

Academic Integrity: Considerations for Accessibility, Equity, and Inclusion

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A Message from the Researchers

Please note that this document is structurally and methodologically similar to some of the second author's previous work (specifically, previous literature reviews and annotated bibliographies). As a result, there is some duplication of the text from previous reports.

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April 4, 2022

Abstract

Purpose: This report summarizes existing research related to academic integrity, accessibility, equity, and inclusion, with a particular focus on individuals with learning disabilities and neurodevelopmental disabilities. It provides an overview of the literature up to and including August 2021, highlighting key issues and existing gaps. The literature review is supplemented with a discussion of key issues and recommendations for practice.

Methods: Our research question (RQ) was: What does the research literature show about academic integrity and related terms (i.e., academic misconduct, academic dishonesty, and plagiarism) in students with disabilities (i.e., learning and neurodevelopmental disabilities) in post-secondary settings?

To answer this question, a methodical search of databases was undertaken, relevant research was compiled, and articles were summarized and categorized.

Results: We ran two searches each using different sets of key words. Although our searches proved unsuccessful, we provide a brief annotated bibliography of sources we knew to exist prior to our search. In addition, we offer a comprehensive discussion exploring why the searches failed, along with a discussion of some broader issues related to academic integrity and student accessibility.

Implications: Scholarly and practitioner inquiry into the connections between academic integrity, accessibility, equity, and inclusion have been slow to develop. This presents opportunities for further inquiry, though we offer the caveat that such studies should be undertaken in the spirit of student success and supports. Most often discussion of the academic integrity and students with disability focus on the legitimacy of the academic accommodations. As more stakeholders become aware of the need to understand the connections between academic integrity, accessibility, equity, and inclusion, there is room for further recommendations for policy, policy implementation, and support through technology, education, and intervention programs.

Additional materials: 82 References; 2 Tables

Keywords: Academic integrity, academic dishonesty, academic misconduct, plagiarism, accessibility, equity, inclusion, learning disabilities, neurodevelopmental disabilities, dyslexia, Autism Spectrum Disorder, higher education

Executive Summary

We intend for report to provide an evidence base for educators, curriculum developers and others to help support instructional approaches that not only promote instructional and academic integrity, but insist upon it.

When we talk about academic integrity, we must also think about respecting and protecting the human rights of our students, including those with disabilities.

Academic integrity is not limited to student conduct. It includes ethical teaching, research integrity and ethics, ethical assessment, and other aspects of ethical conduct among all members of the learning community.

A multi-stakeholder approach to academic integrity means that students, educators, staff, and administrators all have responsibilities for ensuring integrity and ethical conduct across the teaching and learning institution.

Our research question was: What does the research literature show about academic integrity and related terms (i.e., academic misconduct, academic dishonesty, and plagiarism) in students with disabilities (i.e., learning and neurodevelopmental disabilities) in post-secondary settings?

Our searches, as of August 2021, produced no results that met our inclusion criteria. We nevertheless include a brief annotated bibliography of sources we knew to exist before conducting our search. We offer a comprehensive discussion into why the search failed, as well as broader topics related to academic integrity and students with disabilities.

The topic of disability in research relating to academic integrity has been neglected. Scholarship has yet to engaged with these diverse learners. We call on educators, practitioners, and scholars to remedy this by actively engaging in research and dialogue with disabilities, whose supports are often challenges and limited by an ableist appeal to academic integrity discourse.

There is an ethical imperative to ensure that learning materials are accessible. Educators who care about ethics and human rights, should also care about accessibility.

We conclude with calls to action for increased research and student support.

Introduction

This report provides an overview of the literature up to and including August 2021 relating to academic integrity, accessibility, equity, and inclusion.

Origins and Purpose of This Report

This purpose of this report is to document research and related materials related to academic integrity, accessibility, equity, and inclusion to inform and guide future work in the field. The topic of equity, diversity, and inclusion (EDI) as related to academic integrity has been neglected until recently, and research and advocacy work that has been undertaken in relation to academic integrity has focused most intensely on racial, cultural, and linguistic discrimination of students (see Bretag, 2019; Davis, 2021; Eaton, 2021b). We identified a need for deeper discussion of equity, inclusion, and accessibility as they relate to academic integrity. In particular, we have noted a lack of research in how academic integrity is addressed among students with learning disabilities as well as how academic integrity education is designed for diverse learners. This is a gap we begin to address with this report. We note that the current discourse about academic integrity and students with disabilities has focused on challenging the appropriateness of the academic accommodations provided to this equity-seeking group.

As scholars working in Canadian higher education, we have framed this report within the Canadian context. Given the paucity of information currently available on this topic, we recognize that it may also be useful to those working in other countries. We note that in 2021, the topic of accessibility and inclusion is one that has been addressed at a number of academic integrity conferences in Canada (see Chaudhuri et al., 2021; McNeill, 2021; Salmon et al., 2021), as well as internationally (see Davis, 2021) and we are encouraged to see more focus on this important aspect of learning and teaching.

We intend for report to provide a starting point base for educators, curriculum developers and others to help support teaching, learning, and evaluation approaches promote academic integrity through equity and inclusion.

Academic integrity goes beyond student conduct. It includes ethical approaches to how we develop learning materials, teach, and assess our students.

This report is meant to serve as a starting point for deeper dialogue, and to serve as a catalyst for further research and advocacy work.

Our Positionalities

As part of our commitment to ethical approaches to our scholarship, we begin by being transparent about our positionalities, including our training, expertise, and limitations. We begin by declaring openly that neither of us is a medical professional. We come to this work as educators who are committed to student success and wellbeing.

Rachel Pagaling is a PhD student in educational psychology and a student clinician, with professional and scholarly expertise in neurodevelopmental and learning disabilities.

Sarah Elaine Eaton is an associate professor of education, specializing in higher education leadership, policy, and governance. Eaton's has an established program of research on academic integrity and ethics in educational contexts, with a particular focus on higher education.

Brenda McDermott is a student services professional who promotes accessible assessment through Universal Design for Learning. In addition to her PhD in communication studies, she recently completed her MEd, looking at the identity development of access advisors.

We recognize that the field of disabilities studies is broad, and our combined expertise and training qualifies to address only topics related narrowly to academic integrity and learning disabilities and neurodevelopmental disabilities. We make no claims of expertise relating to other types of disabilities (e.g., physical) or other barriers to learning. We have narrowed the focus of this report with intentionality, and we understand that much more work is required to understand the connection between academic integrity (and breaches of it) as they might relate to disabilities in general.

Intended Audience

This report is for stakeholders in education broadly, and more specifically, those working in teaching and learning, academic integrity, student affairs, and student accessibility. It is of particular relevance to administrators, faculty, students, and professionals.

Definitions

Included in this document is an overview of research academic integrity, accessibility, equity, and inclusion with a particular focus on learning disabilities and neurodevelopmental disabilities. We recognize that there are no absolute definitions of concepts such as academic integrity and that individual educational institutions might have policy definitions that differ from those we offer here. We provide our definitions key terms in relation to the literature as descriptive, rather than prescriptive, ways to make sense of complex concepts:

Ableism is “a set of beliefs, processes and practices that produce – based on abilities one exhibits or values – a particular understanding of oneself, one’s body and one’s relationship with others of humanity, other species and the environment, and includes how one is judged by others” (Wolbring, 2008, p. 253).

Academic dishonesty is the deliberate violation of academic codes of conduct. Although this term remains in use, the preferred terms in Canada are “academic misconduct”, “violations of academic integrity”, or “breaches of integrity”. Canada follows a similar path to that of Australia, where breaches of academic integrity are addressed as behavioural matters, rather than moral failings. (For a deeper discussion, see Bretag, 2019b.) This term is still used in the literature, and so we have included it in our definitions, though we suggest alternate terms be used instead.

Academic integrity is based on these fundamental values: (a) honesty; (b) trust; (c) fairness; (d) respect; (e) responsibility; and (f) courage (International Center for Academic Integrity, 2021).

Academic misconduct may be either a deliberate or unintentional violation of academic codes of conduct. Regardless of whether the misconduct is intentional or unintentional, students may be held responsible for their actions.

Accessibility “is about creating communities, workplaces and services that enable everyone to participate fully in society without barriers” (Government of Canada 2021, n.p.).

EDI is the abbreviation for equity, diversity, and inclusion (University of British Columbia, n.d., n.p.). In Canada, this abbreviation is most commonly used. We recognize that in other countries other abbreviations may be used or the order of the letters can differ.

Equity “refers to achieving parity in policy, process and outcomes for historically and/or currently underrepresented and/or marginalized people and groups while accounting for diversity” (University of British Columbia, n.d., n.p.).

Equity Deserving Groups “are communities that experience significant collective barriers in participating in society. This could include attitudinal, historic, social and environmental barriers based on age, ethnicity, disability, economic status, gender, nationality, race, sexual orientation and transgender

status, etc. Equity-seeking groups are those that identify barriers to equal access, opportunities and resources due to disadvantage and discrimination and actively seek social justice and reparation” (Queen’s University, 2020, p. 3).

Inclusion is focused on creating an equitable culture that “embraces, respects, accepts, and values difference” (Canadian Centre for Diversity and Inclusion, 2021, n.p.).

Neurodevelopmental Disorders

In this report, neurodevelopmental disorders are defined in accordance with the Diagnostic and Statistical Manual of Mental Disorders criteria (5th ed.; DSM–5; American Psychiatric Association, 2013). Neurodevelopmental disorders as a group of conditions that typically develop during the early stages of childhood and are often lifelong conditions (American Psychiatric Association, 2013).

Neurodevelopmental disorders is an umbrella term and includes autism spectrum disorder (ASD); attention deficit hyperactivity disorder (ADHD); intellectual disability; communication disorders (language disorder, speech sound disorder; childhood-onset fluency disorder or stuttering, social communication disorder); motor disorders (stereotypic movement disorder, tic disorders, developmental coordination disorder); and stereotypical movement disorder (American Psychiatric Association, 2013). Neurodevelopmental disorders may also frequently co-occur with one another (American Psychiatric Association, 2013) and the breadth of developmental problems that individuals diagnosed with these disorders experience varies from specific personal, academic, or occupational functioning, to global limitations of social skills or intelligence (Gargaro et al., 2011; Kalyva et al., 2016).

Learning Disorders

Students with specific learning disorders (also known as learning disabilities) display academic performance deficits compared to their typically developing peers. They are also described as students with average intellectual ability; however, they also experience learning problems (Beckmann & Minnaert, 2018). The Individuals with Disabilities Education Improvement Act (IDEA) defines learning disorders as “a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken, or written, which disorder may manifest in imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations” (IDEA, 2004, 602[30][a]). Learning disorders, although developmental in nature, are known to often persist into adulthood (Maughan et al., 2009; Gerber, 2012; Scott et al., 2016). Moreover, learning disorders effect students in the areas of basic reading skills, reading fluency, reading comprehension, written expression, mathematical computation, mathematical problem solving, and listening comprehension (IDEA, 2004).

The American Psychiatric Association (2013) differentiates that “learning disorder” is specified as a medical term used for diagnosis, and the term “learning disability” may be used in both the education and legal systems. Further, they clarify that a “learning disability” is not entirely synonymous with a specific learning disorder, although they are related (American Psychiatric Association, 2013). For

example, the American Psychiatric Association (2013) reports “...a student with a diagnosis of a specific learning disorder can expect to meet criteria for a learning disability and have the legal status of a federally recognized disability to qualify for accommodations and services in school” (para. 5). Notably, the term “learning difference” has gained popularity, particularly when speaking with students about their academic difficulties as this term does not label these students as “disordered” (American Psychiatric Association, 2013).

Contextualizing Our Understanding of Definitions

Definitions relating to disabilities are imperfect and contested, as they can be framed within a medical or social model, creating tensions within and between communities who work with, and advocate for, persons with disabilities. We noted that one definition that is easily found when searching for a definition of disability is provided by the Centers for Disease Control and Prevention (2021) in the United States, who define disability as “any condition of the body or mind (impairment) that makes it more difficult for the person with the condition to do certain activities (activity limitation) and interact with the world around them (participation restrictions)” (n.p.). This definition relies on a medical model of disability that may be less helpful to those in teaching and learning contexts.

Although the medical model drives post-secondary policies and processes related to students with disabilities, the social model of disability has greater implications for teaching and learning. The social model of disability rejects the notion of disability as individual pathology (Goodley, 2014). It is the social order that identifies disability as negative. The limitations faced by individuals with disabilities are created by institutions and social practices that prioritize certain bodies or minds over others. As such, the social model highlights how teaching and learning practices construct students as disabled by failing to plan for diversity in learners.

We turned to the Canadian Survey on Disability (Statistics Canada, 2017) for specific insights from Canada. Results from this survey showed that it estimated that one in five Canadians aged 15 and older have one or more disabilities that limit their daily activities. Among youth, the most common types of disabilities relate to mental health and learning (Statistics Canada, 2017). It is not uncommon for individuals to have more than one type of disability. Among those aged 15 years and older who identify as having a disability, 38% had two or three disabilities and 33% had four or more (Statistics Canada, 2017). Persons with disabilities are more likely to face barriers to employment, live in poverty, and have a higher risk of leaving school (Statistics Canada, 2017).

Although providing definitions can be helpful as an entry-point of knowledge building, we emphasize that a nuanced approach is needed. It is important to acknowledge the limitations of definitions. Definitions may not be intellectually or socially neutral. For those learning more about the field of disability and related topics, it is helpful to be aware of tensions and limitations. In particular, it is important to understand that that disability remain defined through the identification of a deficit or stigmatized deviation from the norm. This association has implications for how and when students

identify as “disabled,” particularly students with learning and neurodevelopment disabilities whose differences may not be immediately visible to others (Cole & Cawthon, 2015).

The Need for A Social Justice Approach: Equity, Diversity, and Inclusion

With regards to disability in teaching and learning contexts, taking an advocacy and social justice approach focused on student success may be helpful (see Evans et al., 2017). Persons with disabilities are included among equity-deserving groups.

The United Nations Convention on the Rights of Persons with Disabilities, states in Article 17, Protecting the Integrity of the Person, that “[e]very person with disabilities has a right to respect for his or her physical and mental integrity on an equal basis with others” (United Nations, 2016). The word “integrity” is not inconsequential in the United Nations’ statement.

*When we talk about **academic integrity**, we must also think about respecting and protecting the human rights of our students, including those with disabilities.*

Students with Learning Disabilities and Neurodevelopmental Disabilities in Post-secondary Settings

Education is reported to be a determinant of health, well-being, and community engagement (Canadian Council on Learning, 2010). In Canada, researchers reported an increase in the number of individuals with disabilities of all kinds entering post-secondary education (Floyd, 2012; Katsiyannis et al., 2009; National Center for Learning Disabilities, 2014).

As the number of students with disabilities pursuing post-secondary education continues to increase, the diversity of professionals including professors, administrators, accessibility and academic advisors, and others involved in supporting their learning needs must ensure appropriate and effective programs, accommodations, and services for these students (Lightfoot et al., 2018).

According to the Learning Disabilities Association of Ontario (LDOA) (2018), “in the field of Learning Disabilities (LDs), statistics on incidence rates can be particularly vulnerable to distortion or bias for a number of reasons” (n.p.). They caution that there is “no precise operational definition of learning disabilities that is widely accepted, with the result that studies are inconsistent in how they define what they are measuring” (LDOA, 2018, n.p.), noting that estimates of incidence rates of learning disabilities can range from 2% to 10%. There is evidence to show that many students may experience learning difficulties who have not been formally identified as having a learning or other disability (LDOA, 2018).

The LDOA offers some insights into the situation of college and university students in the Canadian province of Ontario. Note that “colleges” and “universities” are considered different types of post-

secondary institutions in Canada, with universities primarily focusing on degree-granting programs. The LDOA notes that “college students with learning disabilities (excluding those in Apprenticeship programs) rose each year from 8,007 in 2008-09 to 10,971 in 2014-15” (Learning Disabilities Association of Ontario, 2018, n.p.). They further note that “university students with learning disabilities rose each year from 5,620 in 2008-09 to 7,064 in 2014-15” (Learning Disabilities Association of Ontario, 2018, n.p.).

Researchers reported that the number of students that attend post-secondary institutions has increased substantially over the past thirty years (Cole et al., 2015, Joyce & Rossen, 2006). Further, the U.S. Department of Education (2013) reported that 11% of the national population of students attending post-secondary institutions in the United States identify as having a learning disability (U.S. Department of Education, 2013). It is important to note that there may also be students who have undiagnosed or unidentified disabilities as well as students who do not identify their learning needs as a disability; therefore the current number is unknown.

Students with neurodevelopmental disabilities continue to be a growing population at post-secondary institutions. These students, typically referred to as neurodiverse, include individuals who would have been diagnosed with Autism Spectrum Disorder, Asperger’s Syndrome, or Attention Deficit Hyperactivity Disorder (ADHD) (Clouder et al., 2020). In Canada, rates of the post-secondary participation for neurodiverse youth are between 10-15% lower than youth without longer term health conditions (Arim & Frenette, 2019). These individuals also have lower rates of degree completion. In 2014, it was estimated that only 20% of students labeled as autistic attended post-secondary education in Ontario (Luey, 2014). The number of neurodiverse students in post-secondary is expected to increase over the coming decade (Dwyer et al., 2022; Mackay, 2010).

As a relatively new term, rates of neurodiversity students at post-secondary studies have yet to be reported. Rates of students with autism in American post-secondaries vary between 0.3%-1.9% (Dwyer et al., 2022). Students who report having ADHD are approximately 5% of the student population. Like students with learning disabilities, students may not self-identify due to stigma concerns. Discussions of supports needed for the students with a neurodevelopmental disability often focus on communication and sensory differences. Recommended supports include alternative sensory spaces, explicit instructions and expectations, and structured class time (Clouder et al., 2020; Jansen et al., 2017).

Academic Integrity: Overview

The International Centre for Academic Integrity (2021) has defined six fundamental values of academic integrity: courage, fairness, honesty, respect, responsibility, and trust.

Academic integrity is not limited to student conduct. It includes ethical teaching, research integrity and ethics, ethical assessment, and other aspects of ethical conduct among all members of the learning community.

Academic integrity requires a multi-stakeholder approach (Morris, 2016; Morris & Carroll, 2016). This involves everyone on campus taking responsibility in different ways to ensure that learning, teaching, and other associated activities, such as developing learning materials and assessments, are undertaken in an ethical manner.

A multi-stakeholder approach to academic integrity means that students, educators, staff, and administrators all have responsibilities for ensuring integrity and ethical conduct across the teaching and learning institution.

Canadian scholars of academic integrity share similar approaches to those of Australian researchers who have “contextualised academic integrity as a teaching and learning issue, foregrounding the importance of students’ learning, rather than students’ character” (Bretag, 2019b, p. 5).

Breaches of academic integrity, also called academic misconduct, can sometimes be unintentional, particularly in cases where students lack familiarity with the expectations, are unsure of themselves, or lack academic literacy skills, such as citing and referencing (Adam, 2016; Howard, 2016; McGowan, 2005).

Scholars and advocates have been calling for deeper considerations of how equity, diversity, and inclusion (EDI) are important aspects of academic integrity, though one limitation to this advocacy to date is that discussions have often been focused on international students, students for whom English is an additional language, and students of colour (e.g., Boisvert et al., 2020; Bretag, 2019a; Leask, 2006; Parnther, 2020; Parnther & Eaton, 2021). These are indeed important topics, and we advocate for continued dialogue and action to ensure equity among these student groups.

Previous literature reviews on academic integrity have not addressed students with disabilities (e.g., Eaton & Edino, 2018; Eaton et al., 2019; Macfarlane et al., 2014; Hattingh et al., 2020). These shortcomings have resulted in a dearth of literature examining academic integrity in students with disabilities. In this report, we investigate the intersection of academic integrity and EDI, with a particular

focus on learning disabilities and neurodevelopmental disabilities through a review of the existing literature.

Within literature on post-secondary students with disabilities, the discussion of academic integrity typically occurs about the validity of academic accommodations issued by disability supports offices. Academic integrity in this context focuses on ethical assessment and the ethics of changing testing parameters for students with disabilities, most often around the provision of additional time for test-taking for students with disability (Gregg & Nelson, 2012; Lai & Berkeley, 2012; Roberts, 2012). The discussion focuses on processes and practices rather than the actions of students. For example, academic accommodations at compared to sanctioned cheating providing an advantage to students with disabilities (Pardy, 2016; Trachtenberg, 2016).

Methodology

This report provides an overview of the current scholarly and practitioner literature. In this section, we outline the methodology for our review, including some of the complexities encountered during our inquiry. Our focus was on high-quality and authoritative research and practitioner sources.

Research Question

With our intended audience in mind, we developed the following research question to guide our review:

RQ: What does the research literature show about academic integrity and related terms (i.e., academic misconduct, academic dishonesty, and plagiarism) in students with disabilities (i.e., learning and neurodevelopmental disabilities) in post-secondary settings?

Inclusion and Exclusion Criteria

We began with a combined search term strategy that included three categories of terms that aligned with our research question. There were some seed articles that were previously known to our research team (Davis, 2021; Kinder & Elander, 2011; Price, 2006), but because our seed articles did not contain clearly searchable keywords, we relied on our previous knowledge of the subject matter to identify synonyms within the search categories.

Table 1 and Table 2 outline our search term categories. Category 1, did not include the word “cheating” because in previous literature reviews (Eaton et al., forthcoming) this term resulted in an overabundance of content related to relationship cheating or infidelity, rather than academic misconduct.

For Category 2, we focused on terms related to learning disabilities and neurodevelopmental disorders. As an emerging term, we did not include the term neurodiversity, whose definition is still in flux. We did not include terms related to concussion, brain injury, mental health, or physical disabilities. Category 3 included terms related to post-secondary educational settings.

In our results we explain why we ran two searches, each with different search terms. The searches did not include any terms associated with supports for post-secondary students with disabilities, such as accommodation or assistive technology. However, an expansion of the search terms provides one possible direction for future research.

Table 1: Search Term Categories – Search #1

Search Term Category 1	Search Term Category 2	Search Term Category 3
<ul style="list-style-type: none"> • academic integrity • academic misconduct • academic dishonesty • plagiarism 	<ul style="list-style-type: none"> • neurodevelopmental disorder • specific learning disorder • autism spectrum disorder • ASD • attention deficit hyperactivity disorder • ADHD • learning disability • learning disorder • learning impaired • developmental disability 	<ul style="list-style-type: none"> • post-secondary education • higher education • university • college

Table 2: Search Term Categories – Search #2

Academic Integrity: Considerations for Accessibility, Equity, and Inclusion

Search Term Category 1	Search Term Category 2	Search Term Category 3
<ul style="list-style-type: none">• academic integrity• academic misconduct• academic dishonesty• plagiarism	<ul style="list-style-type: none">• dyslexia• dysgraphia• reluctant writer• reluctant reader• reading difficulty• writing difficulty• accessibility• access*• inclusion• learning problems• dyslex*• executive function• working memory	<ul style="list-style-type: none">• post-secondary education• higher education• university• college

Exclusion Criteria

Our search focused on literature of a research, scholarly, and authoritative nature, necessitating the exclusion of non-scholarly sources including, but not limited to:

1. Non-scholarly reports or policy documents
2. Newspaper articles and other popular media sources
3. Other informal media such as blogs, editorials, letters to the editor
4. Social media outputs such as status updates or Tweets

Sources that did not meet any of the search term categories were excluded. We also excluded sources that were not focused on students in post-secondary settings.

Inclusion Criteria

We conducted a rigorous search for high-quality, digitally available sources published since 2000, including:

1. Peer reviewed journal articles
2. Conference papers (peer-reviewed and non-peer-reviewed)
3. Books
4. Theses and dissertations

Sources that met one of the three search term categories were included.

Typology of Evidence

We subscribe to Petticrew & Roberts's (2006) notion that considering the typologies of evidence can provide a useful framework for answering the research questions that guide a literature review. We initiated our search with the following typologies of evidence in mind:

1. Experimental studies
2. Quantitative studies
3. Qualitative studies
4. Mixed methods studies
5. Policy research
6. Literature reviews
7. Other high-quality sources within our search parameters (e.g., scholarly essays).

We did not use these as exclusion criteria, but rather as an overarching guide to keep us sharp when searching for various kinds of sources.

Search Method

During our search we used quotation marks around each term to ensure that the entire phrase was searched. Note that the * symbol is a Boolean search operator that allows for variations on a word to be searched (e.g., dyslex* searches for dyslexia, dyslexic, etc.) The synonyms contained within the search term categories were combined with OR Boolean operator and the three search term categories were combined with AND Boolean operator.

We conducted methodical searches of sources available electronically, drawing on 14 major databases with a focus on education, psychology or interdisciplinary topics available through the University of Calgary.

1. PsycINFO
2. CINAHL
3. SocINDEX,
4. Medline (OVID)
5. ERIC
6. Education Research Complete
7. Library & Information Science Source
8. Academic Search Complete
9. CINAHL Plus with Full Text

10. Business Source Complete
11. International Bibliography of Social Sciences
12. ABI/Business Premium Collection
13. Scopus
14. Web of Science Core Collection

Searches were conducted in July and August, 2021. In the following section, we present our findings, followed by a discussion of the topic, including recommendations for practitioners, educators, and scholars.

Results and Discussion

Results

Our first search based on our search criteria produced in zero results that met our inclusion criteria. We proceeded to reflect on how our initial search terms (see Table 1) might have been too narrow or specific. We then revised our search terms and re-ran the search (see Table 2). The second search also produced no results that met our inclusion criteria.

In the sections that follow, we present a discussion of possible reasons why the searches failed, along with a broader discussion related to the topic at hand. We then proceed to provide a brief annotated bibliography based on sources we already knew about (Davis, 2021; Kinder & Elander, 2011; Price, 2006) and had used in previous work (see Eaton, 2021).

Discussion

Based on our experience and knowledge of the field, we offer a discussion of some possible (but non-exhaustive) reasons why our systematic search failed. We then broaden the discussion to contemplate connections between academic integrity, ethical teaching and assessment, and attending to the needs of learners with disabilities. Throughout we incorporate recommendations for improvement to research, practice, and policy throughout. We also summarize these recommendations in our conclusion as calls to action to emphasize the urgent need for action.

Discussion of the Failed Search

Discussion point #1: Search terms may be too limited

Nomenclature related to academic integrity research topics has been inconsistent across the field (Eaton, 2021; Lancaster, 2021). Deficit-based language is common in academic integrity research, with “academic dishonesty” being among the most commonly-used terms (Lancaster, 2021). We selected several common search terms including “academic integrity”, “academic misconduct”, and “academic dishonesty”. We acknowledge that the search terms we used were carefully curated, but not exhaustive and as a result, we may have missed some studies in our search.

We noted earlier that we opted not to include the search term “cheating” for practical reasons, this point merits further discussion. The term “cheating” has been used in U.S.-based literature for more than a century (see Barnes, 1904; Bird, 1929; Lancaster, 2021; McCabe, 1992, 2016), it is often juxtaposed with the term “honor” (see Barnes, 1904; Lancaster, 2021; McCabe, 2016), and related to the concept of failing to uphold an honor code, a system of student conduct that is used almost exclusively in the United States (see Eaton & Christensen Hughes, 2022).

The search terms regarding to disabilities may also be limited and could be expanded in the future. The diversity of the terms used to describe neurodevelopmental disabilities is varied and shift with changes in social understanding and psychological criteria (e.g., the shift from Asperberger's to Autism Spectrum Disorder). As a stigmatized identity, research on students with disabilities may be better located through associated services or approaches: Assistive or adaptive technology, academic accommodations, or Universal Design for Learning.

To mitigate the possibility that we may have missed some articles based on our selection of terms, we cross referenced our search terms with the author-identified keywords in the sources we reviewed for the brief annotated bibliography that follows later in this report. We noted that only one of the sources included keywords, meaning that we were unable to identify common keywords in titles, abstracts or the body of the known sources (i.e., seed articles). This presented us with both an opportunity and a limitation to develop search terms based on our knowledge of the field, rather than on seed articles.

Discussion point #2: Search terms may be too inconsistent across studies

The combination of academic integrity as a field of research being less mature than other educational research areas (Macfarlane et al., 2014) and previous indications that terminology is used inconsistently in the field (Eaton, 2021; Lancaster, 2021), points to a possibility that researchers and others using keywords in their published works that were not immediately evident to us as search terms. Inconsistency in terminology and keywords has presented challenges for previous reviews of the academic integrity literature (see Hayden et al., 2021).

Furthermore, because those working in student affairs or student accessibility services may be professional practitioners, it is possible that their work may not use the same keywords as academic researchers might. Moreover, student affairs works is more likely to fall into grey literature. As reports and practice briefs, this work is unlikely to be indexed by common research databases. This is not to suggest that the work of higher education professionals is in any way less valuable, but rather to say that an academic search method may not be as effective in finding work for a practitioner rather than scholarly audience.

Discussion point #3: Academic integrity researchers have not been attentive to the reality that many students have disabilities.

Academic integrity continues to develop as a field of scholarly study and has been less developed than other topics of educational research, such as assessment (Macfarlane & Zhang, 2014). Although large-scale surveys relating to academic misconduct have been administered in the United States and elsewhere for more than half a century (Bowers, 1964; McCabe, 1992; Christensen Hughes & McCabe, 2006), to the best of our knowledge, surveys relating to academic misconduct among students have not included questions relating to disability, learning barriers or accessibility needs. In no way is this observation intended to disparage the work of those who designed the surveys, as their work did not

focus on advocacy for students with disabilities. These surveys were designed decades ago, in an era when the profiles of students were different and those with disabilities may have had more limited access to education than they do today (see Evans et al., 2017).

Academic integrity research is broad and transdisciplinary in nature. Currently, there are only a handful of researchers in the world who specialize in academic integrity research, but there are numerous scholars from other disciplines who conduct one-time or occasional research on topics related to academic integrity (see Eaton & Edino, 2018). In this way, academic integrity research has become a secondary area of specialization for some scholars. This has resulted the field of academic integrity research being heterogeneous in a variety of ways including being methodologically diverse, as well as inquiries occurring across the disciplines. The result is that even academic integrity scholars themselves can miss studies that are conducted in other disciplines. One way to overcome disciplinary bias in a field that is multidisciplinary by nature, is to conduct a literature review with a systematic approach that includes experts from different backgrounds (see Hayden et al., 2021).

Returning to the topic of equity, diversity, and inclusion, we note that one in ten youth in Canada have one or more disabilities (Statistics Canada, 2017). Although not all disabilities may have a direct impact on a person's experience in the post-secondary setting, we can say with confidence that previous research on academic integrity has not been attentive to the reality of the diversity of the learners.

The topics of disability and neurodiversity have been neglected in academic integrity research. We call on educators, practitioners, and scholars to research and support not only students with disabilities, but students from all equity-deserving groups.

We further call for stronger positioning of academic integrity through an advocacy and human rights perspective.

Discussion point #4: Disability researchers have yet to address the topic of academic integrity

We acknowledge that the field of disability studies includes a rich and substantive body of literature that covers a breadth of topics including ableism in academia (see Brown & Leigh, eds., 2020), and test accommodations for students with disabilities (see Sireci et al., 2005).

We found little evidence that scholars in the field of learning and neurodevelopmental disabilities have conducted secondary projects related to academic integrity. We recognized that our search might not have been exhaustive, and we may have missed some studies.

In a post-secondary setting, scholarship on tends to focus on improving student support and outcomes (Jansen et al., 2017; Lewandowski et al., 2013). Moreover, this is literature tends to use the term "students with disabilities" frequently rather than specifically looking at a specific diagnosis. This trend

reflects a shift in disability support offices from requiring a specific diagnosis to information on functioning limitations (Roslin, 2021).

Where academic integrity tends to be addressed with disability research, is in regard to the ethics of alternating test designs (e.g., through adaptive or assistive technology or extended time to complete the test). In this way, disability scholars and service providers are engaging in a discussion regarding the appropriateness of academic accommodation for students with disabilities (Pardy, 2016). This approach may be more related to the notion of ethical assessment (which was not one of the search terms used for the literature review).

Discussion of Broader Issues Related to Academic Integrity and Supporting Students with Disabilities

Discussion point #5: Academic integrity as a domain for transdisciplinary research and practice

Academic integrity has been identified as an area of transdisciplinary research (Eaton, 2021). Although there is no universally accepted definition of transdisciplinary research, it has been defined as research arising from complex problems from diverse and heterogeneous domains that cannot be solved by any one group alone (Lawrence, 2010). Transdisciplinary research requires academic scholars and others to collaborate to ensure the cross-fertilization of knowledge and expertise from diverse groups (Lawrence, 2010).

Because academic integrity extends to all fields of study, it is imperative that researchers from various fields collaborate on scholarly inquiry into breaches of academic ethics, but collaboration among researchers is not enough. It is essential to include practitioners and professionals in research collaborations, as these individuals hold particular expertise and wisdom based on their professional practice.

Academic misconduct is a complex issue that cannot be addressed by academic scholars alone. In transdisciplinary research, it is not only permissible to include constituents from other stakeholder groups such as professionals, and policy makers, it is desirable (Lawrence, 2010).

Academic integrity research is a transdisciplinary domain. We call on academic researchers to pro-actively collaborate with practitioners and professionals in research focused on action-oriented solutions focused on student success.

Discussion point #6: Educators need training and support to create more ethical and accessible course materials and assessments

A multistakeholder approach to academic integrity means that educators have a role to play in ensuring their course materials and assessments are prepared in an ethical manner. This means that course materials and assessments must attend to the diversity of the learners in post-secondary education.

Academic integrity cannot exist without ethical approaches to teaching and evaluation.

Among academic integrity scholars and advocates, ethical assessment is often aligned with concepts such as designing or re-designing materials to minimize opportunities for academic cheating, avoiding high-stakes assessments, and providing opportunities for formative as well as summative assessment (Macdonald & Carroll, 2006; Morris, 2016, 2018; Sutherland-Smith, 2008). There is limited discussion in the academic integrity literature about the ethics of developing or presenting course materials.

There is an ethical imperative for educators to ensure that they develop and present learning materials in ways that empower students to learn.

It is incumbent upon educators who care about academic integrity and ethics to extend their thinking beyond the prevention of misconduct and also consider how to create supportive and positive environments for all learners. As others have pointed out, shifting the focus away from how to stop students from cheating and instead focus on how to support student learning is a teaching and learning imperative (Bertram Gallant, 2008). Disability practitioners and scholars can support these ethical imperatives through their work promoting the Universal Design for Learning (UDL) (Fleet & Kondrashov, 2019; Ingram et al., 2012; Rao et al., 2015). UDL seeks to incorporate multiplicity into the post-secondary learning, through multi-means of the presentation, engagement and reflection. UDL challenges traditional ways of assessment to allowing students flexibility in the manner learning is demonstrated. As others have pointed out, adopting a universal design for learning (UDL) approach to teaching, learning, and assessment can help to promote academic integrity (Chaudhuri et al., 2021; McNeill, 2021; Salmon et al., 2021).

Discussion point #7: Administrators who investigate and address academic misconduct are often lack training related to equity, diversity, and inclusion (EDI)

In Canadian higher education institutions, often the work of investigating and addressing student misconduct falls to an administrator. In universities, a common administrative role that would include academic misconduct within their portfolio would be an academic department head or an associate

dean, but this varies from one institution to another and sometimes there is also variance within an institution, depending on the organizational structure of the school.

Speaking anecdotally, based on our knowledge of the academic integrity field, it would not be inaccurate to note that when an individual is appointed to a leadership role in which addressing misconduct is part of their portfolio, they may have had little to no training in how to perform this aspect of the role. Administrators often learn how to address academic and other misconduct through on-the-job experience, rather than through formal training.

Similarly, academic staff in Canada receive limited training about how to support students with disabilities. The diversity of the students with disabilities makes disability-specific training challenging. In Canada (as in other countries, such as the US and the UK) students' specific disabilities are not disclosed to instructional staff for privacy reasons, making the application of the disability-specific training impossible. Professors and other instructional staff may be to take training related to supporting students with disabilities; however, by and large, it is up to the individual academic staff member to pursue these opportunities and resources themselves. This training is often focus on the work of disability support offices and compliance with human rights legislation.

Because administrative leadership roles at the level of middle management (e.g., department head or associate dean) are often assigned by appointment, it is possible that an administrative leader might have no formal training whatsoever in how to support student breaches of integrity in an equitable manner.

This gap in training for educational leaders is a problem.

More training for academic integrity administrators and professionals is urgently needed to ensure equitable treatment in matters relating to student conduct generally, and academic misconduct specifically.

We call on higher education institutions to provide training and resources for administrative leaders regarding how to support students with disabilities in ways that are not only ethical, but that are focused on student success. This approach may be best support through education on ableism with post-secondary education, in the line of Dolmage's (2017) work, than providing disability-specific education.

Similarly, we call on institutions to provide more professional learning opportunities for instructional and leadership staff on how to address breaches of integrity in an equitable manner.

A Brief Annotated Bibliography

Despite our search yielding no results that met our inclusion criteria, we have included a brief annotated bibliography of selected sources we already knew about through previous work in this field. We provide these annotations as a starting point for those interested in further research on academic integrity, equity, inclusion, and accessibility. The studies below is on language processing difficulties and written expression and we believe this to be a reflection of the literature that is currently available in the field, rather than being an accurate representation of what needs to be further explored.

Davis, M. (2021). *Raising awareness of inclusive practice in academic integrity*. Paper presented at the European Conference on Academic Integrity and Plagiarism (ECAIP) Online, 89-90. https://academicintegrity.eu/conference/proceedings/2021/book_of_abstracts2021.pdf

Author-identified keywords: academic integrity, inclusion, inclusive practice

This conference presentation provides an overview of inclusion issues highlighting students that who may be viewed as 'excluded' or 'marginalized' regarding learning experiences. Ten staff and five students within a university in the UK were interviewed. The staff were interviewed to gain an understanding of their roles and views of academic integrity and the students were interviewed to gain an understanding of what their experience was like with the academic conduct referral process. The results of this study reveal that inclusion issues receive insufficient attention. The researcher concludes that inclusion in academic integrity is lacking in research and underscores a need for future research that incorporates inclusive practice.

Kinder, J., & Elander, J. (2011). Dyslexia, authorial identity, and approaches to learning and writing: A mixed methods study. *British Journal of Educational Psychology*, 82, 289-307. <https://doi.org/10.1111/j.2044-8279.2011.02026.x>

Author-identified keywords: None included.

In response to the challenges students with dyslexia may face regarding unintentional plagiarism, the researchers of this study sought to explore and the differences between dyslexic and non-dyslexic students regarding their authorial identity and approaches to learning and writing in addition to explore dyslexic students' understandings of their beliefs about dyslexia, writing, and plagiarism. Thirty-one dyslexic students and thirty-one non-dyslexic university students were included in the study. Kinder and Elander (2011) administered questionnaires that included scales to measure self-rated confidence in writing; understanding authorship; knowledge to avoid plagiarism; pragmatic approaches to writing; and deep, surface, and strategic approaches to learning. Researchers also included qualitative data via interviews with dyslexic students. In sum, results reported that dyslexic students scored lower for confidence in writing, understanding authorship, and strategic approaches to learning, and higher for surface approaches to learning. Further, qualitative results highlighted that all dyslexic students

reported that having dyslexia made writing more difficult and reduced their confidence in academic writing; however, the students had differing views regarding whether dyslexia increased their risk of plagiarism. Kinder and Elander (2011) concluded that dyslexic students have weaker authorial identities and less congruent approaches to learning and writing and further research is needed to investigate how dyslexic students develop approaches to academic writing, which in turn, may affect their knowledge to avoid plagiarism in the future.

Price, G. A. (2006). Creative solutions to making the technology work: Three case studies of dyslexic writers in higher education. *ALT-J Research in Learning Technology*, 14(1), 21-38.

<https://doi.org/10.1080/09687760500479894>

Author-identified keywords: None included.

The purpose of this study was to explore creative ways of using technology to manage dyslexia. In this comprehensive research study, Price (2006) conducted semi-structured interviews with three undergraduate and postgraduate dyslexic students in addition to adding their real-time writing logs. The results of this study were divided into three student case studies. In sum, the results showed that students demonstrated how they use different types of technology to overcome writing anxiety (e.g., mind mapping and text-to-speech software) in addition to utilizing technology to support their 'fear of the blank page' syndrome, and issues of plagiarism. The researcher concludes that it may be useful for post-secondary institutions to provide writing support for students with dyslexia in order for them to gain knowledge of their strengths and weaknesses, thus proactively preventing these students from engaging in academic misconduct (i.e., plagiarism) which may subsequently increase their academic performance. This article would be of value to academic faculty and support service staff working with students with disabilities.

Conclusions and Recommendations

In this report we have offered a summary of the limited contributions to literature that addresses the combined topics of academic integrity, accessibility, equity, and inclusion, as well as a discussion of possible reasons why there is a paucity of research in this area.

Calls to Action

We conclude with these calls to action, summarized from throughout this report, with additional recommendations offered for clarification and direction:

1. We call on educators, practitioners, and scholars to actively engaging in research and dialogue to support students from equity-deserving groups, including students with disabilities.
2. We call on researchers to develop **and sustain** research programs on academic integrity as it relates to accessibility, equity and inclusion. It is not enough to conduct a single study. Instead, multiple research projects conducted over time are needed in order to have impact.
3. We call on academic scholars to collaborate with professional colleagues with expertise in student success, accessibility, educational psychology and related fields, in productive collaborations to build capacity on a larger scale.
4. We call on professional practitioners (i.e., higher education professionals working in student accessibility) to document and share the work they do related to accessibility and academic integrity through presentations, papers, and resources that are easily accessible by others. We challenge post-secondary institutions to support and value this outreach as an important academic mandate of the institution. Similarly we call on academic integrity researchers to connect with student services practitioners and their organizations for their insights into academic integrity.
5. We call on institutions to fund research, as well as evidence-informed tools and resources to help students, faculty and other members of our educational communities to better understand how to better advocate for students from equity-deserving groups, to help them learn in a safe, equitable and ethical environment. This ethical environment may require reflect on traditional assessment practices and effectiveness in demonstrating student learning.
6. We call on higher education institutions to provide training and resources for administrative leaders so they can learn how to better support all students in ways that are both ethical and equitable, focusing squarely on student success and advocacy.
7. We call on educational institutions to provide more professional learning opportunities for instructional and leadership staff on how to address breaches of integrity in an equitable manner.

More engagement at every level is needed among practitioners, educators, researchers and policy makers, to ensure integrity guideline our institutions and provides the foundation for learning and teaching and to support all students in ways that are equitable and respectful.

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