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# **Challenges Encountered by Indigenous Youth in Postsecondary Education**

# Défis rencontrés par les étudiants autochtones de niveau postsecondaire

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### Résumé de l'article

Cet article explore la nécessité d'établir un partenariat réciproque avec les peuples autochtones et de développer des stratégies culturellement adaptées afin de maintenir la motivation scolaire des étudiants autochtones. Les perceptions de professionnels de l'éducation concernant : (1) les défis auxquels les étudiants autochtones sont confrontés lors de leur transition aux études postsecondaires (2) les stratégies utilisées afin de leur fournir un soutien scolaire, et (3) les différentes manières d'améliorer leur expérience académique sont décrites. Cette étude était nécessaire à la meilleure compréhension de l'état des progrès liés à la décolonisation de l'éducation en milieu universitaire. Bien qu'une plus grande proportion d'étudiants autochtones obtienne un diplôme d'études collégiales, plusieurs défis demeurent au niveau de l'adéquation culturelle dans leurs tâches scolaires.

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## Cet article est diffusé et préservé par Érudit.

# CHALLENGES ENCOUNTERED BY INDIGENOUS YOUTH IN POSTSECONDARY EDUCATION

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ABSTRACT. This paper explores the need to build a reciprocal partnership with Indigenous¹ Peoples and develop culturally-relevant strategies that foster academic motivation among Indigenous youth. The objectives of this study were to describe education professionals' perceptions regarding: (1) the challenges Indigenous students face when transitioning to postsecondary education, (2) the strategies used to provide academic support, and (3) the different ways of enhancing Indigenous students' educational experiences. These perceptions were necessary to better comprehend the ongoing progress related to the need for a decolonized education within academic institutions. Although an increasing proportion of Indigenous Peoples are obtaining college diplomas, some challenges remain and are specifically encountered during Indigenous students' transition to postsecondary education and in the cultural relevance within their learning materials.

# DÉFIS RENCONTRÉS PAR LES ÉTUDIANTS AUTOCHTONES DE NIVEAU POSTSECONDAIRE

RÉSUMÉ. Cet article explore la nécessité d'établir un partenariat réciproque avec les peuples autochtones¹ et de développer des stratégies culturellement adaptées afin de maintenir la motivation scolaire des étudiants autochtones. Les perceptions de professionnels de l'éducation concernant : (1) les défis auxquels les étudiants autochtones sont confrontés lors de leur transition aux études postsecondaires, (2) les stratégies utilisées afin de leur fournir un soutien scolaire et (3) les différentes manières d'améliorer leur expérience académique sont décrites. Cette étude était nécessaire à la meilleure compréhension de l'état des progrès liés à la décolonisation de l'éducation en milieu universitaire. Bien qu'une plus grande proportion d'étudiants autochtones obtienne un diplôme d'études collégiales, plusieurs défis demeurent au niveau de l'adéquation culturelle dans leurs tâches scolaires.

Among the challenges identified in the literature regarding Indigenous students' access to postsecondary education, a major one stems from events that occurred over the past century on Canadian territory. Colonialism, an ideology that consists of practices of domination, involves the subjugation of one people to another (Kohn & Reddy, 2017). Colonialism has had a

significant impact on Indigenous Peoples (Price & Burtch, 2010). Europeans implemented assimilation policies with the goal of terminating Indigenous peoples' cultural, social, economic, and political distinctiveness (Hanson, 2009). The introduction of the Indian act of 1876 (i.e., imposition of governing structures to control Indigenous Peoples' rights, culture, and education) (Hanson, 2009), followed by the implementation of residential schools between the 1870s and 1990s (Union of Ontario Indians, 2013) exacerbated the alienation of the Indigenous Peoples. Residential schools became synonymous with places where Indigenous Peoples' traditions, languages, and cultures were being systematically destroyed, to be replaced by Eurocentric ways of knowing, being, and doing (Price & Burtch, 2010). As a consequence, ongoing intergenerational impacts of those traumas continue to considerably affect Indigenous Peoples' health and wellbeing (Aguiar & Halseth, 2015), including perceptions of postsecondary institutions as perpetuating colonialism (Battiste & McLean, 2005) through colonial violence that takes the forms of discrimination, silencing, and denial (Cote-Meek, 2014).

### SOCIOCULTURAL AND SCHOOL-RELATED CHALLENGES

These historical events have led younger generations of Indigenous peoples to experience feelings of alienation and exclusion, loss of self-identity, and loss of self-worth, which impact their educational experiences, specifically in relation to their cultural identity (Fryberg et al., 2013; Nguyen, 2011). With an underrepresentation of Indigenous faculty and staff members in schools, the dominance of Western ways of knowing creates a context in which Indigenous students perceive themselves in isolation (Price & Burtch, 2010), as their interactions are often limited to individuals who do not have a deep knowledge of their culture (Ryan et al., 2009). Furthermore, by imposing Eurocentric ways of learning through the curriculum, Indigenous Peoples' worldviews and traditional educational practices are not considered (Price & Burtch, 2010). This constant differentiation from mainstream practices is conducive to a discriminatory educational system and, eventually, can lead to a lack of interest and sense of belonging on the part of young people (Battiste & McLean, 2005; Price & Burtch, 2010). Finally, the complexities associated with moving away from a tight-knit community (Heber & Peng, 2014) can compound feelings of isolation, demotivation, and depression, which in turn impact student retention, despite any well-established social support systems (Price & Burtch, 2010; Restoule et al., 2013). The culmination of these sociocultural and school-related challenges ultimately lead to concerns regarding school attendance, degree completion, and academic motivation. This article focuses on the ongoing challenges Indigenous students face when transitioning to postsecondary education, as well as the strategies put in place to provide academic support and to enhance their educational experiences.

# STRATEGIES TO SUPPORT INDIGENOUS YOUTH IN POSTSECONDARY EDUCATION

To help facilitate Indigenous youth's transition to postsecondary, several pathway programs have been implemented (Gallop & Bastien, 2016; Hall, 2015; Whannell et al., 2012), which offer alternative roads into higher education and allow for flexibility in choice of program courses. Outcomes from these programs have shown a higher degree of course completion, as well as increases in self-confidence, self-efficacy, satisfaction, motivation, inner strength, and self-knowledge (Habel, 2012).

Other support strategies have included highlighting cultural relevance in the curriculum content (Kennedy & Aotearoa, 2013) and adopting a holistic pedagogical approach (including the teaching of social, cultural, and spiritual wellbeing) as a means of contributing to the preservation of Indigenous Peoples' cultural identity and ways of knowing (Nguyen, 2011; Pidgeon, 2008), this along with implementing cooperative learning models that foster the development of peer-peer, as well as peer-mentor, relationships (Hampton & Roy, 2002). Such strategies are congruent with the cultural beliefs, values, and referents of Indigenous students, facilitating their understanding of academic content, thus increasing their academic success (Kennedy & Aotearoa, 2013). Engaging in extracurricular activities (Gallop & Bastien, 2016) and promoting culturally relevant mentoring initiatives have been found to also foster a sense of belonging among Indigenous youth (Pidgeon et al., 2014). Finally, the development of interpersonal relationships between teachers and students, especially ones built on trust, respect, and value attributed to Indigenous Peoples' culture, have contributed to student retention (Hampton & Roy, 2002). By supporting and refining these strategies, the educational community can further solidify their initiatives to build bridges of connectedness between Indigenous students and the school network (Kirkness & Barnhardt, 2001).

### METHOD

Context. This study took place in five postsecondary institutions across Quebec and Ontario, where a small number of Indigenous students from various Indigenous communities were registered, having arrived from either a reservation (i.e., lands reserved for Indigenous and governed by federal jurisdiction; Secrétariat aux affaires autochtones, 2009) or from Northern and remote communities. Most incoming Indigenous students from high school had been admitted to a transition program in which courses were taught by faculty working closely with communities to ensure the inclusion of culturally-relevant content and instructional methods. Currently enrolled Indigenous students had already spent a year in this transition program and had now transferred to a regular program. Each postsecondary institution had an Indigenous Resource Centre, as well as an appointed full-time pedagogical

counsellor who worked with teachers to develop curriculum material which included content relevant to Indigenous Peoples.

Sample. Participants included seven education professionals (n = 4 non-Indigenous and n = 3 Indigenous), with 2–25 years of work experience in student services, learning centres, or resources centres. As part of their job functions, they played a critical role in supporting Indigenous students through their academic journey. The education professionals shared a commitment to decolonizing education defined as a process of transformation of education "where learning is rooted in Indigenous knowledges" (Munroe et al., 2013, p. 320) to preserve cultural identity and Indigenous languages. Gathering information about the educators' perceptions of Indigenous students' postsecondary experiences was essential to complement current views and beliefs about ongoing colonizing practices within educational institutions and to determine progress towards decolonizing practices.

The following provides a brief overview of the participants' current roles in their respective workplaces (participants have been denoted by pseudonyms):

- Rita (Female, non-Indigenous) brought work experience in peer tutoring
  and her current role was that of an academic support to students whose
  mother tongue is not English.
- Erika (Female, non-Indigenous) was a pedagogical counsellor who assisted students with special needs in navigating college procedures (e.g., registration and course selection).
- Lara (Female, non-Indigenous) worked as the coordinator of the Indigenous Resource Centre and has occupied that position for over 10 years.
- Danny (Male, Indigenous) was a humanities instructor and an assistant coach for one of the college's sporting teams.
- Gail (Female, Indigenous) was a psychosocial support agent and worked closely with Indigenous students. She also worked part-time in a local Native Friendship Centre.
- Amy (Female, non-Indigenous) ran an arts-based education program in a postsecondary institution for Indigenous youth.
- Susan (Female, Indigenous) was a curriculum specialist and developed learning programs based on Indigenous content and pedagogy. She also conducted research with Indigenous teens regarding their academic success.

The research team was composed of three individuals, one of whom was Indigenous, and two of whom were not. The Indigenous member was a student affairs technician who worked in an Indigenous school board in the department of postsecondary student services<sup>2</sup> providing support to

Indigenous students concerning personal, social, cultural, medical, and family issues. The first author, non-Indigenous, had over a decade of professional work experience as an academic advisor in one of the postsecondary institutions where this research was conducted. The second author, non-Indigenous, was a graduate student in cultural psychology and heavily involved in community outreach and volunteer work. We researched postsecondary institutions in the two provinces that offered transition programs exclusively to Indigenous students, that assigned specific professional staff to work and interact with Indigenous students and teachers, and that housed an Indigenous Resource Centre. We narrowed down potential participants by their tasks. If their job descriptions were part of the school's initiative to contribute to Indigenous students' academic success, then we emailed them an invitation to participate in the study. The email message contained information regarding the purpose of the study, themes or topics that would possibly be discussed during the interview, as well as details regarding informed consent. Those who provided a favorable response were recruited for the present study. Other participants were recruited through recommendation and word of mouth. All seven participants volunteered to be a part of the current study.

Data Collection. Data were gathered through semi-structured interviews that lasted between 60 and 90 minutes, were audio-recorded, and conducted by the first author at a time and place chosen by the participant. At the beginning, a brief overview was provided of how the interviews would be conducted and upon agreement and understanding, informed consent forms were signed. Interview questions included topics related to education professionals' perceptions of what academic motivation meant for Indigenous students, what kind of challenges they encountered in postsecondary education, what factors contributed to their retention, as well as what support strategies were developed to provide them with a positive educational experience. This study was limited to questions about postsecondary challenges, strategies to overcome these challenges, and suggestions on how to instill a positive impact on Indigenous students' educational experiences. Probes were also used frequently to elaborate and adhere to the specificity of the participant's replies.

Data Analysis. The qualitative software NVivo 11 was used to classify, sort, and analyze data. Content analysis allowed for direct interpretation of meaning derived from the actual data. Using the language of participants and their unique perspectives, the analysis aimed at describing their observations regarding the hardships and successes of Indigenous youth in postsecondary education. Furthermore, not having preconceived categories (Kondracki et al., 2002) allowed us to immerse ourselves within the data and to let it orient our analysis. Throughout our analysis, we systematically documented and kept records of all procedures and data relevant to the study. Data analysis began with two individual coders transcribing verbatims and reading through the

data. Data were then grouped by each coder into categories and compared to new data as it came in. The process of deriving categories was facilitated by highlighting exact words from selected excerpts that best captured key concepts (Miles & Huberman, 2013). As the process continued, themes were created depending on how categories were related in a logical sequence (Patton, 2002). The two coders scheduled biweekly meetings to discuss emerging themes and compare individual findings. Discussions focused on details regarding how well the themes fit with the research questions, as well as the representativeness of the context in which data were collected. When disagreements arose, discussions continued until a final consensus was reached or when a theme or category could be assigned to an excerpt at the satisfaction of the coders.

*Trustworthiness*. To establish and enhance the trustworthiness of our findings (Leech & Onwuegbuzie, 2007), we implemented the following strategies to address the four criteria first identified by Lincoln and Guba (1985): credibility, transferability, dependability, and confirmability.

Credibility. To enhance credibility, we scheduled debriefing sessions with an Indigenous pedagogical counsellor (a non-participant in this research) who had knowledge of the research topic "... and could challenge our assumptions" (Shenton, 2004). These encounters helped guide us through data interpretation and represent Indigenous Peoples' viewpoints. Feedback obtained was used to strengthen and refine the study, thus enhancing its credibility. Given that the first author had extensive work experience in one of the participating postsecondary institutions, familiarity with the institutional culture allowed for a greater contextual awareness during the discussions and helped to build trust between the researcher, participants, and the Indigenous pedagogical counsellor (Shenton, 2004). Finally, we also conducted member checking (Creswell & Miller, 2000) to ensure that participants were at ease with our selected excerpts and that our interpretations were accurate. Once data were transcribed, we emailed each participant their transcript and asked them to verify their information and review it for accuracy and clarity. Any notes or changes made to the transcript by participants during member checking were incorporated into the data.

Transferability and dependability. Merriam and Tisdell (2016) describe transferability as "the extent to which the findings of one study can be applied to other situations" (p. 253). We have provided rich data about the participants, setting, and themes, described in sufficient detail so as to extrapolate the potential applicability of findings to other similar contexts (Creswell & Miller, 2000). For dependability (Roberts et al., 2006), we provided in-depth descriptions of our methodological process, including participant selection, data collection, and data analysis.

Confirmability. In order to approach the phenomenon under study from an open and unbiased perspective (Glesne, 2006), we acknowledged our previously held beliefs or assumptions regarding the topic under study and kept notes of these preconceptions (Shenton, 2004). The latter allowed us to approach the phenomenon under study "with new eyes in a naïve and completely open manner" (Moustakas, 1994, p. 86) and ensured as much as possible "that the work's findings are the result of the experiences and ideas of the informants, rather than the characteristics and preferences of the researcher" (Shenton, 2004, p. 72).

### **RESULTS**

*Indigenous Students' Challenges in Postsecondary Education.* The following paragraphs describe and summarize the perceptions of education professionals regarding the social, cultural, and pedagogical challenges. As part of our analysis, we identified the number of references describing each specific category (referred to by n). Although this was not a comparative study or a cross-comparative case study, results were written in such a way to prioritize the viewpoints of Indigenous education professionals.

Social challenges. The social challenges converged into five categories (see Table 1). According to Rita (non-Indigenous), "[students] are having a hard time adapting" upon their arrival to postsecondary education. For many Indigenous students, this meant they had to abide to college formalities (e.g., registering for a predetermined number of courses) and adapt to various new contexts and characteristics that represented a different lifestyle in a new environment. For example, Erika (non-Indigenous) stated the difference in the pace of campus life to which students were forced to adapt:

...we expect a lot more socially, verbally, ... then it is needed in most of the communities ... we are going really, really fast, in many aspects of life, including our academic programs.

In addition, feeling like a minority in college can be quite destabilizing: "being the only Indigenous when arriving from [your] community in almost the whole institution..., is a total uprooting" (Gail, Indigenous, Free Translation<sup>3</sup>). This feeling was accentuated because Indigenous students commonly spoke a different mother tongue. "There won't be 50 other people who will speak [their] language" (Free translation, Gail, Indigenous). In some cases, the ripple effects of colonialism (e.g., residential schools) would come into play as some students' parents did not want them to leave their communities nor go to school. "Some of them [had] a legacy of having been to residential schools" (Danny, Indigenous).

The most cited social challenge, however, concerned interactions between Indigenous and non-Indigenous students. Indigenous students generally felt discomfort, shyness, and were hesitant to socialize, communicate, and share their thoughts with non-Indigenous peers. Danny (Indigenous) identified "a common shyness about sharing with these people who aren't our people." In sum, social challenges revolved around issues associated with the social integration in a new environment in which Indigenous students experienced uprooting, a phenomenon closely related to the following cultural challenges (see Table 1).

TABLE 1. Categories of Social Challenges and Number of Quotes (n)

Category	Indigenous (n)	non-Indigenous (n)	Total (n)
Adapting to a new environment	1	16	17
Integrating in college life	1	4	5
Speaking a different mother tongue	3	0	3
Experiencing the ripple effects of colonialism	5	5	10
Interacting with non- Indigenous students	7	20	27
Total	17	45	62

Cultural challenges. Transitioning to postsecondary education in an urban setting led to the discovery of many new cultural differences. Eight categories of cultural challenges emerged from this theme (see Table 2). According to Lara (non-Indigenous), students were making a "big step" by leaving their "small community where it [was] very close-knit" and coming to a lifestyle that she described as "very individualistic." She also described how she observed Indigenous students losing their sense of community because of leaving everything that was safe and familiar. This implied facing cultural differences such as changes in food presentations and labels: "Things (e.g., foods) that we have here and they have there, but they aren't presented the same way and just that is enough to make you feel uneasy or unsure" (Lara, non-Indigenous). Furthermore, Danny (Indigenous) suggested that students experienced a culture shock when leaving their communities for the first time. Not only do "they experience a new culture at a young age", but also "they are coming to a community where it's more normal to reach out and say something to a teacher or an advisor and for them it's not" (Danny, Indigenous). Another challenge was the effect of students' different life experiences on being able to relate to class content. Lara (non-Indigenous) gave the example of a student that could not relate to any of her class readings: "it's like you, if I was to describe you how to go hunting, I can describe it to you, but you will never know what the feeling is."

In addition, Susan (Indigenous) suggested that Indigenous students conceptualized time as being circular instead of linear. She expressed that they look at the world in a different way, in which "all the possibilities are happening simultaneously [...] because they don't see time as linear." Danny (Indigenous) also raised the limited cultural sensitivity displayed by counsellors toward students. It may have been associated with not prioritizing hiring Indigenous candidates or "people having a background dealing with Indigenous issues." Institutions don't yet seem to possess all the tools to fully portray cultural sensitivity.

The last, and most cited cultural challenge was the pressure felt by students to meet the expectations of their respective communities. As Gail (Indigenous) stated: "communities say, we give you funding to go study in the city, but don't forget, you have to come back home" (Free translation). Hence, according to Gail (Indigenous), Indigenous youth often chose their program of study in relation to what profession was needed to serve their communities, thus contributing to the collectivist approach valued by Indigenous communities.

TABLE 2. Categories of Cultural Challenges and Number of Quotes (n)

Category	Indigenous (n)	non-Indigenous (n)	Total (n)
Different type of lifestyle (individualistic)	0	3	3
Losing sense of community	0	4	4
Cultural differences	0	3	3
Culture shock	3	0	3
Different life experiences	0	1	1
Concept of time	1	2	3
Limited cultural sensitivity among college staff	1	0	1
Abiding to community expectations	5	2	7
Total	10	15	25

Pedagogical challenges. Pedagogical challenges represented the largest theme and produced 10 distinct categories (see Table 3). The most cited pedagogical challenge was Indigenous students' learning strategies and study skills. According to Erika (non-Indigenous), Indigenous students faced a lot of unknowns when transitioning to postsecondary education, especially expectations about tests and assignments. As a result, some students did not prepare in time for their assignments (e.g., did not buy required books for the

class). Furthermore, Danny (Indigenous) observed that some of his Indigenous students were less familiar with basic math skills than his other students. He also noticed a general difficulty with the learning of languages and, especially, with the one spoken in their institution. Transition to postsecondary was made even more challenging because not all prerequisite courses for some college programs were offered in the communities (e.g., physics and chemistry classes), "given that not enough students are interested" (Gail, Indigenous; Free translation). Consequently, some Indigenous students were declined admission due to a missing prerequisite course.

In addition, Susan (Indigenous) suggested that the majority of Indigenous students were visual-spatial learners, with most Indigenous students synthesizing and processing information holistically. This holistic worldview also led to challenges to certain academic tasks involving time constraints. Susan (Indigenous), stated: "[...] as Indigenous persons, we are great with space, but we are not so good with time." Along the same lines, Erika (non-Indigenous) stated that a 15-week long semester was constraining and challenging: "You have to be able to complete your assignments, attend class" and "so... the understanding of what the requirements are, during those 15 weeks, the dedication that it takes and the planning... I think it's a big one." Other participants pointed out how certain interventions and school protocols were "so formalized" (Lara, non-Indigenous). Danny (Indigenous) stated that postsecondary institutions "overly bureaucratize things" and that this process leads to a form of depersonalization, which he "thinks for people who are struggling, this is not the way to go." Having a fixed curriculum also penalized Indigenous students. Danny (Indigenous) stated that students felt overloaded and thought they were "encouraged to take too many classes or [that] they were forced to."

Indigenous students were more confident to speak about course-related topics in more informal conversations, like those that took place in a resource centre, instead of in formal learning environments (e.g., the classrooms) (Rita, non-Indigenous). Susan (Indigenous) emphasized that Eurocentric systems' teaching practices "have been created for another culture, another worldview, and another learning style and everything about [them, Indigenous] is disregarded." Danny (Indigenous) suggested that for Indigenous students finding school and life balance was quite challenging. Specifically, life responsibilities such as paying next month's rent, getting some income, or simply surviving were much "more pressing than school to them." Overall, Indigenous students were coming to postsecondary education with different life experiences and responsibilities which in turn impacted their academic journey, compounded by the fact that the post-secondary teaching environments did not acknowledge Indigenous students' needs.

TABLE 3. Categories of Pedagogical Challenges and Number of Quotes (n)

Category	Indigenous (n)	non-Indigenous (n)	Total (n)
Learning strategies and study skills	4	9	13
Ways of learning languages	0	2	2
Limited information for college preparation	4	9	13
Access to education	6	0	6
Time constraints	3	4	7
Formality of interventions	1	7	8
Fixed curriculum	3	1	4
Formal learning environments	0	4	4
Teaching practices	11	0	11
Finding school and life balance	4	0	4

## Strategies to Support Indigenous Students in Postsecondary Education

This section describes education professionals' perceptions regarding the support strategies necessary to be put in place to address these social, cultural, and pedagogical challenges.

Social strategies Five categories of social strategies emerged through our analysis (see Table 4). Building a trusting relationship between students and college staff members was the most cited strategy, this to facilitate communication with Indigenous students. Getting to know students on a daily basis, as well as allowing them to get acquainted with their teachers through informal conversations, helped students feel more comfortable.

[...] When you talk to one of them [...], you get to know them, the first question is not, what do you need help in, but what is it like here? How is it going? Do you live on campus? [...] and you get to know them and then you say so, do you need help with tutoring? (Danny, Indigenous)

Danny (Indigenous) also talked about the importance of "breaking that line" so [students] can engage with others (e.g., mentors, teachers); if not "they won't reach out to talk." Thus, blurring professional barriers and fostering an individualized and personal relationship contributed to Indigenous students' social engagement in school. In addition, building trust was identified as crucial in developing positive relationships and creating an optimal learning environment.

Being the first one to initiate communication with Indigenous students was underlined as important, for example, making the first move while also reassuring students by telling them "okay, I am here if you need me" (Lara, non-Indigenous). Danny (Indigenous) suggested providing guidance in daily activities by individually meeting with Indigenous students regularly. Lara also emphasized the need to adjust to students' pace and to learn to be patient because for some students "it took a full year before they opened up to [her]." Being patient was key because when students displayed a sense of openness, their communication skills and school engagement were enhanced. Finally, according to Gail (Indigenous), prioritizing individualized interventions was indicative of a social strategy that led to an interest into what was happening in students' lives outside of school.

TABLE 4. Categories of Social Strategies and Number of Quotes (n)

Category	Indigenous (n)	non-Indigenous (n)	Total (n)
Building relationships with students	11	4	15
Initiating communication	2	3	5
Providing support in a balanced way	0	1	1
Providing guidance in daily activities	1	5	6
Adjusting to student's pace	0	4	4
Total	14	17	31

*Cultural strategies.* This theme produced two categories: (1) the incorporation of traditional cultural activities to course content (n = 4, 4 = Indigenous) as a teaching method and the organization of school-related cultural activities (n = 6, 6 = Indigenous). These cultural strategies were expressed as means of reuniting Indigenous students, promoting their culture, and increasing their self-confidence.

Susan (Indigenous) spoke about her experience using Indigenous pedagogy during her tutorial sessions. In the following example, she describes the use of a traditional game in teaching students physics and anatomy:

[students] talked about beavers, [they] talked about mammalian physiology versus other physiologies, [they] talked about what happens if you cut a tendon and then what [they] did is [they] actually had some of those tendons dried out and then [they] had them pounded, because that's how [they] used to do [their] thread.

Gail (Indigenous) stated that organizing school-related cultural activities built Indigenous students' self-confidence and helped them take pride in their culture. For example, they taught [their] language to students and teachers, and it was fun because they were proud, but also because they were obliged to speak in front of a public and to come out of their shells, and after people would come and ask them questions and would recognize them in the hallways (Free translation, Gail, Indigenous).

Moreover, these activities facilitated social interactions between Indigenous students and, ultimately, built stronger friendships over time. According to Gail (Indigenous), this process of relationship-building was a positive contributor to students' academic experience, because "it's easier to get through it when you are not alone."

Pedagogical strategies. Eight categories of pedagogical strategies were identified to support Indigenous students in postsecondary education (see Table 5). Gail (Indigenous) referred to professional development for staff as a relevant strategy and had given workshops on cultural safety (e.g., recognizing Indigenous Peoples' situation of discrimination and colonization) which "college staff liked and [...] found interesting." However, she stated that much effort was still needed to assess the practical implications of these workshops on instructional practices.

The most cited category referred to the application of diverse teaching methods which included open-ended discussions, active learning, peer teaching, and valuing experience as knowledge. According to Danny (Indigenous), traditional lecture formats "work poorly with a lot of Indigenous students and other students too." To address this, Danny established a classroom climate that allowed students to benefit from listening to their peers' conversations: "[...] where, how do you feel about this? what do you think about that? is a point of discussion." Furthermore, asking questions that outlined the smaller steps needed to achieve clarity when narrowing down on a specific research topic and formulating a good thesis statement encouraged the development of their confidence and supported their autonomy (Rita, non-Indigenous).

Danny's strategy was to monitor students' progress with weekly or monthly meetings to "see them and [ask] what are you struggling with, how are you going to manage your time to get to that? [...]" This strategy was worth further expansion, as it was not a widespread practice in the college nor was it thought out specifically for postsecondary Indigenous students.

In recent years, alternative educational paths such as transition or pathway programs were used as a means to facilitate Indigenous students' access to postsecondary education. Gail (Indigenous), however, did not perceive this as the best solution:

... It's like if we are saying, we don't think you can attend the regular program, so we will always suggest you an alternative path. It's even more sensitive for the Indigenous Peoples, because for generations we directed

them to alternative paths, in residentials schools, in programs for youth with difficulties ... (Free translation).

Other participants did not criticize the pathway programs *per se*, but regarded the lack of follow-up in providing students with the appropriate support when transitioning into regular programs as highly problematic.

Another effective strategy to promote academic success among Indigenous youth was the possibility to register for an Indigenous language course (e.g., Inuktitut) instead of another second language. In "[...] some of the communities they speak an Indigenous language, so some [students] are happy to be able to take that option" (Danny, Indigenous). Gail (Indigenous) regarded this initiative as highly positive because it meant going that extra mile and "doing something more for Indigenous students" (Free translation).

Finally, to foster the development of feelings of relatedness and connectedness, education professionals referred to providing Indigenous student-alumni with mentorship and to hire more culturally diverse college staff. The limited number of teachers with an Indigenous background or with an insufficient knowledge of Indigenous Peoples' cultures was said to influence Indigenous students' education because "...youth are not being taught by people who are familiar with their culture" (Amy, non-Indigenous).

TABLE 5. Categories of Pedagogical Strategies and Number of Quotes (n)

Category	Indigenous (n)	non-Indigenous (n)	Total (n)
Professional development for staff	1	1	2
Applying diverse teaching methods	10	7	17
Accommodating to students' needs	0	9	9
Monitoring student progress	3	1	4
Designated transition programs for Indigenous students only	0	4	4
Offering an Indigenous language course	1	0	1
Providing Indigenous student-alumni mentorship	1	0	1
Hiring Indigenous staff	3	0	3
Total	19	22	41

Despite the various support strategies that were highlighted by education professionals to facilitate Indigenous students' transition to postsecondary, results uncovered a misalignment between challenges versus strategies. Figures 1 and 2 display the sum of all the references made in each category by Indigenous and non-Indigenous participants. According to Figure 1, the number of perceived challenges experienced by Indigenous students consistently outnumbered the number of support strategies (see Figure 2). Additionally, Figure 2 shows the emphasis placed on strategies addressing pedagogical and social challenges; cultural strategies received less attention. Lastly, only Indigenous participants mentioned strategies on how to overcome cultural challenges. This implies that improvements are still needed to provide a culturally relevant and safe educational environment in which Indigenous students can thrive. Hence, the next section summarizes participants' recommendations on how to instill a positive influence to enhance the educational experience of Indigenous youth.

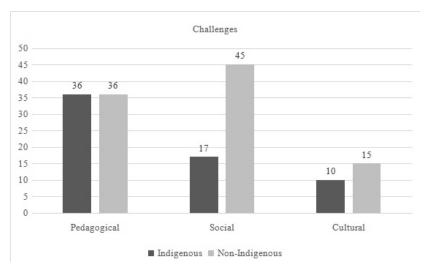


FIGURE 1. Perceived challenges related to Indigenous students' experiences in postsecondary education

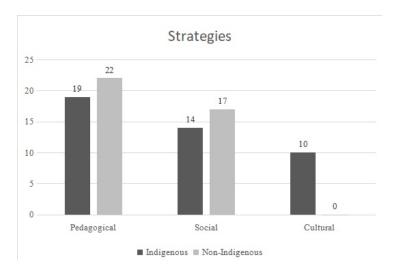


FIGURE 2. Support strategies for Indigenous students in postsecondary education

## Instilling a Positive Impact

As mentioned, some of the challenges faced by Indigenous youth included adapting to a new environment, abiding to community expectations, and having limited information for college preparation. To begin addressing some of these challenges and to customize the quality of existing support systems, we queried our participants about their suggestions regarding ways of enhancing Indigenous students' educational experiences.

Indigenous participants' suggestions. Susan's suggestions were related to customizing tutoring programs and obtaining appropriate support tailored to visual-spatial learners. She also suggested the use of online learning, most importantly to motivate students by translating program objectives into how they could benefit or help their communities. Danny recommended directly asking students what would facilitate their growth in postsecondary education, as well as supporting their autonomy in projects and course selections. In addition, Gail pointed out that ensuring reserved spots for Indigenous students in postsecondary programs and developing specialized protocols for interventions with Indigenous students could contribute to instilling a positive impact. Gail also insisted on the need for school staff to participate in professional development regarding cultural sensitivity. Finally, she suggested that education professionals should collaborate among each other to provide specialized mentoring programs for Indigenous students.

Both Indigenous and non-Indigenous participants' suggestions. Most participants insisted on the need to build personalised relationships with students. Erika (non-Indigenous) suggested working on a "one on one basis", Danny

(Indigenous) emphasized the need to provide students with opportunities to speak with teachers (e.g., organising retreats, outings), whereas Gail (Indigenous) highlighted students' needs for a sense of security through the development of a trusting relationship. As for Rita (non-Indigenous), she mentioned the importance for education professionals to first become familiar with the Indigenous students' community before embarking on any form of collaborative work with them. Both Susan (Indigenous) and Erika (non-Indigenous) pointed to the importance of not assuming that Indigenous students are auditory learners and instead to keep in mind that "no two learners are the same." Furthermore, providing social and emotional support (e.g., individualized regular meetings with a resource person) was underlined by both Erika (non-Indigenous) and Danny (Indigenous). Amy (non-Indigenous) emphasized the need to allocate a physical space for Indigenous students in colleges, whereas Lara (non-Indigenous) suggested supporting students by ensuring a constant presence. Moreover, she advised to not "try to have students fit into a mould", but instead, to encourage them in their journey.

Overall, non-Indigenous participants' suggestions revolved more around the school's social and pedagogical aspects, whereas Indigenous participants raised suggestions that touched more upon the need to adapt to students and to prioritize decolonizing practices. These results imply the necessity of considering Indigenous Peoples' opinions and expertise when developing and implementing culturally-relevant strategies for Indigenous students' academic experiences.

## DISCUSSION

This study presented education professionals' perceptions of the challenges and support strategies associated with Indigenous youth pursuing a postsecondary education from a pedagogical, social, and cultural perspective. Our results revealed that a holistic approach to pedagogy is better aligned with Indigenous Peoples' worldviews and traditional educational practices (Price & Burtch, 2010), which directly challenges postsecondary delivery of a Eurocentric style of teaching (Rose & Meyer, 2002). For example, assumptions such as students being auditory learners must be dismantled to allow for a personal and individualized relationship to flourish and highlight each students' uniqueness within their own learning profile. On the other hand, our findings also supported and were consistent with past research highlighting Indigenous students' difficulties with integrating in college life, adapting to a fast-paced learning environment, and meeting expectations of individualistic versus collectivist ways of thinking (Fryberg et al., 2013; Nguyen, 2011).

To acknowledge and respect Indigenous Peoples' cultures (Gallop & Bastien, 2016; Hampton & Roy, 2002) and contribute to the development of their sense of belonging, various support strategies were identified that facilitated Indigenous students' integration into postsecondary education (Restoule et al., 2013; Whannell et al., 2012). Education professionals emphasized the building of a positive rapport, as well as the implementation of more culturally-oriented strategies to enable preserving Indigenous Peoples' identity, ways of knowing, and to some degree, relatedness to their learning goals (Kennedy & Aotearoa, 2013). Another commonly reported support strategy that has shown promising results in terms of overall retention for Indigenous students was the creation of bridging programs: short programs that offer more general education courses as a means to introduce students to collegelevel courses without the constraints of restricted course selections or course load requirements. Although they were viewed as fruitful venues to facilitate Indigenous students' entry into postsecondary education (Habel, 2012), Gail (Indigenous) raised a concern that Indigenous students in transition programs were sometimes viewed as not "really academic material". Again, these programs might perpetuate the stereotypes of Indigenous students' not being academically prepared to directly enter regular postsecondary programs. Such stereotypes can further contribute to Indigenous students' negative self-esteem, but also to others' biased judgements about Indigenous students. Another important strategy to foster feelings of relatedness and connectedness was hiring culturally diverse staff, such as education professionals with an Indigenous background. This strategy is essential and would allow Indigenous students to self-identify within their institution (Danny, Indigenous). Danny (Indigenous) also raised a complementary suggestion: the importance of providing non-Indigenous staff with adequate professional development about Indigenous people's history and culture. Without this accurate knowledge, it would be very difficult for non-Indigenous staff members to reach out to Indigenous learners and, thus, they would be indirectly continuing to perpetuate colonizing practices and attitudes.

Finally, Figures 1 and 2 revealed uneven weight and effort attributed among the social, cultural, and pedagogical layers of perceived challenges and invested support strategies. Specifically, strategies aiming to overcome pedagogical and social challenges were prioritized by non-Indigenous education professionals, whereas others targeting cultural challenges seemed to not be receiving enough attention. Focusing on overcoming pedagogical obstacles is essential for Indigenous students' academic success, but it is well known that those difficulties stem from ongoing historic trauma and its intergenerational transmission (Aguiar & Halseth, 2015). These results highlight the fact that the deployment of institutional efforts is not always invested in an equitable manner and that it is imperative to initiate or continue that dialogue with Indigenous people (students, communities).

Limitations. Although participants worked closely with Indigenous students, they did not occupy the exact same employment positions as one another, which may have led to different perceptions and interpretations. Furthermore, education professionals were interviewed instead of Indigenous students themselves, and therefore this study can only hope to be partially representative of Indigenous students' lived experiences. This omission was, however, complemented by the inclusion of three participants with an Indigenous background, as well as of one research team member of Indigenous background who was consulted on a monthly basis. Staving aligned with the long-term goal of implementing decolonizing pedagogies, it was primordial to interview both Indigenous and non-Indigenous education professionals to obtain a more complete picture of ongoing colonizing practices and beliefs within our postsecondary institutions. Finally, across the different institutions, the concentration of Indigenous students differed, which in turn could have impacted participants' professional experiences and their perceptions. Future research should focus on inquiring with Indigenous students to seek their educational needs and on interviewing Indigenous students, teachers, and other education professionals within the same institution to better illustrate the alignment within participants' responses.

Conclusion. This study showed that much effort still needs to be deployed to decolonize instructional practices and ways of thinking (Battiste, 2013). According to Battiste (2013), "a regeneration of new relationships among and between knowledge systems" is needed to decolonize humanities and sciences. However, this reconciliation requires competence by scholars in both knowledge systems (p. 103). As non-Indigenous scholars and practitioners, it is our duty to continue educating ourselves about Indigenous peoples' ways of knowing and doing to better comprehend contemporary relationships with Indigenous peoples and to participate in the reconciliation of both knowledge systems (Battiste, 2013). Indigenous students may continue to face social, cultural, and pedagogical challenges that represent remnants of a somber past where a practice of domination significantly impacted Indigenous Peoples' health and wellbeing (Aguiar & Halseth, 2015). However, with the long-term goal of contributing to Indigenous students' academic success, more emphasis is currently being placed on developing culturally relevant support strategies. These include teachers' participation in professional development to raise awareness of Indigenous Peoples' ways of knowing, as well as the adoption of a culturally sensitive approach as a means of fostering a personalized rapport with Indigenous students. On an institutional level, support is also needed to continue developing instructional strategies that are adaptive to Indigenous peoples' worldviews, as well as to expand the specialized protocols for admissions to various programs. Initiating and sustaining these processes mark the beginning of changes that would allow the development, elaboration, and application of culturally and socially-oriented strategies to promote a more positive educational experience for Indigenous youth. Most importantly, in order to avoid the perpetuation of colonizing practices, all these changes must be implemented with the consultation of Indigenous peoples directly. Strategies and suggestions of how to provide Indigenous students with a positive educational journey must involve Indigenous youth in the decision-making process as "a direct change in school philosophy, policy, pedagogy, and practice" (Battiste, 2013, p. 99).

#### NOTES

- We used the term Indigenous throughout the manuscript, however, this term does not refer
  to a universal category as Indigenous Peoples, knowledges, and identities are tribal and
  plural.
- This research team member is affiliated to an Indigenous school board and works as a student affairs technician in the postsecondary student services. The name of the institutional affiliation has been removed for ethical reasons of confidentiality.
- This term means that one of the researchers translated the quote from its original language to English, without necessarily following a translation protocol.

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