develop the research question that guided our study: How do Ontario's publicly-funded colleges address contract cheating in their academic integrity policies and related documents?

Method

Our research methodology was based on the document and policy analysis procedures outlined by Bretag et al. (2011a, b) and Grigg (2010), and involved a systematic extraction, evaluation, and synthesis of information to gain further insight into the issue of contract cheating in Canadian post-secondary education. We collected publicly accessible online academic integrity policies from websites of 24 publicly-funded colleges in the province of Ontario, Canada. In the first cycle of document retrieval (August 28 to September 22, 2018), two research team members searched for and downloaded the primary documents about academic integrity (i.e., policies, procedures), and other documents that described academic integrity on each college's website. Searches for documents were conducted through each institution's web search function or by inserting an institution's name and the words 'academic integrity policy' into Google's search bar. Documents that were unavailable publicly were requested from the institution ($n = 1$). The second cycle of document retrieval occurred during data extraction when it was deemed necessary to retrieve documents mentioned in the primary documents ($n = 1$).

Analysis

The documents retrieved from 22 colleges were written in English and 2 were in French. We delimited our data extraction and analysis to the documents written in English, as the research team members were not fluent in the French language.

Phase 1: document characteristics

Prior to data extraction, the research team agreed to extract information for five categories: document type; title of document; specific language related to contract cheating; the presence and clarity of contract cheating definitions; and policy principles (Grigg 2010; Bretag et al. 2011a, b). The identification of document types and titles are important as both communicate the overall intention of the documentation. We determined the frequencies of documents using a single concept within the title (e.g., "Academic Integrity") and those using multiple concepts within a title (e.g., "Academic Honesty and Plagiarism"). Similar to the titles of documents, language (whether direct or indirect) is important to communicate intention, frame the narrative, and support interpretation by the reader. Finally, policy principles convey the foundational values on which the policies were developed and the elements that are important to stakeholders.

All four team members extracted the data from the documents of 11 colleges independently. Each coder was the primary coder for about half of the documents and the secondary coder for the other half. In this way, the data extraction process for each document occurred twice. Next, the level of agreement in data extraction was calculated. Across all categories, the level of agreement between the two coders ranged from 68.2% (for the coding of policy principles) to 100.0% (for the identification of document type and definitions). Disagreement for coding principles identified within the documents was the highest. Disagreements between coders for all categories were reviewed and resolved by consensus.

Phase 2: evaluation of Core elements

In Phase 2, we evaluated the extracted data according to the five core elements of exemplary academic integrity documentation: access, approach, responsibility, detail, and support (see Bretag et al. 2011b); this framework aligns with 13 best practice guidelines for academic integrity policy developed by the Higher Education Academy (Higher Education Academy [HEA] JISC Academic Integrity Service 2011) in the United Kingdom (UK). We briefly describe the core elements below.

Access refers to whether documents are centrally located on the post-secondary institutions' website. *Approach* refers to the presence of statements within the academic integrity documentation that provide details on the importance of the fundamental values of academic integrity (i.e., honesty, trust, fairness, respect, responsibility, and courage in all scholarly work; International Center for Academic Integrity (ICAI), 2014) and acceptable and unacceptable scholarly activities. These messages should be woven consistently throughout the document using specific language related to upholding the fundamental values of academic integrity. The core element of *responsibility* refers to the belief that all members of an educational community must uphold the values of academic integrity. *Detail* refers to the importance of well-developed policies and procedures that are easy to understand and follow. Well-developed documentation uses clearly defined terminology for violations of academic integrity, and examples to illustrate the terminology clearly. Such documentation includes details on the identification and investigation of academic integrity violations, appropriate reporting mechanisms, the setting of fair consequences, and a centralized system to record and monitor cases. We intentionally limited our evaluation of this core element to the appropriateness of the terminology concerning contract cheating as a thorough evaluation of other details was beyond the scope of the current report. *Support* refers to the strategies and resources developed to educate students about academic integrity and violations, and to support educators so they can promote academic integrity in their teaching and learning environments and to identify and report cases of academic misconduct when they arise. These strategies and resources must be mentioned in policy.

Results

The overall purpose of our analysis of institutional-level documentation on academic integrity from 22 publicly-funded colleges in Ontario, Canada was to determine the ways in which contract cheating is conceptualized and defined at each college, and to identify general trends in the communication of contract cheating. We retrieved and

extracted information from 28 documents, outlining the expectations for academic conduct among students and in some documents, staff and faculty.

Document characteristics

We noted the recency of the documents during our extraction, paying attention to institutional revisions and updates. Twelve documents showed updates effective as of 2017 and 2018, 12 were updated in 2015 and 2016, and 3 were updated between 2008 and 2014. One document was not dated. It was not clear if the recent policy revisions and updates were limited to formatting, content ordering, editorial, definition and glossary changes, rather than substantive changes.

Document type and titles

We coded 27 documents as policies and procedures (of these, 2 were academic regulations) and 1 as a code of conduct. A broad range of titles were used to name these documents, making it relatively difficult to group titles into just a few categories (see Table 1). Titles with minor variations were grouped into the same category; for example, “Academic Integrity” and “Academic Integrity Policy” were classified as a single-concept title falling under the “Academic Integrity” category. “Academic Integrity” is the most common single-concept title for documents pertaining to academic integrity. Relevant to our purposes, there were no documents with titles containing the term “contract cheating” or a related term.

Policy language

The specific definitions and language used to describe contract cheating were generally indirect within the majority of the 28 academic integrity documents. The general messages were that students are required to submit work that is their own or assumed to be their own (3 documents), or they should not submit work completed by another person (10 documents) (see Table 2). Six colleges stated that plagiarism or cheating

Table 1 Frequency of Single- and Multiple-Concept Titles of Academic Integrity Documentation in Publicly-funded Colleges in Ontario, Canada

	Frequency	Intended Audience		
		Students only	Staff only	Students and Staff
Single-Concept Titles				
Academic Integrity	13	4		9
Academic Offenses	5	3	1	1
Code of Student Conduct	3	2		1
Academic Honesty	2	1		1
Academic Regulations	1	1		
Multiple-Concept Titles				
Academic Dishonesty and Discipline	1			1
Academic Honesty and Plagiarism	1	1		
Admission Requirement and Academic Regulation	1			1
Student Rights and Responsibilities and Discipline	1	1		
Total Number of Documents	28	13	1	14

Titles were counted once

Table 2 Definitions and Language used to describe Contract Cheating in the Academic Integrity Documents of 22 Publicly-funded Colleges in Ontario, Canada

Summary of Language Used	Frequency ^a
Students required to declare that the work submitted is their own.	1
Students should not submit work completed by another.	5
Submitted work is assumed to be the work of the student who submitted it.	3
Students should not submit work (or conduct research) completed by another, including <i>work purchased or sold</i> .	2
Misrepresenting one's own work.	3
Buying, selling, or stealing or soliciting material for the purpose of academic gain.	6
A violation of academic integrity (or cheating, plagiarism, impersonation) occurs when a student submits work completed by another.	3
Contract cheating: a form of academic dishonesty in which a student's academic work is completed by a third party on their behalf and submitted for academic credit. It may involve a fee paid to a third party. ^b	1
Unclear, none	1
Total	25

^aThe primary language used in the documents by an institution was extracted for the frequency count. Most institutions are represented once in the frequency count, but three institutions are represented twice. ^bDefinition verbatim from Seneca College of Applied Arts and Technology (2015, p. 2)

included buying, selling, or stealing or soliciting material for the purpose of academic gain. Only one college used the term and defined contract cheating explicitly. None of the other documents used the term “contract cheating”.

Policy principles

Eight principles were identified in the 28 academic integrity documents. Two or more principles were identified in the documents from 11 colleges, one principle could be identified in the documents from 8 colleges, and the principles could not be easily identified in the documents of 3 institutions. The three most common principles were “academic integrity values”, “procedural fairness”, and “educative or education” (see Table 3). When referring to the values of academic integrity, the descriptions of this principle focused on students taking responsibility for academic dishonesty rather than upholding values of integrity (which were largely undefined). Procedural fairness (although mentioned in nine documents) was not described clearly in the majority of these documents, with one exception. We note that although the terms “procedural fairness” and “natural justice” are sometimes used interchangeably (Grigg 2010), we opted to be attentive to differences in how the terms were presented in the policy documents. Documents that referred to educational approaches to academic integrity briefly described the responsibility of the colleges to teach the skills (e.g., citation, referencing) necessary for students to uphold the values of academic integrity, and helping students understand their actions and the impact of their actions.

Core elements of academic integrity documentation

We have drawn on the core elements of exemplary academic integrity policy, as outlined by Bretag et al. (2011b), which include: a) access; b) approach; c) responsibility; d) detail; and e) support. We address each of these in the sections that follow.

Table 3 Policy Principles identified in the Academic Integrity Documents of 22 Publicly-funded Colleges in Ontario, Canada

Policy Principle	Frequency
Academic Integrity Values	10
Procedural Fairness	9
Educative/education	7
Administrative Law	2
Natural Justice	2
Restorative Justice	2
Burden of Proof	1
Presumption of Innocence	1

The frequency does not total 28 documents because more than one principle was identified in the documents from 11 colleges

Access

Because we used a deliberate search strategy, we found and retrieved all but one set of academic integrity documents from an online location. Using the available menus and hyperlinks on the institutions' websites to locate the documents, however, reduced ease of access. On average, the number of clicks to the academic integrity policies was 3.5 (*Mode* = 3, *Range* = 1–5). For the majority of the colleges, the number of clicks from the institutions' homepages was not straightforward and involved searching each page carefully for text (hyperlinks) that were likely to lead to a general policies and procedures page. The text used in the hyperlinks varied; for example, for one institution, the path was Homepage/Current students/College Directives (2 clicks), and for another, the path was Homepage/Support/Policies and procedures/AI policy (3 clicks), and a third Homepage/about/corporate-information/policies/research-and-scholarship/Academic integrity (5 clicks). For six colleges, there was no apparent pathway to relevant academic integrity information and hyperlinks chosen led to dead ends. The way in which students use the Internet may have changed since Bretag et al. (2011a) conducted their policy analysis. As the field of educational integrity has also evolved, we have come to recognize that academic integrity requires a multi-stakeholder approach (TEQSA 2017). This means that policy should not only be accessible to students, staff, and faculty, but also to external stakeholders (e.g., parents), alumni, and prospective students, particularly if institutions are publicly-funded with taxpayer dollars, such as those in our study. For these reasons, we contend that ensuring equitable and easy access to policy documents remains an important aspect of exemplary academic policy.

Approach

As shown in Table 3, the documents from 10 institutions suggested a strong commitment from the educational community to the values of academic integrity. Eight documents focused on violations, breaches, offenses, and discipline.

Responsibility

On first inspection, the intended audience for 14 documents included both students and staff, 13 documents were intended for students only, and one set of documents addressed staff only (see Table 1). Deeper examination, however, revealed that the vast

majority of documents (27/28) actually targeted students even though the language at the beginning of the documents indicated that all members of the educational community shared responsibility for academic integrity and were expected to adhere to the policies and principles. This suggests that institutions intend to communicate that the responsibility for the culture of academic integrity on campuses rests primarily with students.

Detail

The term contract cheating was only used in the documentation of one college; whereas synonyms and other related phrases were used to describe the concept in all other documents (see Table 2). Nine colleges provided an extensive list of examples of academic integrity violations listed either within the policies or procedures documents or in the appendices. However, the examples provided for contract cheating were either the same as the definition provided in the policy or slightly simplified versions of it.

Support

Inspection of the documents revealed that no specific supports were outlined in 18 of the 28 documents. In five documents, support for students were suggested (e.g., academic advisor, accommodations, workshops), two provided and suggested teaching, learning, identification, and reporting supports for staff (e.g., workshops, text-matching software, forms), and three suggested supports for both students and staff.

None of the documents that we reviewed could be considered examples of exemplary academic integrity policy as defined by Bretag et al. (2011b). Despite this, several sets of policies and procedures showed important strengths. One college, for example, published their policies and procedures in an online location that was easy for students and academic staff to access (i.e., one click from the college's homepage). Another college provided clear and detailed language around contract cheating, making it relatively easy for students to understand the expectations around third-party contributions to submitted assignments. A third college acknowledged the institutional responsibility to teach the expectations about academic integrity. All but three colleges communicated at least some information about the underlying principles that guided their approaches to dealing with academic integrity violations.

Discussion

The goals of our research were to contribute to the literature on academic integrity policy analysis in higher education in Canada and to focus on how contract cheating is addressed in the policy documents of colleges in Ontario, Canada. Our investigation yielded several important findings: (a) access to contract cheating information in academic integrity documents was generally limited; (b) underlying policy principles were not usually defined clearly; (c) documents communicated that students were primarily responsible for academic integrity; and (d) none of the documents could be considered exemplary (as per Bretag et al., 2011a, b). We discuss these findings in detail below.

We located the majority of the academic integrity documents using our original search strategy; however, only one college provided direct access to the documents from its homepage. Direct access to academic integrity policies communicates to

students and academic staff that the promotion of academic integrity and dealing with violations is a priority for the educational institution (Bretag et al. 2011b). Ease of access also relates to the language used to describe contract cheating. The term “contract cheating” was not found in the academic integrity documents, with one exception. Buying and selling were commonly used in place of the term; however, buying and selling are not necessary for contract cheating to have occurred. As described in the introduction, contract cheating involves a third-party whether they are paid or unpaid to complete the work on behalf of another (Draper and Newton 2017; Harper et al. 2018).

The absence of specific terms and the use of incomplete definitions or definitions that overlap with other categories of academic misconduct (e.g., plagiarism, inappropriate collaboration, academic fraud) can create confusion for students and for academic staff, which is contrary to best practice recommendations for good academic integrity policy (Higher Education Academy [HEA] JISC Academic Integrity Service 2011). The use of indirect language, however, may be a reflection of a number of factors. Because conducting a comprehensive policy review to determine if the policy remains relevant and is meeting its goals requires substantial resources, the intentional use of broad definitions may ensure the continued relevance of the policy over a longer time frame. The use of indirect language may also be related to a general lack of awareness of the extent of the contract cheating problem in Canada. Although researchers in Australia and the UK have been investigating contract cheating broadly for nearly two decades, this has not been the case in Canada, where primary research on the topic of contract cheating has yet to be published. Perhaps it is not surprising that “contract cheating” terminology in academic integrity policy documents in Canadian colleges has been largely absent. Even if policy makers are aware of the issue, we speculate that uncertainty in planning and implementing effective solutions and strategies to respond to contract cheating may lead to omissions in policies and procedures.

The values of academic integrity, procedural fairness, and educative principles were the top three principles identified in the academic integrity documents, which speak to the institutional approaches to academic integrity and academic misconduct violations that colleges have taken. In general, the documents did not provide clear explanations of the principles or how/why the principles were foundational to the development of the document. For example, procedural fairness, which finds its roots in administrative law (Kelleher 2016), was not described clearly. When referring to the fundamental values of academic integrity, these were largely undefined and descriptions that accompanied values statements were limited to students’ responsibility to avoid academic dishonesty rather than to encourage upholding and enacting the values of academic integrity. Educative considerations are key for promoting academic integrity and must be threaded throughout academic integrity policies (Bretag et al. 2011b; Fishman 2016). Although the notion of educative approaches appeared in the reviewed documents, how these approaches were implemented institutionally or individually was largely unexplained. The lack of details about principles may be a barrier to effective communication with students and academic staff, and to ensuring that all members of the educational community (not just students) think that the policies apply to them and are implemented consistently and fairly.

Moving beyond the documents and exploring other sources of information may be necessary to confirm that educative principles for academic integrity are fundamental

to the implementation of colleges' academic integrity policies. Griffith (2013) examined the websites of Ontario's publicly funded universities with a focus on the language and the overall impression of academic integrity that was portrayed by the universities. She determined that Ontario universities communicated an educative approach in their online academic integrity information using images, videos, and text. This finding is in line with the literature that stresses the importance of adopting a holistic institutional approach to academic integrity education (Macdonald and Carroll 2006; Caldwell 2010; Morris 2016). Policies not only need to be educative, but must also be written in such a way that administrators can impose sanctions if warranted (Brent and Atkisson 2011; TEQSA 2017).

In their examination of academic integrity policies of 39 Australian universities, Bretag et al. (2011a) identified 6 that clearly communicated the purpose, values, institutional commitment, and responsibility of all members of the educational community to academic integrity. Although we did not find policy exemplars particularly in terms of contract cheating, we found that a direct use of the term and a clear definition of contract cheating in the documentation of one college. According to the Australian Government: Tertiary Education and Standards Agency (TEQSA 2017), clearly describing contract cheating in academic integrity policy is not only good practice but a necessary step in dealing with this issue. In addition to the definition, academic integrity policy must provide all members of the educational community with information about the seriousness of this type of academic misconduct and how engaging in it or not reporting it devalues certifications, diplomas, and degrees and may damage the reputation of the institution. Not reporting also inhibits an institution from engaging with the issue and developing effective prevention strategies.

Limitations

Our study is not without limitations. First, our work was limited to documents produced in English, which was a result of the limited French language proficiency of our research team. As such, we acknowledge that our findings may not be generalizable to French language colleges. Similarly, because we delimited our study to publicly-funded colleges, we recognize that the findings may not apply to universities, privately funded career colleges, or colleges in other Canadian provinces. In Canada, each of these types of post-secondary institutions differ in purpose, scope, and programs offered. For example, colleges typically prepare students for direct entry into a career through completion of certificate, diploma and applied degree programs, whereas universities have traditionally been defined by their ability to offer undergraduate and graduate degrees, with a focus on research intensive programs (Michalski et al. 2017). Because of differences in context, approaches to the development of academic integrity policy and procedures may also differ. Canadian studies have compared academic integrity policies of universities across provinces (MacLeod 2014; Eaton 2017) or within a single province (Neufeld and Dianda 2007). Within the policies examined in previous research, the authors identified a broad range of policy principles (Macleod 2014) and inconsistency in definitions for plagiarism (Neufeld and Dianda 2007; Eaton 2017), particularly when describing intentionality and plagiarism beyond the writing domain (i.e., visual and

spatial arts). These findings illustrate that Canadian policy-making in the post-secondary sector lacks a “coherent and systematic national strategy” (Axelrod et al. 2011, p. 144), which may be influenced by bureaucratic structures and the sometimes tenuous relationships between federal and provincial governments (Axelrod et al. 2011). This type of inadequate and disorganized approach to higher education policy has created significant challenges to academic integrity in other jurisdictions, and has motivated countries, such as Australia, to adopt legislation to assure the quality of higher education. Indeed, the TEQSA Act (2011) aims to provide “national consistency in the regulation of higher education; and regulation for higher education” (TEQSA 2017, p. 4).

Another limitation of our current study is that we evaluated only one of the six components of the *detail* element of exemplary academic integrity documentation (i.e., appropriateness of the terminology). Deeper examination of the documents to obtain information about how academic integrity violations are identified, reported, and investigated, consequences for violations, and whether a centralized system records and monitor cases (Bretag et al. 2011a, b) requires going beyond the narrow focus on contract cheating to include the details pertaining to all types of academic misconduct.

Directions for future research

Despite the limitations of the current work, our analyses revealed several key findings that suggest directions for future academic integrity research. We have shown the need for more robust inquiry into the academic integrity policy documentation to determine how various types of post-secondary institutions across Canada address contract cheating. In addition, we recognize the need for further research relating to academic integrity at the K-12 levels in Canada. There is a dearth of research on academic integrity policy and academic integrity violations in K-12 education in Canada, as well as in other countries; however, what we are beginning to realize is that contract cheating is a more serious issue in secondary school than administrators wish to acknowledge. Stoesz and Los (2019) estimated contract cheating rates of 10–18% in two secondary school samples in Manitoba, Canada and others have found evidence of contract cheating companies aggressively targeting Canadian school children as young as grade six, which is roughly equated to 11 years old (Eaton and Dressler 2019). If outsourcing behaviour is entrenched before students graduate from high school, those engaged in it are likely to continue this behaviour in their post-secondary studies (Curtis and Clare 2017) and in the workplace (Nonis and Swift 2001). Thus, it is imperative that young students are educated about the potential short-term and longer-term consequences of contract cheating. Academic integrity policy review and revision are the first steps to ensure that teaching of contract cheating is prioritized in K-12 education.

Another important avenue for future research is to examine undergraduate and graduate student and educator perceptions of academic integrity policies across Canada and how they differ from those in other countries. Mahmud et al. (2019) surveyed 1757 students to determine their perceptions of access to policy, adequacy of support, and consistency of policy implementation. Overall, significantly fewer students from Eastern European countries than students in the UK agreed that their universities provided sufficient information and training in academic integrity and academic integrity policies

and procedures. Differences in perceptions of contract cheating and academic integrity policies between students in different programs of study within the same institution may also be informative for further policy development. In her doctoral work, Curry Mills (2009) reported that graduate students were generally unaware of and/or confused by what actions were considered cheating by their professors, especially those actions that students interpreted as helping and sharing behaviours. In the study, graduate students also believed that faculty did not enforce the institutional policy and, in some cases, enforced their own harsh practices. Interesting, whereas students in business, education, medicine, and social sciences indicated a medium to high level of understanding of academic integrity policies and its perceived effectiveness, those studying in the humanities and science, technology, engineering, and mathematics indicated a lack of understanding.

In education policy research, “the accumulating evidence demonstrates that procedures and processes have changed, awareness about and attention to quality has changed, and perhaps even pedagogical practices have changed but are our graduates now better educated as a result?” (Beerkens 2018, p. 275). This statement suggests that the questions that can be answered more easily are usually the focus of investigation and research programs. It is crucial, however, that we examine how students might benefit from improvements in academic integrity policy and teaching practices, such as improving the clarity, detail, and other aspects of core academic integrity policy. On a go-forward basis, it is important to continue paying attention to how pedagogical and policy evolves to support academic integrity.

It will be important to examine if a legal approach to contract cheating does in fact deter and reduce contract cheating. Interestingly, contract cheating services have been illegal in New Zealand since 1989 (see Steel 2017), and the UK and Australia may be on the road to making this happen as well. Currently, strong evidence to support the relationship between legislation and reduced supply of outsourced work is lacking (Amigud and Dawson 2019). Further to this, research is needed to better understand if the Canadian legal and post-secondary landscape has potential to support the legislative advocacy endeavor that is ongoing in other countries.

Recommendations for policy

Canada has no centralized federal ministry of education that could support the development of national research and policy agendas (Metcalf and Fenwick 2009; Eaton and Edino 2018), but that does not equate to a complete lack of systems that focus on quality assurance in higher education (McKenzie 2018). For example, Universities Canada is a national organization concerned with quality assurance among universities. Similarly, the Canadian Association of College and University Student Services (CAUCUSS) has engaged in long-standing conversations and professional development related to academic integrity (McKenzie 2018).

In Ontario, the Ministry of Training, Colleges and Universities (MTCU), along with various arms-length agencies provide quality assurance frameworks, support, and oversight to the colleges and universities. As part of this framework is the *Ontario Qualifications Framework*, which outlines that degree level programs (only) be developed and reviewed with consideration for academic integrity competencies

(MTCU 2012). Emphasizing the importance of academic integrity and acknowledging contract cheating as an issue that affects every level of education and all post-secondary credentials in various ways is key to ensuring both are addressed more effectively in policy and procedure documents and that students learn relevant knowledge and skills early in their programs of study. Inclusion of expectations around academic integrity into provincial program qualification frameworks may expand early and scaffolded training. In addition, ensuring that academic integrity is part of the cyclical review policy and process for programs of study will ensure that various stakeholders examine the issues from a teaching and learning perspective. When policymakers embed academic integrity into curriculum development and instructional design policies, including consideration for Vocational Learning Outcomes (MTCU 2013) and assessment design, teaching and learning are impacted immediately.

Students join our institutions from various educational backgrounds and with a multitude of academic experiences; thus, students must have access to information, resources for specific learning needs, and an effective teaching and learning environment to support success in their programs of study. Unfortunately, research shows that dissatisfaction with learning environment is a significant variable associated with contract cheating (Bretag et al. 2018a). As such, an intentional policy response that focuses on solutions is required to address student and faculty needs in teaching and learning. Although long-term policy revision should be explored, having policies that are easier to review, revise, and implement is an excellent place to start in the shorter term. While further research is needed, especially in the Canadian context, intentional policies with an inclusive, student-focused, teaching and learning approach is critical to uphold institutional reputation and ultimately to enhance the student experience and ensure graduate success.

Conclusions

This paper reported findings from a portion of a national study reviewing post-secondary policy related to contract cheating in Ontario, Canada. It is clear that the research agenda on academic integrity in Canada must be elevated (Eaton and Edino 2018), and our examination of college academic integrity policies with regards to contract cheating is an important step towards this goal. As noted above, policy research is not merely an academic exercise (Ozga 1999). Policy *analysis* can serve as the foundation for policy *advocacy*. We advocate for institutional policies that follow the core elements of excellence: ease of access; an educative approach; clear roles and responsibilities for a variety of campus stakeholders; sufficient detail; and support for students, faculty, and staff (Bretag et al. 2011b).

Effective policies are necessary to positively influence the actions of administrators, educators, and students (Clark et al. 2012; Bretag and Mahmud 2016); however, “just having policy is insufficient. .. having one and supporting it with staff development, review, and information dissemination will make change more likely” (Morris and Carroll 2016, p. 457). We concur with Bretag et al. (2011b) who declared that if academic integrity policy is to have any teeth, then “policies, procedures, teaching, and assessment practices should be interconnected” (p. 3). Such interconnection requires appropriate funding, resources, and institutional commitment to support high quality teaching and assessment practices that are clearly linked to policies, procedures, and supports

for students and faculty. With this study, we conclude that colleges in Ontario, Canada now have an evidence base upon which to improve their institutional policies related to academic integrity and in particular, highlight the importance of addressing contract cheating from an institutional perspective. Arguably, what we have learned from this study may also serve to inform policy decisions in other post-secondary contexts in Canada and beyond.

Abbreviations

CAUCUSS: Canadian Association of College and University Student Services; HEA: Higher Education Academy; MTCU: Ministry of Training, Colleges and Universities; OQF: Ontario Qualifications Framework; TEQSA: Tertiary Education Quality and Standards Agency; UK: United Kingdom

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Authors' contributions

BT (30%); SEE (25%); JM (25%); ET (20%). SEE conceptualized the project. BMS and ET searched for and collected the policy documents for analysis. All authors extracted and analyzed the data, and drafted the manuscript. All authors read and approved the final manuscript.

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Competing interests

The authors declare that they have no competing interests.

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References

- Amigud A, Dawson P (2019) The law and the outlaw: Is legal prohibition a viable solution to the contract cheating problem? *Assess Eval High Educ*:1–11. <https://doi.org/10.1080/02602938.2019.1612851>
- Australian Government: Tertiary Education Quality and Standards Agency (TEQSA) (2017) Good practice note: Addressing contract cheating to safeguard academic integrity. Retrieved from <https://www.teqsa.gov.au/latest-news/publications/good-practice-note-addressing-contract-cheating-safeguard-academic>
- Axelrod P, Desai-Trilokekar R, Shanahan T, Wellen R (2011) People, processes, and policy-making in Canadian post-secondary education, 1990–2000. *High Educ Policy* 24:143–166. <https://doi.org/10.1057/hep.2010.29>
- Beerens M (2018) Evidence-based policy and higher education quality assurance: Progress, pitfalls and promise. *Eur J High Educ* 8:272–287. <https://doi.org/10.1080/21568235.2018.1475248>
- Brent E, Atkisson C (2011) Accounting for cheating: An evolving theory and emergent themes. *Res High Educ* 52:640–658. <https://doi.org/10.1007/s11162-010-9212-1>
- Bretag T (2019) Contract cheating research: Implications for Canadian universities. Keynote address presented at the Canadian Symposium on Academic Integrity, Calgary Retrieved from <http://hdl.handle.net/1880/110279>
- Bretag T, Harper R, Burton M et al (2018a) Contract cheating: A survey of Australian university students. *Stud High Educ* 0:1–20. <https://doi.org/10.1080/03075079.2018.1462788>
- Bretag T, Harper R, Burton M et al (2018b) Contract cheating and assessment design: Exploring the relationship. *Assess Eval High Educ* 0:1–16. <https://doi.org/10.1080/02602938.2018.1527892>
- Bretag T, Mahmud S (2016) A conceptual framework for implementing exemplary academic integrity policy in Australian higher education. In: Bretag T (ed) *Handbook of Academic Integrity*. Springer Singapore, Singapore, pp 463–480

- Bretag T, Mahmud S, East J et al (2011a) Academic integrity standards: A preliminary analysis of the academic integrity policies at Australian universities. *AuQF* 2011:48–53 Retrieved from <https://ro.uow.edu.au/cgi/viewcontent.cgi?referer=https://scholar.google.ca/&httpsredir=1&article=1332&context=asdpapers>
- Bretag T, Mahmud S, Wallace M et al (2011b) Core elements of exemplary academic integrity policy in Australian higher education. *Int J Educ Integr* 7:3–12. <https://doi.org/10.21913/IJELv7i2.759>
- Brown VJ, Howell ME (2001) The efficacy of policy statements on plagiarism: Do they change students' views? *Res High Educ* 42:103–118. <https://doi.org/10.1023/A:1018720728840>
- Caldwell C (2010) A ten-step model for academic integrity: A positive approach for business schools. *J Bus Ethics* 92:1–13. <https://doi.org/10.1007/s10551-009-0144-7>
- Carnegie Mellon University. (2015). University policy on policy development. Retrieved from <https://www.cmu.edu/policies/university-policy-development/index.html>
- Clark SC, Griffin RA, Martin CK (2012) Alleviating the policy paradox through improved institutional policy systems: A case study. *Innov High Educ* 37:11–26. <https://doi.org/10.1007/s10755-011-9182-z>
- Clarke R, Lancaster T (2006) Eliminating the successor to plagiarism: Identifying the usage of contract cheating sites. In: Paper presented at the Second International Plagiarism Conference, Gateshead Retrieved from https://www.researchgate.net/publication/228367576_Eliminating_the_successor_to_plagiarism_identifying_the_usage_of_contract_cheating_sites
- Curry Mills C (2009) Graduate students' perceptions of academic integrity policies, practices, observations, engagement, and seriousness of behaviors. Clemson University. TigerPrints.
- Curtis GJ, Clare J (2017) How prevalent is contract cheating and to what extent are students repeat offenders? *J Acad Ethics* 15:115–124. <https://doi.org/10.1007/s10805-017-9278-x>
- Draper MJ, Newton PM (2017) A legal approach to tackling contract cheating? *Int J Educ Integr* 13:1–16. <https://doi.org/10.1007/s40979-017-0022-5>
- Eaton SE (2017) Comparative analysis of institutional policy definitions of plagiarism: A pan-Canadian university study. *Interchange* 48(3):271–281. <https://doi.org/10.1007/s10780-017-9300-7>
- Eaton SE (2018) Contract cheating: a Canadian perspective. Retrieved from <http://blogs.biomedcentral.com/bmcblog/2018/07/24/contract-cheating-a-canadian-perspective/>
- Eaton SE (2019) The ethics of outsourcing: Contract cheating in medicine and health sciences. Paper presented at the Orthopaedic Surgery Citywide Rounds, Calgary Retrieved from <http://hdl.handle.net/1880/110102>
- Eaton SE, Dressler R (2019) Multilingual essay mills: Implications for second language teaching and learning. *Notos* 14(2):4–14
- Eaton SE, Edino RI (2018) Strengthening the research agenda of educational integrity in Canada: a review of the research literature and call to action. *Int J Educ Integr* 14:1–21. <https://doi.org/10.1007/s40979-018-0028-7>
- Fishman T (2016) Academic integrity as an educational concept, concern, and movement in US institutions of higher learning. In: Bretag T (ed) *Handbook of Academic Integrity*. Springer, Singapore, pp 7–21
- Fořtýnek T, Glendinning I (2015) Impact of policies for plagiarism in higher education across Europe: Results of the project. *Acta Univ Agric Silv Mendeliana* Brun 63:207–216. <https://doi.org/10.11118/actaun201563010207>
- Freeman B (2013) Revisiting the policy cycle. Association of Tertiary Education Management (ATEM): Developing policy in tertiary institutions. RMIT University, Melbourne Retrieved from https://federation.edu.au/__data/assets/pdf_file/0018/119043/Revisiting_Policy_Cycle_2013_BFreeman.pdf
- Glendinning I (2013) Comparison of policies for Academic Integrity in Higher Education across the European Union. Retrieved from <http://ketlib.lib.unipi.gr/xmlui/bitstream/handle/ket/814/Comparison%20of%20policies%20for%20Academic%20Integrity%20in%20Higher%20Education%20across%20the%20European%20Union.pdf?sequence=2>
- Glendinning I, Fořtýnek T, Dlabolová D et al (2017) South East European project on policies for academic integrity, Brno Retrieved from http://www.plagiarism.cz/seppai/Final-report_SEEPPAI.pdf
- Griffith J (2013) Pedagogical over punitive: the academic integrity websites of Ontario universities. *Can J High Educ* 43:1–22
- Grigg GA (2010) *Plagiarism in higher education: Confronting the policy dilemma*. (Doctor of Philosophy). University of Melbourne, Melbourne
- Gullifer JM, Tyson GA (2014) Who has read the policy on plagiarism? Unpacking students' understanding of plagiarism. *Stud High Educ* 39:1202–1218. <https://doi.org/10.1080/03075079.2013.777412>
- Harper R, Bretag T, Ellis C et al (2018) Contract cheating: A survey of Australian university staff. *Stud High Educ* 0:1–17. <https://doi.org/10.1080/03075079.2018.1462789>
- Higher Education Academy [HEA] JISC Academic Integrity Service (2011) Policy works: Recommendations for reviewing policy to manage unacceptable academic practice in higher education. Retrieved from <https://www.heacademy.ac.uk/knowledge-hub/policy-works-recommendations-reviewing-policy-manage-unacceptable-academic-practice>
- Hosney M, Fatima S (2014) Attitude of students towards cheating and plagiarism. *J Appl Sci* 14:748–757. <https://doi.org/10.3923/jas.2014.748.757>
- Hu G, Sun X (2017) Institutional policies on plagiarism: The case of eight Chinese universities of foreign languages/ international studies. *System* 66:56–68. <https://doi.org/10.1016/j.system.2017.03.015>
- International Center for Academic Integrity (ICAI) (2014) In: Fishman T (ed) *The fundamental values of academic integrity*, 2nd edn. Clemson University, Clemson. <https://doi.org/10.15713/ins.mmj.3>
- Kelleher WE (2016) Canadian laws relevant to university student academic discipline. Northcentral University, Prescott Valley
- Kothari A, Wathen CN (2013) A critical second look at integrated knowledge translation. *Health Policy* 109:187–191. <https://doi.org/10.1016/j.healthpol.2012.11.004>
- Lancaster T, Clarke R (2015) Examining contract cheating, essay mill use and academic misconduct by students on health courses. 10.13140/RG.2.2.19014.78402
- Lancaster T, Clarke R (2016) Contract cheating: The outsourcing of assessed student work. In: Bretag T (ed) *Handbook of Academic Integrity*. Springer, Singapore
- Macdonald R, Carroll J (2006) Plagiarism — a complex issue requiring a holistic institutional approach *Plagiarism. Assess Eval High Educ* 31:233–245. <https://doi.org/10.1080/02602930500262536>
- MacLeod PD (2014) An exploration of faculty attitudes toward student academic dishonesty in selected Canadian universities. (Doctor of Education), University of Calgary, Calgary Retrieved from <http://hdl.handle.net/11023/1370>

- Mahmud S, Bretag T, Foltýnek T (2019) Students' perceptions of plagiarism policy in higher education: A comparison of the United Kingdom, Czechia, Poland and Romania. *J Acad Ethics* 17:271–289. <https://doi.org/10.1007/s10805-018-9319-0>
- Mccabe DL (2005) Cheating among college and university students: A North American perspective. *Int J Educ Integr* 1:1–11. <https://doi.org/10.21913/IJEI.V1I1.14>
- McKenzie AM (2018) Academic integrity across the Canadian landscape. *Can Perspect Acad Integr* 1:40–45. <https://doi.org/10.11575/cpai.v1i2.54599.g42964>
- Medway D, Roper S, Gillooly L (2018) Contract cheating in UK higher education: A covert investigation of essay mills. *Br Educ Res J* 44:393–418. <https://doi.org/10.1002/berj.3335>
- Metcalfe AS, Fenwick T (2009) Knowledge for whose society? Knowledge production, higher education, and federal policy in Canada. *High Educ* 57:209–225. <https://doi.org/10.1007/s10734-008-9142-4>
- Michalski JH, Cunningham T, Henry J (2017) The diversity challenge for higher education in Canada: The prospects and challenges of increased access and student success. *Humboldt J Soc Relat* 1:66–89
- Ministry of Training, Colleges and Universities (MTCU). (2012). Ontario Qualifications Framework. Retrieved from <http://www.tcu.gov.on.ca/pepg/programs/oqf/>
- Ministry of Training, Colleges and Universities (MTCU). (2013). Published College Program Standards. Retrieved from <http://www.tcu.gov.on.ca/pepg/audiences/colleges/progstan/>
- Morris EJ (2016) Academic integrity: A teaching and learning approach. In: Bretag T (ed) *Handbook of Academic Integrity*. Springer Singapore, Singapore, pp 1037–1054
- Morris EJ, Carroll J (2016) Developing a sustainable holistic institutional approach: Dealing with realities “on the ground” when implementing an academic integrity policy. In: Bretag T (ed) *Handbook of Academic Integrity*. Springer Singapore, Singapore, pp 449–462
- Neufeld, J., & Dianda, J. (2007). Academic dishonesty: A survey of policies and procedures at Ontario Universities. Retrieved from <http://cou.on.ca/wp-content/uploads/2015/07/Academic-Colleagues-Academic-Dishonesty-A-Survey-of-Policies-and-Procedures-at-Ontario-Universities.pdf>
- Newton PM (2018) How common is commercial contract cheating in higher education and is it increasing? A systematic review. *Front Educ* 3:1–18. <https://doi.org/10.3389/educ.2018.00067>
- Nonis S, Swift CO (2001) An examination of the relationship between academic dishonesty and workplace dishonesty: A multicampus investigation. *J Educ Bus* 77:69–77. <https://doi.org/10.1080/08832320109599052>
- Northwestern University (2018) University policy development guidelines. Retrieved from <https://policies.northwestern.edu/docs/policy-development-guidelines-final.pdf>
- Ozga J (1999) Policy research in educational settings. Open University Press, Buckingham
- Price M (2002) Beyond “Gotcha!”: Situating plagiarism in policy and pedagogy. *Coll Compos Commun* 54:88. <http://www.jstor.org/stable/1512103>. <https://doi.org/10.2307/1512103>
- Rogerson AM (2017) Detecting contract cheating in essay and report submissions: Process, patterns, clues and conversations. *Int J Educ Integr* 13:10. <https://doi.org/10.1007/s40979-017-0021-6>
- Seneca College of Applied Arts and Technology (2015) Academic Integrity Policy. Seneca College, Toronto
- Sisti DA (2007) How do high school students justify internet plagiarism? *Ethics Behav* 17:215–231. <https://doi.org/10.1080/10508420701519163>
- Statistics Canada (2017) Canada at a glance. Retrieved from <https://www150.statcan.gc.ca/n1/pub/12-581-x/2017000/pop-eng.htm>
- Statistics Canada (2018) Postsecondary Student Information System (PSIS): Detailed information for 2016–2017. Retrieved from <http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=5017>
- Statistics Canada (2019) Postsecondary enrolments, by status of student in Canada, country of citizenship and sex. Retrieved from <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710008601>
- Steel A (2017) Contract cheating: Will students pay for serious criminal consequences? *Altern Law J* 42:123–129. <https://doi.org/10.1177/1037969X17710627>
- Stoesz BM, Los R (2019) Evaluation of a tutorial designed to promote academic integrity. *Can Perspect Acad Integr* 2:3–26. <https://doi.org/10.11575/cpai.v2i1>
- Tertiary Education Quality and Standards Agency (TEQSA). (2017). Good Practice Note: Addressing contract cheating to safeguard academic integrity. Retrieved from <https://www.teqsa.gov.au/sites/g/files/net2046/f/good-practice-note-addressing-contract-cheating.pdf?v=1507082628>
- Winton S, Tuters S (2015) Constructing bullying in Ontario, Canada: A critical policy analysis. *Educ Stud* 41:122–142. <https://doi.org/10.1080/03055698.2014.955737>

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