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Inclusive Teaching Practices in College Education during the COVID-19 Pandemic: Did Online and **Blended Learning Bring Some Change?**

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Abstract

The implementation of inclusive teaching practices in postsecondary education has depended, up until now, on individual faculty initiatives. However, the COVID-19 pandemic has caused teachers to rethink their practices and to move their courses online. The purpose of this exploratory study is to analyze the evolution of inclusive teaching practices in college education, following the transition from face-to-face to blended and online courses during the pandemic. Qualitative data was collected from 25 interviews with students with disabilities. Results show a progression in the accessibility of course materials and in the use of technological tools to diversify content presentation formats. Assessments also showed some diversification. However, the results suggest that opportunities for student engagement and participation in online and blended courses were quite restricted. Teaching was also perceived as less inclusive and less structured by students, except in courses where teachers set aside specific time for questions and to summarize important points. The results are discussed considering principles and practices to support learning and engagement for all students, recognizing the variability of their needs and preferences.

Keywords: online and blended learning, inclusive teaching practices, college education, COVID



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Introduction

In Quebec college education, only slightly more than half of institutions offered online or blended courses prior to the pandemic (55%), and these courses represented less than 5% of students enrolled (Donovan, 2019; Johnson, 2019). For many faculty and students, the pandemic environment led to initial experiences with online and blended courses and, as a result, required significant adaptability on both sides. However, many faculty quickly engaged in online and blended training, and a more profound transformation of courses occurred by the fall of 2020 (Lakhal et al., 2021; Papi et al., 2021).

How accessible were these courses for students with disabilities, first generation post-secondary students, international students, and students from cultures different from their peers (Donovan et al., 2021; Rao et al., 2021)? To make courses more accessible and engaging for all students, inclusive teaching practices aim to remove potential barriers to learning and engagement for all by addressing diverse needs (Meyer et al., 2014). However, research in this area is still scattered, regardless of course modalities or levels of education (Fornauf & Erickson, 2020). In postsecondary education, most scientific studies are conducted with a single course group, making it difficult to determine the uses of inclusive teaching practices on a broader scale (Beaulieu et al., in press). Moreover, little is known about the inclusive teaching practices implemented in online and blended courses, especially in college education. The transformation of courses resulting from the COVID-19 pandemic thus provides a rich basis for studying this topic.

Inclusive Teaching Practices and Research Question

Inclusive teaching practices refer to the ways in which faculty adapt or transform their courses to make them accessible and engaging for all students (Hockings, 2010). However, the inclusive teaching practices described in the literature also show a great deal of variability, which makes it difficult to determine the uses of inclusive teaching practices in postsecondary education, particularly at the college level (Beaulieu et al., in press).

Several publications addressing the use of inclusive teaching practices in postsecondary education have presented them according to thematic categories: 1) Accessible Course Materials; 2) Inclusive Lecture Strategies; 3) Course Modifications; 4) Inclusive Classroom; and 5) Inclusive Assessment (Lombardi et al., 2015; Gawronski et al., 2016; Beaulieu et al., in press). According to the most recent study in college education, 1 recourse to inclusive teaching practices was low to moderate in face-to-face courses before the pandemic (n = 1435 students): Inclusive Lecture Strategies, Accessible Course Materials, and Inclusive Classroom were moderately used by teachers, and there was little implementation of Course Modifications or Inclusive Assessments (Beaulieu et al., in press).

In online or blended courses, no broad-scale studies have been conducted in college education, to our knowledge. Therefore, this study explores the following research question:

¹ Providing data from ESH-transition longitudinal research, as is the case for data for this study (see the Method section).

How has the implementation of inclusive teaching practices in college education evolved as a result of the transition from face-to-face to online and blended courses during the COVID-19 pandemic?

Method

Context, participants, and data collection

Students from 10 college institutions in Quebec participated in this study. They are involved in the larger <u>ESH-Transition</u> longitudinal research project, which aims to study the effects of inclusive teaching practices and adapted services on the adaptation and success trajectories of students with and without disabilities. The project includes an over-representation of students who have declared a disability (with a diagnosis from a health professional, e.g., ADD/ADHD, ASD, mental health, learning, motor, visual) compared to the current college enrolment, although the quantitative component of the project also includes students who do not have a disability.

Approximately 200 students having reported a psychological or physical disorder in an initial questionnaire were randomly selected and invited to participate in an interview, as part of the qualitative phase of the ESH-Transition project. Following this invitation, 25 semi-structured interviews of students were conducted. Socio-demographic information about participants is presented in Table 1.

Table 1

Participants' socio-demographic information

	Participants
Gender	15 women, 10 men
Demographic region	12 Quebec City, 6 Montreal, 7 Central Quebec
College size	20 large (>5000 st.), 4 medium (3000-5000 st.), 1 small (<3000 st.)
Study program	7 pre-university, 16 technical, 2 springboard
Diagnosis	16 ADD/ADHD, 11 learning disorder; 8 mental health; 3 autistic spectrum disorder; 2 language; 2 organic; 1 motor;1 visual

Online interviews took place between November 2020 and April 2021. They lasted approximately 60 minutes and were recorded in audio format. An interview guide was used as a thread for the discussion, allowing for different themes of the project, and in particular the pedagogical practices at the college before the pandemic (face-to-face) and during the pandemic (online or blended) that are the focus of this study.

Data analysis

All interviews were transcribed in full and then coded by two independent researchers using QDA Miner. Coding discrepancies were discussed between coders to reach consensus, with a final interrater reliability of 90%. For this study, only the interview and code section related to teaching practices was analyzed using a deductive approach. Thus, the qualitative data illustrate students' perceptions according to thematic categories of inclusive teaching practices previously established by Gawronski et al. (2016).

Results and Discussion

Results of this exploratory study are presented according to the following thematic categories: 1) Accessible Course Materials; 2) Inclusive Lecture Strategies; 3) Course Modifications; 4) Inclusive Classroom; and 5) Inclusive Assessment (Lombardi et al., 2015; Gawronski et al., 2016).

Accessible Course Materials

Most students noted an increase in the online availability of course notes. "The teachers sent us the PowerPoints with audio parts in them. So we could do the work when we wished; I liked the approach a lot [...] I like to do things at my own pace, in my own way" ² (P4). Students particularly valued audio-video materials (e.g., video capsules or annotated slides) that gave them increased flexibility in terms of scheduling and pace of learning (Belt & Lowenthal, 2021). Such materials also helped them to better prepare questions or participate in discussions with their peers (Rao, 2021).

Nevertheless, not all teachers published their lecture notes for students. "The teachers on Zoom don't always write on the board. That is, they just talk, and you have to take notes on what they're saying. When it's just the teacher talking and there's nothing else, I zone out ... it's harder to concentrate." (P24). Such student comments emphasize the need for teachers to ensure that presentations of content and information are accessible and support learning for all students, so that they do not miss important information (Burgstahler, 2021; Rao, 2021).

Inclusive Lecture Strategies

According to some students, certain teachers cut the synchronous meetings very short and seemed rushed. The students also explained that they felt less comfortable asking questions online, which may have made teaching less inclusive. "During an online course, you can't really raise your hand and say, 'I'm not sure I get it' every time you don't understand or whatever. Because the courses are a bit condensed ... Then there's still material to get through." (P25). The fact that some teachers did not feel comfortable with online and blended courses may have made their courses less structured. Also, the fact that students would refrain from asking questions in synchronous online meetings may explain why they were less able to grasp the important points in the courses. Lowenthal et al. (2020) point out that a clear and simple course

² All interview excerpts have been freely translated from French to English.

structure, which includes an explicit outline of the content covered and, where possible, a summary of important points, supports learning for all students and is an inclusive pedagogical practice in online and blended courses.

In contrast to the previous comments, several students indicated that teachers specifically set aside time for questions or to summarize important points in synchronous meetings. "During Zoom, she explains the material that's a little more complicated, and if we have questions, we ask them then" (P17). "Every couple of classes or so, the teacher devoted 90 or so minutes to really explaining the material ..., realigning a little bit, in other words, summarizing the important points" (P21). Indeed, highlighting important points is an inclusive teaching practice that promotes students' understanding of content (Meyer et al., 2014). In blended and online courses, setting aside time in synchronous meetings to clarify, synthesize, and deepen the content previously discussed in asynchronous mode also fosters student engagement (Heilporn et al., 2021).

Course Modifications

In interviews, students did not mention the possibility of changing their workload or assessments, suggesting that the pandemic context brought little change in this area. Several students also felt their workload had increased during the pandemic. "Now it's like we're doing homework all the time, literally all the time. So, ideally, we would have to be 24 hours a day in homework mode" (P7). However, the fact that college students from Quebec are not familiar with online and blended courses could explain the fact that they had more difficulty organizing their work time autonomously (Rao, 2021).

Inclusive Classroom

As expected, more faculty used technology tools to present content than before the pandemic. "The teacher often does video capsules, and with that we always have a note-taking document, which he made for us. Like an outline with boxes to fill in, including comprehension questions. And the video clips, ... he explains stuff to us, and at the same time there's his PowerPoint that scrolls" (P2). However, the results highlighted that some uses of technology, such as podcasts presented without additional visual support, may not be beneficial for all students. In this regard, Burgstahler (2021) reminds us that presentations of content and information should seek to reach the maximum number of learners, so that even those who cannot hear or see do not miss important information.

Furthermore, the results showed that practices varied greatly from one teacher to another. Some teachers provided only lectures: "he shows us the documents, shares the screen, then he explains" (P2). The fact that some teachers felt less comfortable engaging students actively online could be explained by less knowledge and understanding of how to integrate educational technologies to enrich their courses, especially in online and blended courses (Neuwirth et al., 2020). However, other teachers varied their activities to actively engage students: "There's this one teacher, during most of her classes [synchronous meetings] we're in teams; we answer questions in relation to the texts and videos she sent us the week before. This is a really good technique. And she also gives explanations and everything. A really nice approach" (P21).

Inclusive Assessment

Students indicated that they had more assignments and fewer exams during the pandemic. They noted a positive change with respect to assessments, concerning which they often had access to their course notes and had more time to complete. "Most [of the assessments] were changed to assignments where we were given a day or even a week to do them" (P8). However, these appear to have been mainly written assignments or online quizzes, with students not mentioning other forms of assessments (e.g., portfolios, video presentations).

While asynchronous assignments were appreciated by students because they could access their course notes, this advantage was seemingly offset by a heavier workload, suggesting the need to reflect on the balance between the diversification of the forms of evaluation and the corresponding estimated workload (St-Onge et al., 2021). The diversification of assessment formats would also merit further consideration. In this regard, Raynault et al. (2022) describe several types of authentic assessment for online and blended courses.

Conclusions

Our study provides an initial portrait of the use of inclusive teaching practices in blended and online college courses in Quebec. Overall, a certain progression of practices was observed in the blended and online courses offered during the pandemic. However, students' perceptions of the use of inclusive teaching practices show that there is still a long way to go to systematize these uses in all their courses. The above-mentioned results and discussion highlight the need for faculty training on teaching and learning in blended and online courses, on the one hand, and on inclusive teaching practices and their potential course benefits, on the other. Support for faculty in their implementation are essential to bolstering learning and engagement of all students, in recognition of the variability and diverse needs of postsecondary learners (Cumming & Rose, 2021).

Author's Contributions

GH, CB, SL: study conceptualization and methodology. CB: data collection and analysis. GH: data analysis and writing.

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Ethics Statement

Ethical approval was granted by the ethics board committees at the authors' university and participant college institutions.

Conflict of Interest

The authors do not declare any conflict of interest.

Data Availability Statement

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

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