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Teaching Culturally and Linguistically-Diverse International Students: Connections Between Promising Teaching Practices and Student Satisfaction

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Handbook of Research on Teaching Strategies for Culturally and Linguistically Diverse International Students

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Chapter 1
Teaching Culturally and Linguistically–Diverse International Students:
Connections Between Promising Teaching Practices and Student Satisfaction

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ABSTRACT

This chapter describes three studies that explore promising teaching practices for teaching linguistically and culturally-diverse international students by identifying teaching practices that have high levels of international student satisfaction and student perceptions of learning. The first study, using a mixed-methods approach, found eight teaching practice areas that resonated with students. The second study, using a qualitative approach, identified similarities and dissimilarities between STEM and non-STEM students. The third study, using a qualitative approach, uncovered student preferences for online teaching practices. Recommendations for professional practice are discussed, along with potential areas for further research.

INTRODUCTION AND BACKGROUND

Partially due to the increasing enrolment of international students, colleges and universities in the U.S. and Canada are becoming more culturally and linguistically diverse. According to the Canadian Bureau of International Education (CBIE) and the Institute of International Education (IIE), more than 1.6 million

international students chose to study at Canadian and American post-secondary educational institutions in 2020 (CBIE, 2021; IIE, 2021).

Despite this trend, international students may face many problems when they arrive in their new host city. Culture shock, socialization, language barriers, changes in eating practices, and accommodations are all challenges they will need to confront. From the academic perspective, they will not only deal with new teaching methods and a new language used by their instructors, but they will also have to alter their learning strategies and preferences to a new learning environment (Lin & Yi, 1997; Rao, 2017; Smith et al., 2019). Unfortunately, though, few instructors have received training for teaching international students (Paige & Goode, 2009; Tran, 2020), which results in a less than optimal environment for intercultural learning.

Since 2020 and the outbreak of COVID-19, most students have experienced a change in the way instruction is delivered to them. It is estimated that approximately 90% of learning was online during the COVID-19 timespan (Radcliff et al., 2020). In fact, a rise has been seen in the popularity of North American online education in recent years, even before the pandemic. It seems that online learning is increasingly being favoured by a growing range of students of various ages and diverse backgrounds, including international students (Best Colleges, 2019). However, several gaps have been found in online teaching, including challenges faced by first-time online students, the impact of various course-loads, and learning effectiveness for additional-language students.

As a result, to achieve higher-student satisfaction and perceptions of learning, instructors must analyze their roles, and implement new teaching strategies to facilitate international students' learning experiences. With the aim of enhancing their academic performances, both offline and online, it is imperative for educators to apply more promising teaching practices that include measurable results, and report successful outcomes for students with diverse language and cultural backgrounds. This chapter provides insights from three distinct studies regarding the promising teaching practices. The first research study identified teaching practices that have high levels of student satisfaction and student perceptions of learning. A second study was conducted to explore the different teaching and learning preferences of international students, with emphasis on the differences between STEM (science, technology, engineering and mathematics) and non-STEM students' preferences. A third study was carried out to evaluate international online students' degrees of satisfaction regarding their instructors' teaching strategies and individual instructor characteristics. The research participants were unique to each study.

This chapter will explore three research questions:

1. What promising teaching practices have high levels of international student satisfaction and perceptions of learning?
2. What are the perceptional differences between international students enrolled in STEM and non-STEM academic programs, regarding the promising teaching practices for teaching international students?
3. How satisfied are international students with the online-teaching strategies they experienced, and what are their perceptions of learning with these strategies?

THEORETICAL FRAMEWORK

The studies presented in this chapter are based on the belief that the most effective teaching practices are where promising teaching practices, international student satisfaction, and student perceptions of learning meet (see Figure 1). It is guided by four theories. The primary theory used is Tinto's (1993) student integration model, which stated that students must integrate into both social and academic settings, formally and informally, to create a connection with their academic institution. Once a connection is made, commitment to careers and educational goals is established. The researchers also relied on the work of Darby and Lang (2019), which suggested that the personality of the instructor can affect learning; Tran's (2020) framework for teaching and learning for international students, that introduces the importance of connecting with academic and social experiences; and the research conducted by Smith et al. (2019) that identified a connection between promising practices for teaching international students with student satisfaction and perceptions of learning.

Figure 1. Identifying effective teaching practices
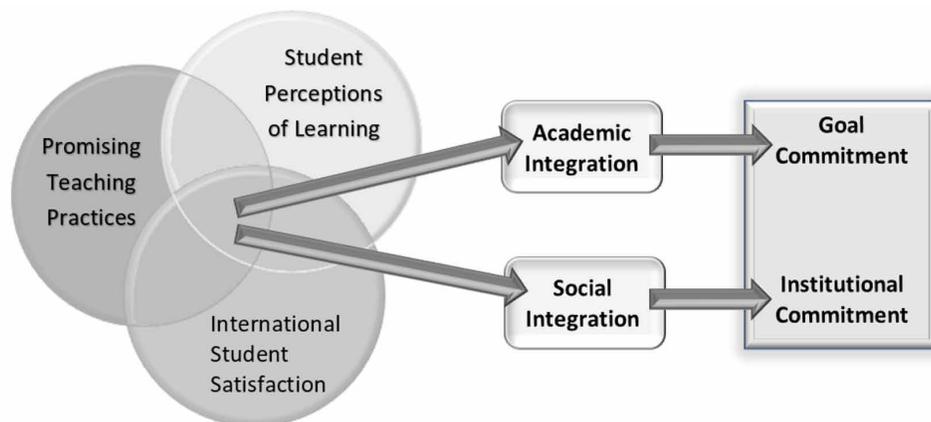
PROMISING PRACTICES FOR TEACHING INTERNATIONAL STUDENTS

Presently, campus internationalization initiatives focus primarily on external areas, including education abroad and student exchange, recruiting international students, and institutional partnerships (Helms et al., 2017). However, this is expected to change, as more institutions are developing academically-related internationalization initiatives. A growing number of institutions are increasing faculty engagement of internationalization efforts (Helms et al., 2017). To do this, faculty will need to critically examine their roles in campus internationalization, and implement teaching strategies that improve international students' academic performances. However, few instructors have received formal training for intercultural learning or inclusive education (Paige & Goode, 2009; Tran, 2020).

Satisfaction among international students studying at Canadian and U.S. colleges and universities is high. A survey (2018) reported that 96% of international students studying at Canadian institutions are either very satisfied, or satisfied, with their educational experiences, and recommend Canada as a study destination (CBIE International Student Survey, 2018). International Student Barometer findings

(i-graduate International Insight, 2017) also suggested that international students are largely satisfied with their academic experiences at Canadian and American colleges and universities. Little variance in international student satisfaction of learning experiences was found for gender, while country of origin, study level, program, study stage, study time, and age were where the differences lie.

While their satisfaction with learning experiences is generally high, there is no denying the fact that international students must face all kinds of challenges on both academic and non-academic levels. Academic challenges include language barriers, exclusion from discussions, culturally-related learning differences, and academic support issues. Cultural adjustment, social issues, and finances are non-academic challenges which also factor into international students' lives (Smith, 2016).

To deal with these challenges, faculty must pursue a wide variety of teaching practices. Existing literature listed many promising teaching practices that can be added to their repertoire, which may help improve the teaching of international students, and result in high levels of student learning. Creating an inclusive teaching environment is an important element. Also, it is essential to put culturally-responsive teaching into practice in the classroom, including strategies like developing diverse cultural knowledge bases, designing culturally-relevant curriculum, building learning communities, and engaging in cross-cultural communication (Gay, 2010). Faculty should use differentiated instruction when teaching international students from different language backgrounds, which can help foster collective thinking to create a learning-centred context for students. Moreover, the role of faculty goes beyond the classroom. The academic supervisory relationship between instructors and students can impact students' academic success (Curtin et al., 2013), so instructors should support students in a broader way, by giving advice on academic programs, or providing them with employment information.

This mixed-methods' study identified the promising teaching practices to teach international students from different language and cultural backgrounds, by evaluating the rate of student-satisfaction levels and perceptions of learning. It is based on the belief that the most effective teaching practices are combined with high levels of student satisfaction and perceptions of learning. The researchers used a mixed-methods' research design that included an online-survey questionnaire, focus-group discussions, and individual interviews. Research participants were international students who study at a mid-sized, comprehensive, public university in Canada. The sample size is 3,467 international students from a wide array of countries of origin, study levels, academic programs, study stages, and ages.

The responses from the participants were in line with what was found by the Canadian Bureau of International Education. Most (93.9%) reported being satisfied, with their learning experiences at a Canadian university. Some (16.64%) of this group feel very satisfied, others (48.29%) feel satisfied, and many (28.97%) reported being somewhat satisfied.

Promising teaching practices received from respondents, that were reported as satisfied or very satisfied, varied from 49.7% to 82.9%. The teaching practices with the highest respondent satisfaction percentages (greater than 70%) fell into these areas: academic integrity, assessment, assignments, clarifying expectations, communicating outside of the classroom, lecture design and delivery, verbal communications, and visual communications.

Interestingly, all the promising teaching practices identified as having high levels of student satisfaction also have medium or high student perception levels of learning. While 13 teaching-practice areas received medium or high student perceptions of learning levels, some did not receive satisfied student responses. Table 1 shows student satisfaction and student perceptions of learning for teaching practices, as well as the correlation between student satisfaction and perceptions of learning for each teaching practice.

Table 1. Student satisfaction and student perceptions of learning for promising teaching practices

Promising Teaching Practices	Student Satisfaction (Satisfied/Very Satisfied)	Student Perceptions of Learning (Medium/High)	Correlation (r)
Academic Integrity			
Integrates information about academic honesty in instruction to prevent plagiarism	82.90%	95.60%	0.445*
Communicates what constitutes cheating and the consequences of academic dishonesty	77.80%	94.40%	0.482*
Makes use of librarians to teach about academic integrity	65.70%	88%	0.594*
Assessment			
Designs assessments that recognize and validate cultural differences in writing and communication styles	58.30%	84.10%	0.686*
Explains assessment criteria to students so that they know how they will be evaluated	71.40%	91.40%	0.582*
Uses fair assessment practices	70.80%	92.40%	0.595*
Assignments			
Assigns quick writing assignments, such as a "one minute paper" at the end of class, asking students to list anything needing further clarification	55.10%	81.60%	0.730*
Collects written questions about the lecture at the end of class	49.70%	77.50%	0.718*
Words instructions for assignments clearly	71.30%	92.40%	0.543*
Breaks up deadlines for large projects into phases so that students can brainstorm, draft, solicit feedback, revise, and edit throughout the semester	73.60%	92.30%	0.596*
Provides step-by-step instructions for assigned tasks	67.70%	92.20%	0.633*
Posts assignments and readings ahead of time	76.30%	92.20%	0.549*
Asks students to come to class with a written response to an assigned reading	59.80%	86.60%	0.678*
Clarifying Expectations			
Collects and makes available examples of recently completed, outstanding student work, so that students can see the format and standard of work expected	63.50%	84.60%	0.708*
Provides students with rules for discussion, participation, and group work	67.60%	90.10%	0.570*
Models how to ask questions, think critically, write good essays/reports, or read analytically by demonstrating these skills in class	63.10%	88.50%	0.648*
Provides clarity on course objectives and expectations, and major concepts to be covered	72.50%	92.70%	0.614*
Communicating Outside of the Classroom			
Sets up online discussion boards where students can pose questions, and use email or other communication technologies	64%	85.40%	0.664*

Table 1. Continued

Promising Teaching Practices	Student Satisfaction (Satisfied/Very Satisfied)	Student Perceptions of Learning (Medium/High)	Correlation (r)
Provides alternative ways for students and the instructor to communicate outside of the classroom	66.70%	88.80%	0.600*
Actively invites students to come to faculty office hours	71.10%	90%	0.574*
Takes every opportunity to enhance student-teacher dialogue outside of the classroom	66.90%	84.90%	0.680*
Lecture Design and Delivery			
Tells students what topics will be covered that day and how the lecture relates to information presented in previous lectures	73%	92.70%	0.587*
Uses interesting examples, real-life examples, and case studies	70.50%	92.40%	0.646*
Distributes electronically lecture notes/slides and handouts with explanations of key concepts and ideas	73%	94.10%	0.577*
Uses examples to illustrate and reinforce key concepts and ideas	72.20%	93.10%	0.617*
Verbal Communications			
Speaks clearly and at a normal rate, emphasizes key ideas and words, and provides enough pauses to allow time for questions and note-taking	69.70%	90.10%	0.569*
Asks for clarification when student responses are not clear	72.40%	94.10%	0.605*
Encourages students to ask questions	74.20%	93.90%	0.548*
Visual Communication			
Uses visuals (e.g., diagrams, charts, pictures, overheads) to aid comprehension	73.80%	95.10%	0.539*
Ensures that notes written on the board or on flip charts are legible from the furthest seat in the room	70.40%	93.30%	0.601*
Uses print rather than cursive writing	69.20%	93.30%	0.601*

* Significant at the 0.01 level.

In the focus group and interviews, students' responses were mainly positive. Most of them identified instructors as a key factor in the learning experience. Some characteristics, like humour, encouragement and support, and value of diverse cultures were welcomed by students. Many practices were endorsed by students of all educational levels, including a student-centred approach, use of interactive teaching methods, specific and prompt feedback, use of practical experiences, pleasant learning environment, and methods to support additional language learners. Undergraduate participants were interested in academic support, updated curricula, and partially filled slides in advance of class. They also emphasized the importance of experiential and applied learning, and close interaction with instructors. Graduate students spoke of the importance of a free learning environment, multi-modality teaching strategies, use of digital and visual materials, and emotional, physical, and non-judgmental support from their supervi-

sors. Teaching methods that led to students becoming bored and having heavy workloads, such as too grammar-intensive teaching, and use of the repeating-listening pattern of teaching and learning, along with a lack of encouragement, received dissatisfaction from students.

There were some differences between course-based and research-based graduate student responses. Course-based graduate students commented on their course instructors and teaching methods, while research-based graduate students mostly commented on their relationship with supervisors. Table 2 compared the satisfying and dissatisfying teaching strategies reported by these two groups of students.

Table 2. Satisfying and dissatisfying teaching practices of course-based students and research-based graduate students

Groups	Satisfying Teaching Practices	Dissatisfying Teaching Practices
Course-Based Program Students	Free learning atmosphere Multi-modality and experiential teaching strategies Up-to-date course content and multiple teaching resources Instructor attitudes and experience in the field Approachable instructors Prompt feedback No phone policy Use of real-world examples	Failed to engage international students in class discussions Not open enough to the views of students Did not define terminology in advance of using it in class Use of student in-class presentations Lack of explanations Lack of class content Insufficient formative feedback
Research-Based Students	Good relationship with supervisor Desirable assignments Simultaneous engagement in their own research and joint research	Lack of supervision Failure to understand students' cultural backgrounds Insufficient non-academic support services and course options.

This study identified teaching practices that result in both student satisfaction and student perceptions of learning. Many students called for a multi-modal teaching style that combined traditional lectures and interactive methods. They also described some instructor characteristics as important factors in the student experience.

PROMISING PRACTICES FOR TEACHING STEM AND NON-STEM INTERNATIONAL STUDENTS

This qualitative study focused on exploring the promising teaching practices that have high levels of international satisfaction of learning. The findings indicate that instructors using these teaching practices will create a more accessible learning environment for international students. In addition, student characteristics (e.g., country of origin, field of study, level of study) will impact their preferred teaching practices. The researchers revealed 22 promising teaching practices where there is a significant difference between STEM and non-STEM students, regarding student satisfaction and perceptions of learning.

Due to the cultural differences, it is important to consider that international students prefer the teaching practices and approaches that they are accustomed to in their home countries (McKinnon, 2013). For example, the Asian-educational system mainly follows Confucianism values, which gives instructors the authority to be the holders of knowledge, and students maintain silence for most of the class (Le Ha

& Li, 2012). The learning styles and preferences of Chinese students may also be affected by the exam culture, with their learning strategies being more related to memorization (Lee, 1996). Also, learning styles and preferences may vary according to the student's field of study (Kulturel-Konak et al., 2011). Relevant former studies reported statistical differences in learning styles of students enrolled in different areas of study. For example, education and information technology students were more active learners, while law and science students were more reflective learners (Alumran, 2008). Engineering students preferred more active and concrete learning styles, while mathematics students were more intuitive (Harvey et al., 2010).

Corresponding to students' learning preferences, teaching practices applied in different subjects differ from each other. Literature corroborates that it is essential to match the learning preferences of students with corresponding teaching practice, but this does not always play out in real life (Vincent-Lancrin et al., 2019). Debdi et al. (2016) concluded that the teaching practices used by instructors in engineering and computer science courses were unaligned with students' learning preferences.

The data of this study was collected through a qualitative research design that included focus groups and individual interviews conducted at a mid-sized Canadian, comprehensive university. Most research participants were graduate students in thesis-based or course-based, master's degree programs. A total of 28 students (14 STEM students, and 14 non-STEM students) participated in the study.

Table 3. STEM and Non-STEM student responses on overall topics

Topics	STEM Respondents	Non-STEM Respondents
Overall Impression of Teaching Received	"Teachers are very good and [are] always open to questions." "Industrial experience is key. I am satisfied, due to practical applications."	"The depth of the program is well thought of." "One of the teachers was the best teacher I have ever had."
Most Enjoyable Memory	"They do this peer review thing." "[I] like two-way communication, where there is not just a slide-read." "Use of interactive technology, such as Kahoot"	"Well-structured class" "Discussion-based and presentations that include diversity" "Professors paid attention to students."
Teaching Practices Most Preferred	"Using visualizing tools, because some concepts are difficult to understand" "The storytelling method" "The seating arrangement where everyone can see each other"	"Able to crack a joke" "Use a lot of teamwork" "Use of rubrics" "Classes that have different structures" "Reviewed one chapter each class"
Teaching Practices Least Preferred	"Courses are heavily memorization-based." "Lectures that do not fully cover the content" "Professor's accent" "Presentation of lecture slides without full explanations"	"Didn't cover the book at all" "No feedback" "Lectures that are only theory-based" "Where there is little opportunity for engagement" "The main thing is having to know it is, because that is how it is."
Recommended Changes to Teaching Practices	"Provide lecture notes in addition to slides" "More concentration on the technical stuff" "Professors should be available during the last 15 minutes for questions." "Professor should be clearer and articulate properly." "Focus more on theory in class" "Reduce class size."	"Standardize how the grading goes, less differences between different classes" "Would want my professors to use more discussions, and to be more engaged" "Communicating outside of the classroom and having a place to talk to professors" "Having more international connections [and] socializing, in the university, in general"

Some overall topic findings regarding the impressions of the teaching received, the most enjoyable memory, the teaching practices most preferred, the teaching practices least preferred, and the recommended teaching practice changes are presented in Table 3. In general, the student responses were positive.

There is some variance between the two groups of students. STEM students mentioned that the most preferred teaching practices involved the interactions and engagement with teachers, face-to-face seating arrangements, the use of visualization tools, and the use of the story-telling method of lectures. The least preferred were the ones that required a large amount of memorization, and written assignments, because of the concern for cheating, and vague lecture slides. For non-STEM students, they preferred it when instructors managed time well and used the full lecture time available, used humour to connect with students, included teamwork and group projects in the course, used rubrics to provide feedback, and used a wide range of class instruction. Non-STEM students did not appreciate when instructors strayed from the textbook too much, and did not provide enough feedback. These students also voiced dissatisfaction with lectures that were too theory-based, and overly student-centred courses that lacked the guidance of instructors. Some non-STEM students preferred culturally-responsive teaching, and diversity and inclusion, while STEM students felt they were less important.

Findings of the study echoed several of the literature findings above. The field of study appears to be an important factor in understanding both the learning styles and teaching preferences of international students, so there is a need to use different teaching practices when teaching STEM and non-STEM students (Kulturel-Konak et al., 2011). Also, there are teaching practices used by non-STEM instructors that, if used by STEM instructors, could result in deeper and more efficient content learning (Harvey et al., 2010).

Students' responses on the teaching practices were mostly positive. They reported satisfaction with their instructors' use of teaching methods that shift the focus of instruction from the teacher to the student to enhance classroom learning. STEM and non-STEM students gave similar answers on the most preferred and least preferred teaching practices, and recommended teaching practices' changes. There are also some practices preferred by both groups, including the use of two-way communications, formative feedback, sharing lecture slides in advance, matching lecture topics with textbook topics, course organization, student engagement, managing speed of lecturing, and opportunities for applied or hands-on learning. Differences can be seen on the extent of specific teaching practices that should be used. For instance, non-STEM respondents wanted to see more use of discussion and group presentations, but while STEM students also liked this approach, they preferred knowledge transmission from the instructor.

PROMISING ONLINE TEACHING PRACTICES

With COVID-19 forcing post-secondary educational institutions to shift to open and online learning, it is imperative for educators to pay more attention to international students' needs. Finding strategies for teaching international students from diverse backgrounds in online settings is essential to ensure successful course completion. Gaps in academic performance between international and domestic students are evident (Grayson, 2008; He & Banham, 2011; Hechanova-Alampay et al., 2002; Kim et al., 2015), partly due to the language difficulties, culturally-related learning differences, academic support issues, and adjustment to a new educational system (Smith, 2016). This leads to international students being less satisfied with the student experience, and less engaged in the classroom, than their domestic peers (Kim et al., 2015).

The existing pre-COVID-19 literature mainly focused on two primary themes. The first is the importance of making clear what students are expected to do in an online class. The second is ensuring that instruction is student-centred and focused on diverse student needs. Darby & Lang (2019) emphasized the importance of clear communication within online learning, as it helps build community and socialization between teachers and students. Before forming any groups, it is important to discuss intercultural communications and cooperation (Walton, 2010) to ensure effective digital collaboration. Instructors are supposed to keep an open mind regarding cultural differences (Wang, 2006) and lessen the chance of misunderstandings during intercultural interactions (Chen & Starosta, 1998). Some other factors regarding communication should also be considered, such as language proficiency (Bossio & Bylyna, 2006), and form of lecture presentations (Guo & Jamal, 2012). Student-centered learning is also crucial for international online learners. This can be accomplished by introducing students to western educational practices (Smith et al., 2019), taking time to understand individual student needs (Kinsella, 1997), and by assessing students' comfort with technology (Woodley et al., 2017). However, research involving challenges that first-time online students face, and how they differ from what experienced online learners encounter, is lacking. The effectiveness of strategies for supporting online students, like differing course loads and making vague academic expectations, remain unclear.

This study employed a qualitative methodology, which included 15 individual interviews. Interview participants were international students who are representative of the international student population at a mid-sized, comprehensive university in Ontario, Canada. Graduate students made up 53% of the participants. Seven participants were in non-STEM programs, and the remaining students were in STEM programs. The courses (some asynchronous and others synchronous) students participated in were pivoted because of the COVID-19 pandemic.

Students' attitudes toward online learning were mixed. Three factors most of the students noticed about how online education differed from traditional learning that were less satisfying included ineffective communication, decreased sense of belonging, and varying assessment practices. Table 4 presents a summary of the interviewee responses to the questions relating to these three factors.

The lack of communication in online learning, especially during lectures, with assignment instruction and poor communication with feedback, brings about many challenges. Students noted that it was difficult starting conversations in the digital world, which hindered their ability to connect with students and teachers. Almost all participants noted that they did not feel a sense of community. They were lonely, and not sure who to turn to for help. Some instructors did try to increase the sense of belonging, by calling on students' names, or assigning group work. These efforts were much appreciated by students. Assessment practices changed drastically when education shifted to online. Many students felt grading was unfair, and pointed out that instructors and teaching assistants were not prepared for the online world. From these results, the negative effects of online learning were detrimental to the learning of culturally and linguistically diverse students.

Some other notable differences, related by the students, are also worth mentioning. Some instructors did not incorporate culturally-responsive teaching in their courses. Many students noted the lack of differentiated instruction, which led them to drop the course. Group work did not receive enough positive feedback from students, because of the inadequate effort made by some of the group members. In addition, internet connectivity was an issue, at times.

Table 4. Summary of responses regarding primary factors associated with online education

Factor	Summary of Responses
Communication	Communication outside of the classroom shifted from in-person discussions to digital conversations, with most instructors still offering virtual face-to-face office hours for students. Verbal communication during lectures was a concern for some students. There were mixed opinions on the communication received on assignment feedback. Most students were satisfied with the communication received about classroom expectations.
Sense of Belonging	Almost all participants agreed that there was a lack of community in the online learning environment. Students felt that most of their connection was through discussion boards, but not all professors utilized this feature in the online platform. Some students noted the communities built outside of the classroom, such as for group projects or assignments, but the community and sense of belonging within the classroom was limited. Online learning was very isolated, and students felt they had to learn everything on their own. Questions and interactions were encouraged during class. Students thought that the online learning environment was stressful. Students did not feel any discrimination; in fact, many students said there was respect within the classroom, which helped with the overall comfort levels. There was just a lack of connection and community. Students enjoyed it when they had group projects, because it allowed them to get to know their classmates.
Assessment Practices	Many instructors made online assessments in such a way that students cannot go back once they have submitted an answer. Drastic differences in grades between group members of the same project were noticed. Not enough variety: most courses just did multiple-choice assessments Grades were falling, because of the lack of participation. This can be an issue for students who do not feel comfortable speaking out loud. Marking done by GA's was unfair and unorganized. Some students believed the grading was fair and that instructors were very understanding.
Other Notable Differences	There was a lack of culturally responsive teaching, although some students believed it would not add to their learning. There was a lack of differentiated instruction. There was dissatisfaction with group members' input in projects. Peer-review forms were appreciated. Online learning is tiring if students do not get a break. Most students prefer synchronous learning, although there are some benefits to asynchronous learning. Online platforms are easy to use, although some students believe instructors need more training. The Internet is unreliable at times. Almost all the students appreciated the student-centred teaching implemented by instructors.

RECOMMENDATIONS

To improve students' academic performance and experiences, instructors are encouraged to take both satisfaction and student perceptions of learning into consideration. The following areas should be the focus, when applying a teaching method, including academic integrity, assessment, assignments, clarification of expectations, communication outside of the classroom, lecture design and delivery, verbal communications, and visual communications. Instructors should use a multi-modal teaching style that combines traditional lectures and interactive methods, which is also preferred by many students. Instructor characteristics are also an important factor in the student experience. Humour and jokes, identification of diverse cultures, patient and responsive support, as well as close interaction with peers are all methods that should not be underestimated.

When teaching students majoring in different academic areas, instructors need to use differentiated teaching strategies. As for STEM students, instructors should consider reducing class sizes, adding terminology explanations, playing up industrial experiences, using interactive technology and visualization

tools, sharing lecture notes, and enhancing out-of-class learning opportunities. As for non-STEM students, instructors should consider ensuring program depth, engaging in discussion-based and team-work activities, focusing on diversity topics, using humour, enhancing opportunities to engage with students outside of the classroom, and increasing opportunities for students to socialize with other students from beyond their home country. Faculty who teach both STEM and non-STEM students should use student-centred teaching methods, two-way communications, engage in formative feedback, share lecture slides in advance, match lecture topics with textbook topics, ensure solid course organization, promote student engagement, manage lecture-delivery speed, and increase opportunities for applied or hands-on learning.

With the increasing demand of online education, digital teaching strategies must improve to foster student learning. Educators who have international students in their online classrooms should continue to use the following teaching practices, as they created increased satisfaction, and increased perceptions of learning: clarification of classroom expectations, diversity and inclusion, and student-centred teaching.

LIMITATIONS AND FUTURE RESEARCH

Inevitably, the studies have some limitations. For instance, the research data was collected based on one semester, rather than a full academic year, and the perceptions of student learning data was self-reported, which may affect the accuracy of association between the practices studied, and the diversity of students' responses. Furthermore, in the first study, the respondent rates of the online survey of participants, from different levels, were discordant, with graduate students making up to over two-thirds of the total. The underrepresented data of undergraduate students limited what can be said about international undergraduate students' experiences. In the second and third studies, participant quantity and the diversity of student course programs were not considerably varied. Also, responses failed to include teaching contexts.

All in all, international student learning is a topic that needs to be discussed constantly to ensure the success of these learners. Research on this topic has come a long way, but there is still so much more to explore. What are the other teaching practices that can be implemented to enhance learning? How can STEM and non-STEM students be further serviced to ensure that the appropriate teaching style is provided? What can be done to create community in online classrooms? What teaching practices should be used for specific student types? What can be done to help student development and support? These are only a fraction of the questions that still need answering before an impact can truly be made. By sharing the works in this book, it is hoped that there is movement one step closer to the finish line.

CONCLUSION

Findings of the three studies provided a deeper insight into international students' learning. The first study found that the most promising teaching practices identified as having high levels of student satisfaction also have medium/high student perceptions of learning. In the second study, the researchers examined different preferences of STEM and non-STEM international students on 22 promising teaching practices. Little difference was found in the two groups regarding their most, and least, preferred teaching practices, or recommended teaching practices' changes. The major differences lied in some specific areas, like knowledge transmission and culturally-responsive teaching. The last study explored the connection between the promising practices for teaching online international students with inter-

national student satisfaction and perceptions of learning. It found that many teaching practices, such as communication, sense of belonging, and marking schemes are essential factors to meet students' needs. Also, there are individual instructor characteristics preferred by online international students, including calling on students by name, and the use of humour and jokes.

The findings illustrated above are imperative for today's teaching reality, as it provides a blueprint about how to improve international student learning. International students come to western institutions expecting a high-quality education from a reputable school (Best Colleges, 2019). It is important that institutions work to continue to provide such education for these individuals, by following and building on the best teaching practices shown to enhance learning.

In the following chapters, there is further exploration on the teaching of international students, teaching about academic integrity, teaching unique types of international students, student development support, and online teaching and learning.

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KEY TERMS AND DEFINITIONS

Active Learning: Activities that students do to construct knowledge and understanding.

International Students: Students enrolled in post-secondary educational institutions, located in a country other than their home country.

Non-STEM Students: Students enrolled in a post-secondary educational institution in an academic program other than science, technology, engineering, or mathematics.

Online Learning: Education that takes place using the internet.

Promising Teaching Practices: Teaching practices that have been, or are being, evaluated, and for which strong quantitative and/or qualitative data shows positive learning outcomes.

STEM Students: Students enrolled in a post-secondary educational institution in science, technology, engineering, or mathematics academic program.

Student Engagement: Meaningful student involvement throughout the learning environment that results in students making a psychological investment in their learning.

Student Perceptions of Learning: Students' perceptions of the quantity and quality of learning they have acquired while enrolled in a post-secondary educational institution.

Student Satisfaction: Students' subjective evaluation of the outcomes and experiences associated with post-secondary education.