

Inclusive education: simple strategies to improve equity and embrace diversity

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1. Introduction

Welcome!

We're glad you're here and are interested in how education could be made more inclusive. In this introduction, you'll find some background information on issues surrounding inclusion in education, some groups and aspects to consider when thinking about course changes, and how reflecting on ourselves plays an important role.

The book is organized in the same way many of us prepare our courses, starting with the syllabus, intended learning outcomes and course structure, moving through to course content (e.g., classes, notes, activities), environment, assessments, and other aspects of instruction and design.

Nous avons aussi une version française. We also have a French version.

Introduction

A central role of professors, instructors, and educators of all kinds is to offer each student opportunities to learn and expand their horizons. It is part of the basic definition of what it means to do this job. That educators want all their students to succeed is axiomatic, particularly for those who are reading a book of this kind. We are not deliberately trying to exclude students or make learning harder for some than others.

Nevertheless, the challenges of learning can differ enormously among individuals, and many of those challenges align with their identities, cultural backgrounds, privileges, and capacities. None of these characteristics predicts talent in any discipline. Yet, student success nevertheless correlates with individual characteristics (Caballero et al. 2007, Wei et al. 2018). In other words, characteristics do not predict talent, but characteristics do relate to success. The inclusion gap is the space between talent and success, and it is created, in part, by obstacles to inclusion that we hope this resource might help reduce or eliminate.

While the idea of inclusion — what we refer to as “inclusion by default” — ought to be obvious, achieving an inclusive learning environment can be challenging. Failures to account for diversity in learning environments can lead to systemic *exclusion* of students for reasons that are unrelated to their ability, effort, or ambition. This outcome is the antithesis of what we aim to achieve as educators.

The challenge is made greater because learning spaces are inequitable, rather than inclusive, by default. As educators, we have particular responsibilities and authority, and wielding that authority carefully and in the interests of all students is simply hard to do well all the time. After all, the responsibility for selecting a curriculum, designing course content, choosing examples to make concepts more concrete and relatable, and evaluating student learning traditionally rest largely or entirely with us.

Finally, educators are models of academic success. That kind of success can pose a daunting problem for students. A professional educator is likely to have some combination of academic talent, good fortune, and privilege that meant they could pursue and excel at academic work at its most advanced levels. If university courses worked for the educator, why shouldn't the same courses work equally well for each subsequent student? There may be times when this seems like it must be true. For example, hard work is critical to success, and becoming a professional educator certainly requires a lot of hard work. Maybe students should just put in that sort of intense effort, and then their success might be limited only by their intrinsic talents? Even this simple view — commonly held — is a fallacy of privilege. Leaving aside such critical challenges as historic and present-day discrimination, many students cannot dedicate their time purely to learning because their

economic circumstances require them to hold down part-time or full-time jobs to enable them to pay for their education or support family. A pathway that worked for us as educators may be unavailable to the students in our courses. The road we took to academic excellence may simply be inaccessible or impractical for many students.

The triple issues of practicing teaching philosophies that are inclusive by default, managing the intrinsic inequity of nearly any conventional learning environment, and taking account of personal privilege in helping students learn are key motivations for preparing this book. To these, we add that many educators can *also* experience discrimination or be targeted by colleagues (and even students) because of their identity. Women professors, for example, are often perceived as less capable than identically (or less) qualified men colleagues and this inequity translates to differences in how students [evaluate professors](#) (Langbein 1994, Mitchell and Martin 2018). Discrimination and bias should have no place in education (or anywhere else). Yet, educators can be subjected to the same, caustic forces as students.

All too often, we have seen advocates for inclusion offer unconstructive critiques or attacks on efforts to improve equity in academic environments. Obviously, intolerance in this context is intensely hypocritical and leads to exclusion and gatekeeping. As authors of this resource, we recognize that we carry our own biases, learned from lifetimes of living in society. Our shared aspiration to eliminate prejudice cannot heal the lived (and sometimes life-altering) experiences of our students and colleagues in being singled out, called out, or labelled because of their identities. A university course cannot wash away such things either. But it is imperative that university courses should never be places where such exclusion is perpetuated.

So, the fundamental goal of this book is to suggest ways to do *better* using a framework that aligns with fairly common approaches to conceiving, designing, and teaching a university-level course. Perfection, which is subjective in this context in any event, should not be the enemy of progress. In writing this book, we know that we have done so far from perfectly, but we nevertheless hope that our efforts can help make a difference. As educators, we are uniquely positioned to make a positive difference in students' lives and careers. It's worth it.

As educators, what can we do?

There is no single, correct approach, nor is there a need to do everything at once. We don't have to be experts in this area to make our courses more inclusive. In this resource, we suggest simple ways to start making our courses more inclusive and further readings and resources. Instead, we suggest trying a few things, connecting with and listening to students, then building on those previous steps.

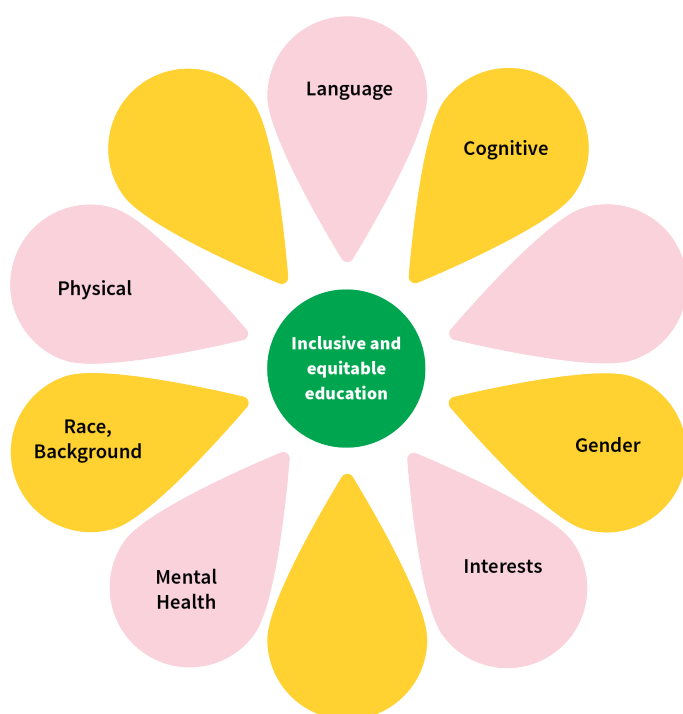
As a starting point, **we can work to identify our own privileges and biases.** Project Implicit is one place that aims to identify implicit biases; the Canada Research Chairs' Unconscious Bias Training Module is another. Training for ourselves can also include mental health (e.g., More feet on the Ground) and sexual assault support (e.g., Training on sexual violence support).

Are you designing a new course, teaching a course for the first time or wanting to take steps past this guide? Consider connecting with an educational expert in your Teaching and Learning Centre (e.g., Teaching and Learning Support Service at uOttawa) and/or Library. They have expertise in designing for educational accessibility and inclusion, using frameworks such as Universal Design for Learning. The chapter on Designing a course from scratch has more information.

In what ways can inequities and barriers arise?

Inequities arise in many ways; some are predictable and visible, while others are not. Improving equity, diversity, and inclusion in education involves many components, including: physical (e.g., diversity, disabilities), cognitive

(e.g., neurodivergence, attention deficit disorder), emotional, race, background, gender diversity, language, interests, mental health, wellness, and competing interests (e.g., family, school, athletics, job). We hope you find some useful suggestions in this guide to do just that.



There are many aspects of a person's identity and background that can support, contribute to, or hinder learning. We provide some examples here and invite you to consider others.

Our actions in our courses can directly impact students, their education, and their careers.

A key idea behind making education more equitable is that learners may follow different paths as they progress toward the same learning outcome. A student with attention deficit disorder may need a quiet work environment to work through complex problems; a student with a back injury may need a standing desk. In each case, the learner has the opportunity to demonstrate that they can achieve the same learning outcome, simply using a different path. We dive into specific accommodations and general approaches to making an overall course more inclusive through the eBook.

Another key idea is making education more inclusive, which can involve simple statements of welcome and showing diverse role models. Such acts can indicate that traditionally excluded learners will not only be welcomed in the course space, but that they can also see themselves in successful careers in that field.

Intended outcomes of your efforts

As you consider changes to your course, what outcomes are you hoping for? These could include that:

- Everybody from a traditionally excluded group would be able to achieve a comparable outcome.
- People's feelings about the quality of their learning (ability to learn, career readiness) would be comparable.
- People's feelings about their classroom experience (feelings of inclusion, connectedness).

Take a few minutes and write down your own intentions or intended outcomes.

Once you have made the changes to your own course, what will you see or hear differently?

How will you know that you have accomplished those outcomes?

Some definitions

Equity

Diversity

Inclusion

Let's get started!

2. The syllabus

In this chapter, we describe ways that the syllabus can be made more approachable and be used to communicate the inclusive nature of your course. First impressions count, and the syllabus serves this purpose. Since the syllabus is the students' first contact with your course, this is an opportunity to communicate your intentions and create the environment you want for the course. While there are required elements, there is lots of room for your own voice and approach. "Accessible Syllabus" provides excellent recommendations for making the syllabus more readable, accessible, and additional tips on how to set and sustain an inclusive tone.

Sections in this chapter:

- Core principles
- Elements the syllabus has to include
- Setting a tone of welcoming and inclusion
- Decisions about course resources
- Communication
- Learning outcomes
- Grading policies
- People things happen to people

Starting principles

The course's syllabus needs to convey information to students that will be fundamental to their success. The information a syllabus contains needs to be easy to find and easy to understand. These characteristics are also part of engaging in inclusive teaching. Yet, reading the syllabus is likely to be the first interaction a student has with a course. Sure, the syllabus can take a "just the facts" tone with students, but this misses an opportunity to welcome students actively to a new learning experience.

As you launch into teaching, it's a good time to examine your own assumptions, however many times you may have done so before. Are all the students equally ready to take on this new challenge, whether academically or in terms of their past experiences? Remember that the ongoing pandemic has created, for many, a sense of isolation that is distinct from what most present-day instructors have experienced in their own academic or personal backgrounds. For others, pandemic-related isolation might well be a relatively minor issue, given that many people have experienced grave personal challenges and losses that might make starting something new more difficult.

Students will need to demonstrate their capacity to learn the material courses convey, so setting an inclusive and welcoming tone at the outset of a course does not dilute the rigour of the course's content. The objective of evaluating students' learning in a course is to encourage them to learn course content well and to be able to apply it to solving problems. Another objective is likely to help students build foundations for more advanced learning and perhaps to impart professional skills as well. Conversely, the course should not apply a filter to students at the outset, tacitly encouraging students who fit the unconscious starting assumptions of the instructor, and discouraging others.

The syllabus is a place where you can embrace the diversity of all students, while still being clear about your expectations and pathways to success in the course.

As you work through this chapter, we recommend having your syllabus open and working along.

Remember to share the document with students in an accessible format and share it in a small file size (e.g., as a PDF set up for electronic distribution and accessibility).

Elements the syllabus has to include

There are some items that a syllabus has to include. For uOttawa, the list is below and is provided in the Academic Regulations:

- the course description approved by Senate;
- learning outcomes,
- teaching methods;
- assessment methods and weighting of grades;
- a list of required and recommended readings;
- a calendar of activities and evaluations;
- course attendance requirements;
- the professor's contact information and office hours;
- a reference to the regulation on plagiarism and academic fraud;
- a statement that assessments can be written in French or English.

Starting to seem long? A little dry? Students will likely not take in the entire syllabus in a single sitting and that's okay. The syllabus is their road map and reference document for important information in the course, which they can consult as needed. You may want to highlight various aspects of the syllabus at various times in your course, such as expectations about academic integrity leading up to major assessments and student resources throughout the course.

Rather than only stating regulations at students (the “just the facts” approach), which can come across as patronizing and impersonal, consider explaining *why* you value critical teaching practices. Academic integrity matters enormously as a matter of equity, for example, not simply because universities have rules about it. Cheating creates academic outcomes that do not reflect the effort that students put into their learning, subverting learning objectives and potentially contributing to perverse outcomes when scholarships are awarded. Maintaining standards around academic integrity is in the interests of students, in other words. There are learning opportunities for students, even at such moments, that might lead to better understanding of the challenges that *professors* must also meet. A little mutual understanding is always a good thing, and illustrating that you care about why rules matter, not just that there are rules, can help students see past the imposition of conditions on their conduct to a deeper perspective.

Many institutions provide a template that can be used to make the job easier. uOttawa currently uses Simple Syllabus, a cloud-based syllabus template that is accompanied by university regulations and recommendations for creating the syllabus. Systems like this are great for ensuring your syllabus includes everything your university requires. The key thing is to ensure the content is there, not that you follow a pre-defined format. For most of the required elements, you can choose the tone and wording. More on that in the next section.

Course Learning Outcomes

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General Course Learning Outcomes

Specific Course Learning Outcomes

Characters : 65

This section is required ([Academic Regulation 1-8.5](#)), but can be modified.

Course Learning Outcomes (e.g. Course Objectives) are brief statements describing what students are expected to achieve or be able to accomplish by the end of the semester through their participation in this course.

Learning outcomes should be specific, measurable, and attainable. For more information on Learning Outcomes please visit the [TLSS resources](#).

Updated: 2021-07-20

An excerpt from *Simple Syllabus*, a syllabus creation tool available at uOttawa and elsewhere.

Setting a tone of welcome and inclusion



As the first document the students read in the course, the syllabus is a great place to welcome students and prepare the environment you want for the course. For example, you can introduce yourself and teaching assistants, including pronouns (bear in mind that sharing pronouns is optional).

First impressions are made quickly. Set the tone when you start.

You can also include a statement about diversity and inclusion, which provides a chance to welcome *all* students to the course and to demonstrate that you care about doing so.

However this is done, it is far better to include such a statement (even if you feel it is imperfect) than to avoid the matter entirely. You could also include a specific statement that you will work with students to implement approved accommodations (e.g., academic, religious, illness) or other flexibility that you include (e.g., sliding scale on a grading scheme).

Statements regarding diversity are likely to convey sincerity more effectively if they are personal to the instructor. It is easy to quote regulations or standard policy comments at these junctures, but that approach can be mistaken as performative, and the appearance of insincerity is antithetical to the aim of welcoming students of all backgrounds.



You can include an **Indigenous affirmation**, using one developed by your institution, another source, or going

beyond the script. Here are some resources:

- uOttawa's Indigenous affirmation
- native-land.ca: an interactive map of Indigenous territories around the world
- Canadian Association of University Teachers' Guide to Acknowledging First Peoples and Traditional Territory
- Territorial acknowledgements: Going beyond the script

We pay respect to the Algonquin people, who are the traditional guardians of this land. We acknowledge their longstanding relationship with this territory, which remains unceded. We pay respect to all Indigenous people in this region, from all nations across Canada, who call Ottawa home. We acknowledge the traditional knowledge keepers, both young and old. And we honour their courageous leaders: past, present, and future. – Indigenous Affirmation from uOttawa

Course content sometimes takes a “colonial” tone, overwriting or ignoring Indigenous peoples’ experiences, knowledge, and precedence in history. Decolonizing curricula effectively requires thoughtful consideration of bias and conveying these views to students is worthwhile, even if completely eliminating such biases is a longer process. For example, one of the authors teaches ecology, and part of the history of this field, in a western scientific sense, is the pioneering work of 19th century naturalists, such as Darwin. Describing his work as stemming from “voyages of discovery” is accurate, on one hand, in that Darwin made observations leading to unique and new hypotheses about the evolution of life on Earth. On the other hand, most of the places he and other naturalists went had been occupied and shaped by human cultures for thousands of years or longer. The peoples in such areas, like the Amazon, had and have profound knowledge of their environments and the organisms that share them, and most of this wisdom was unacknowledged in the development of western science. The beginning of knowledge about how the world works is often treated as when western science first turned its sights on a particular topic. This view can be too narrow, in many contexts.

Yet, decolonizing a curriculum can be a long term challenge and consulting with Indigenous scholars and colleagues can help accelerate such an effort, and with reconciliation.

The UN Declaration on the Rights of Indigenous Peoples notes (Article 15:1) notes that: “Indigenous peoples have the right to the dignity and diversity of their cultures, traditions, histories and aspirations which shall be appropriately reflected in education and public information.” Canada’s Truth and Reconciliation Commission identified a series of key principles and concluded with a series recommendations that are relevant to remodelling education to be more respectful of Indigenous cultures. Among these is the recognition that, “Reconciliation requires constructive action on addressing the ongoing legacies of colonialism that have had destructive impacts on Indigenous peoples’ education, cultures and languages, health, child welfare, the administration of justice, and economic opportunities and prosperity.” Surely, overwriting or failing to acknowledge Indigenous cultures is not in keeping with such aims.

Finally, we note that acknowledging the value of Indigenous inclusion explicitly sets a valuable and positive example for students, whether there are Indigenous persons in a particular course or not.

A note on gender declarations



Some people identify their gender (e.g., she/her, they/them) when they introduce themselves, in their signature, etc., including professors in their syllabi. A core reason for stating pronouns is to communicate that everyone is welcome in the course, including people of all genders. Declaring gender is completely optional; you, the teaching assistants, or students may not wish to do so. While there are good reasons for some to declare their gender, there is an endless array of reasons why people may not want to do so (imagine someone transitioning, for example). Such a declaration should remain a personal choice. Nevertheless, there is an important distinction between welcoming and embracing gender diversity (do this), versus forcing a choice upon others to declare their gender publicly (don't do this).

In a related vein, there are a number of resources to learn more about sexual identity; UBC has created an infographic that can serve as a starting point.

Decisions about course resources

Textbooks and other course materials

As you make decisions about which textbook or other material to use in the course, choose accessible ones, respect copyright, and consider selection criteria that include EDI concepts: what experts (e.g., scientists) are represented, how are discoveries described, what kind of language does the resource use? For example, Diversity Chemistry is a site that can help find diverse examples of chemists who work in a variety of fields.

If you have any questions, the Library's experts are available to support you—be sure to give them enough time to answer your questions or for additional support.

For example, if you need to scan materials, the library's Course Reserve Service (using Ares at uOttawa) can scan these for you, in an accessible version. If you're showing films or videos, the library can support you in adding captions (and meet AODA requirements); they do need sufficient advance notice (e.g., 1 – 6 weeks).



Be sure that the course documents are **accessible** and **respect copyright**. Bonus points if you purposefully choose diverse sources and role models.

Open Education Resources (OERs)



Consider using **Open Education Resources** (OERs) in your course. OER are “learning and teaching materials that are **freely** and **openly** available”. They range from textbooks to entire courses and everything in between, including videos, podcasts, tests and exercises, websites, software, simulations, case studies, presentations slides, and more. The key is that they can be widely distributed and adapted because they are at no cost to the user and are not subject to the usual copyright restrictions. This openness is most often indicated by a Creative Commons licence.” –uOttawa Library

Benefits of OERs

Based on uOttawa's description, here are some key benefits of OERs:

- OER are affordable for students, making education more accessible.
- OER allow you to customize and adapt to the course context, providing a richer teaching and learning

opportunity.

- Students can benefit from multiple learning styles because OER can incorporate various content formats (text, audio, video or multimedia) and interactive elements.
- Remote and continued access since most OER are digital, do not require an access code and do not expire.
- Contribute to students' success and completion by easing their financial burden without having a negative impact on their learning (e.g., Bol et al., 2021)

Finding OERs for your discipline

You can find OERs through your library (e.g., uOttawa Library, by discipline) and other sources such as eCampusOntario and BCcampus.

Communication

Students can be intimidated by the idea of speaking with a professor—with you. 😊 Introducing yourself is one of the ways you can become a little more approachable. Encourage students to connect with you and other members of your instructional team.

Some professors find that their office hours are not well-attended. There can be a few reasons for that, such as mis-matched schedule, difficulties finding or accessing the prof's office, students not knowing what office hours are for, or students being intimidated by approaching the professor. Professors have taken a number of approaches to encourage students to make contact, described in the Chapter on course content and classes.

Learning outcomes

While this eBook talks primarily of changes the educator can make to create more inclusive course environments, we can also have expectations of the students' knowledge, skills, and values with respect to equity, diversity, and inclusion as they complete a course or program. Much like other professional skills that students are expected to develop (e.g., teamwork, communication), what are your expectations for students' learning in your course or program with respect to EDI?

Some examples could include the following, which are based on uOttawa's chemistry graduate program-level learning outcomes and other sources:

- Demonstrate and promote **academic and professional integrity**, including:
 - EDI-related knowledge, skills, and values and strategies to improve **EDI** (equity, diversity, and inclusion)
 - **Ethics** in conducting experiments/studies and analyzing findings
 - Identifying potential **conflicts of interest**.

You may decide to ask students to self-assess these skills and later develop formal assessments (**formative** or **summative**).

Grading policies

Share your policies and procedures for missed assessments, considering the language you want to use (e.g., Accessible Syllabus) and your institution's existing policies (e.g., uOttawa's academic regulations).

People things happen to people

All sorts of issues can arise for students (or ourselves!) during a semester, such as a sick family member, caring for siblings, technical issues, etc. You can consider other ways to incorporate flexibility in the course without adding to your own workload, such as allowing students to drop the lowest quiz/assignment mark or allowing multiple formats for an assignment submission.

Including other sections can also help students learn policies, regulations, and resources of the institution, including academic integrity policies, mental health, bilingualism (e.g., being allowed to write assessments in French or English), and Academic supports.

In summary, the syllabus is an opportunity for inclusion, to engage with students and set a welcoming tone for the course!

3. Academic accommodations

In this chapter, you'll:

- Identify reasons why accommodations are critical for inclusive learning, including for disabilities and compassion
- Identify and implement approved academic accommodations
- Decide what other accommodations or flexibility you wish to offer in your courses

Academic accommodations (e.g., exams, classes)

Models of academic learning are informed by stereotypes we have learned from a variety of sources. From the instructor's perspective, a stereotypical view might be that students should learn material exactly the way it is taught, and that student successes in lectures, lab courses, or discussion groups reflect the work they put into their studies.

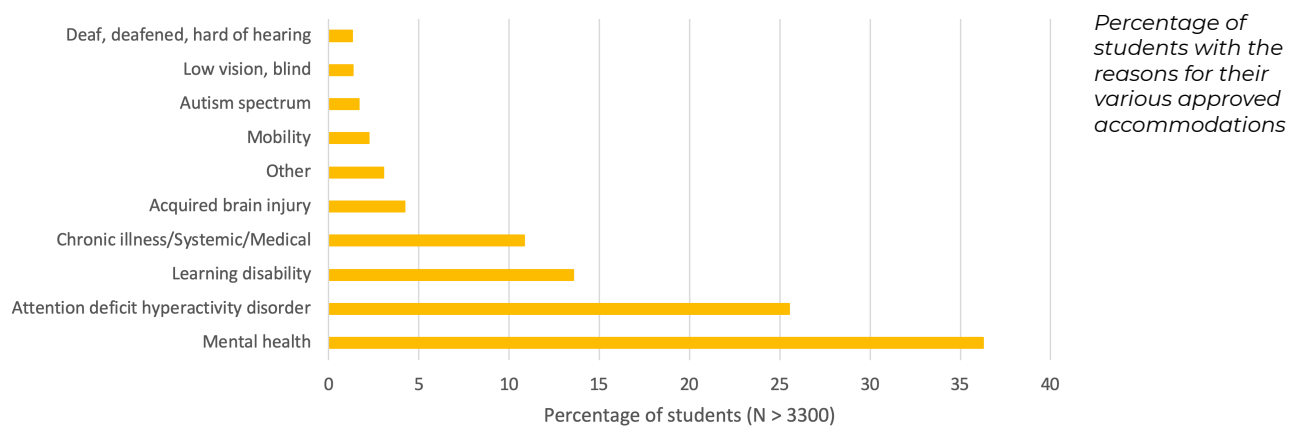
Yet, many students face persistent barriers to their learning that are consequences of cognitive, physical, mental health, or other issues. These barriers are common (e.g., 46% of students in universities and colleges in North America contend with depression; Ontario Universities, 2021), and many students in every course are likely trying to overcome one or more of these barriers to their learning and in their lives outside academics.

Academic accommodations support a student's efforts to work around barriers to achieve the learning objectives of a course. Accommodation does not imply compromise or dilution of course expectations. Standards do not become lower because a thoughtful instructor supported a student's academic accommodation. Rather, accommodation is more like supporting students in finding a different pathway to the end result or learning outcome.



Accommodations are needed for a variety of reasons.

Many academic accommodations can be required by law or regulation, as in Ontario through its Human Rights Code. Here are recent data from students at uOttawa (2021) that summarize common reasons for approved accommodations:



As professors, we do not have a right to know the specific reason for the accommodation; rather, we have access to the nature of the approved accommodation itself. Accommodations are varied and tailored to the situation and can include additional time on exams, large-sized paper, digital exams, etc.

Most institutions have a centralized process to review and approve/decline students' requests for exam accommodations for students who have disabilities that may be temporary or permanent, visible or invisible. The goal of these accommodations is to allow "an equitable opportunity to fully access and participate in the learning environment with dignity, autonomy and without impediment while preserving academic freedom, academic integrity, and academic standards."

As educators, we are "responsible for collaborating in the academic accommodation process and for implementing the approved accommodation plan, as applicable:

- referring all accommodation requests related to a disability to your university's Academic Accommodations Service.
- be alert to the possibility that a person may need an accommodation even if they have not made a specific or formal request.
- implementing the accommodation plan with the support of Academic Accommodations staff and their faculty, and participating where appropriate in the development of accommodation plans;
- working collaboratively with Academic Accommodations, the student, and the Faculty to find a satisfactory resolution in those instances where the educator believes that an accommodation plan puts at risk the student's ability to meet academic standard, academic integrity, essential academic requirements and skills; and
- in collaboration with the Teaching and Learning Support Service [or other Centre for University Teaching], consider universal design elements of their course that could minimize the need for accommodations."

If a particular accommodation does not seem appropriate, you can discuss further with the student and/or Academic Accommodations. For example, a student may have an accommodation that seems counter to the learning outcome itself. In that case, a different accommodation may be more appropriate. See uOttawa's Quick Guide.

The process at uOttawa

Before your courses starts and periodically during your course, **log in to the Ventus Professor Portal** to:

- Check the list of accommodations approved for students in your courses; some may involve accommodations during classes (e.g., note-taking, recording, access to slides) or assessment (e.g., time extensions, memory aid, low auditory distractions)
- Submit Notices of Examination (NOE) (deadline is 10 calendar days before the exam!); The Academic Accommodations service will arrange for proctoring exams for students with many accommodations
- Delete and modify NOEs already submitted
- Fill out / edit Proctor Instruction sheets
- Check which students have confirmed to write the exam at SASS – Academic Accommodations (with accommodations) or in-class (without accommodation)
- Send a copy of your exam to your academic unit before the deadline. This step allows for exams to be organized and processed if necessary; for example, the exam may be enlarged for students who have low vision.
- If students have written an exam with Academic Accommodations, their exam will be delivered to your Department shortly after the exam

Professor Portal

- View students at Academic Accommodations in all of your courses
- View student accommodations in all of your courses
- View and verify Confirmation of Academic Accommodation letters
- Submit and modify notices of examinations and proctor instruction sheets
- View and download uploaded exam files

[Try the Professor Portal](#)
Log in with your uoAccess credentials

CHM1311 A LEC

Students

Student name	Student number	Status	View confirmation of academic accommodation
Callum White	3234567	Dropped	N/A
Hannah Black	1000000	Enrolled	View confirmation of academic accommodation

Notices of examination

Exam date	Type	Format	Duration	Proctor instructions	Exam copies
18 Jan, 2019 @ 11:00	Quiz (Deferred exam)	Paper	20 minutes	Incomplete	0 files View Students
23 Jan, 2019 @ 12:00	Midterm	Paper	15 minutes	Complete	0 files View Students

Showing 1 to 2 of 2 entries

Accommodations

Beyond the regulations

Consider adding a statement to your syllabus that tells students that you adhere to the approved accommodations and that they can approach you if desired with questions or concerns. Students are often not aware that they can request accommodations or that educators do have a responsibility to accommodate – a message in the syllabus can help open the lines of communication.

You can also decide if you will allow other kinds of accommodations. For example, while time extensions for exams are typically granted for students with certain kinds of approved disabilities, a parent writing a take-home exam with young children home does not “fit” into a pre-determined category. Depending on the type

of assessment, you might choose to work with the student to identify an accommodation to enable them to demonstrate the extent of their knowledge. An alternate path might be as simple as a time extension.

Decisions beyond the required accommodations are in your hands, based on the course, students, and assessment context. Inclusive practices in teaching can go far beyond the minimum standard. The above example shows just one type of opportunity that we can take as educators.

4. Course content and classes

With this chapter, you'll identify ways to make your course space online more inclusive, through:

- Clear organization
- Accessible content
- Diversifying the space
 - Model diversity
 - Make class time more inclusive
 - Use inclusive language
 - Flexibility in ways to participate
 - Addressing microaggressions

Organize your course with a Learning Management System

Learning Management Systems (LMS) have become very common in university, college, and high school courses, providing easy ways to store, organize, and communicate course content online. Many institutions subscribe to one or more of these platforms, such as D2L Brightspace, Moodle, or Canvas. Each comes with a distinctive learning curve for both the professor and the student, so brace yourself if you are new to the world of LMS. However, learning these systems is time well spent. They can be powerful time savers, after learning how to manage their idiosyncrasies.

Imagine the student's experience as they enter your course on your LMS. How will they know what to do first and what they should expect later? Will students be able to find any material you have provided for an upcoming lecture in a timely way?

Design matters for purposes of inclusion. A simple design reduces stress and frustration for students. On the other hand, haphazard organization or just listing content can lead to flurries of messages from students struggling to find the content they need to access, leading to stress for the instructor also. Consider organizing your course in modules/chapters/sections that guide the students through the recommended order of the course (e.g., video → activity → class notes → class link → assignment...) and sections with quick access (e.g., class notes).

As simple as this issue sounds, many students struggle with mental health challenges and disorders, and a little extra work on organization is an easy, small step to take toward inclusion. Anxiety disorders are particularly common and tend to appear particularly early in life. About 28.8% of the population is affected by these disorders and their median age of onset is 11 (Kessler et al. 2005). These rates are increasing over time, even before the COVID-19 pandemic. Students in universities and colleges in North America are also experiencing growing rates of depression, and 46% of them report that depression has limited their abilities to function normally (Ontario Universities, 2021). In any large classroom, some of your students are experiencing these or other mental health or physical challenges.

We suggest:

- Making it easy to navigate your LMS, so that course content is organized logically and simply – guide students through the recommended order of activities
- Make course milestones, such as deadline for activities, assignments, or exams, easy to find, and draw your students' attention to these deadlines early and clearly; the LMS' "checklists" or "calendar" functions can

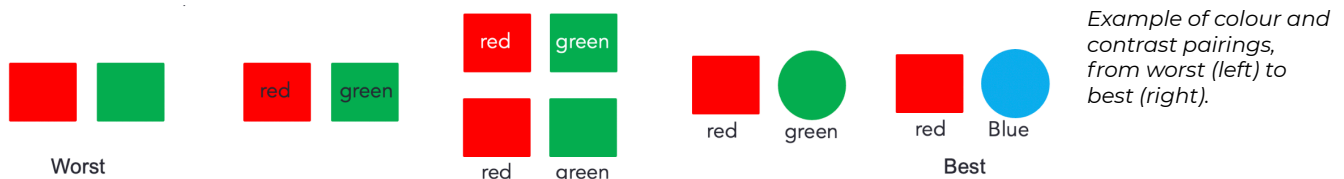
also help

- Provide a section with quick access/links to documents or activities they might want to quickly find (e.g., course notes, problem sets)

Create accessible course content

Overall, courses in Ontario need to adhere to the Accessibility for Ontarians with Disabilities Act (AODA). There are many parts to the Act, which a Centre for University Teaching (Teaching and Learning Support Service at uOttawa) and librarians can help you with. Here are some of the most common and important components:

1. Videos and audio files need to have closed captions or subtitles. Software can help (e.g., Otter.ai, YouTube Studio). Providing a separate transcript is also very helpful. These help people with hearing difficulties and those who are not fluent in the language of communication.
2. Images should use alternative (alt) text, unless they are only decorative. WebAIM has a fantastic describe of alt text: what is it, when to use it, and what to actually say in the text.
3. Create office documents using best practices for accessibility. For example:
 - Create slides and other documents with good contrast (resource: contrast checker)
 - Avoid common pairs involved in colour blindness (e.g., red and green) and support colours with shapes and/or text
 - Use simple, straightforward language
 - Avoid tables and table-based document layouts if possible, as these are difficult to interpret for those using a screen reader
 - Organize the document in the order that most directly communicates your ideas
 - Export Word and PPT documents to PDF in the format "Best for electronic printing and accessibility"
 - For slides, use sufficient font size (minimum 20 pt), sans serif type, and minimal text.



BCcampus has an Accessibility Toolkit that quickly highlights accessibility aspects to consider in courses and other academic setting.

II. Best Practices

*Table of Contents for
BCcampus'
Accessibility Toolkit*

3. Organizing Content

4. Images

5. Links

6. Tables

7. Multimedia

8. Formulas

9. Font Size

10. Colour Contrast

11. Accessibility Statements

Josie Gray

More accessible Office documents can be created by following this guide, which includes using text or shapes to support colour use,

Diversify the space

Model diversity

What do you want students to experience when they enter your course? First impressions are lasting impressions. Stereotypical presentations of practitioners of your discipline lead to beliefs around who can pursue careers in that field. For example, in one study, K–12 students asked to draw a scientist overwhelmingly drew men in white lab coats (Miller et al. 2018). Over time, the youngest students have begun to draw women scientists more frequently, but as students get older, the tendency to draw men scientists grows more common. This suggests that society signals that “scientist” is a career that is reserved for men, establishing biases in career expectations later than when this research began in the 1960s.

An easy, small step toward inclusion is to demonstrate diverse practitioners in your field. While students might well arrive in your course with pre-existing biases regarding who can pursue professions in different areas, it is easy to avoid reinforcing them. As an example that illustrates the issue, a recent study of textbooks in the UK found that 77% of scientists represented were men, while only 17% were women; the balance was indeterminable (Murray et al., 2022).

Consider:

- Illustrating concepts, discoveries, and examples in your course using diverse representatives from the field. Here are some possible sources:
 - Diversify Chemistry
 - Black in X
 - Diversity Ecology, Evolution, and Behaviour
 - Disabled and here
- Including a welcome message from yourself and teaching assistants
- Providing a *Resources* section with key information, including about equity, diversity, and inclusion (e.g., course, learning, institutional support services, diverse professionals in your field)



You are welcome here, a periodic table that demonstrates and invites diversity in science, by Anne McNeil and John Megahan.

Involve students

You could also hear from students in the course, such as start, middle, and end-of-course surveys. In these, you can ask students for their questions, concerns, what tools they have available for the course, and suggestions for a class playlist, and more! You can use these **adaptable course questionnaires** to make your own version.

You could ask students to contribute to class activities, projects, etc (or design/co-design them). Students bring many experiences, such as a medicine's availability in their home country, their parents' diverse expertise, and much more!

Make class time more inclusive

All students should be able to **hear, see, and communicate** in the course. Those principles can guide the choices you make for the course, independent of the course's mode or format. More specific suggestions follow.

Don't assume that students will have the latest technology or the best wifi. We strongly recommend using a survey at the start of the course to find out what tools and resources students do have available. For aspects that you consider essential to the course, try to work with students to find the necessary resources or alternatives (e.g., the library can often support).

Provide the slides in advance. All students will benefit from being able to focus on you and take key notes, rather than trying to copy everything. Some students will gain additional benefit; for example, a deaf student will be able to share the notes with their interpreter in advance, which allows them to decide on any discipline-specific signs to use in their communication (many ideas do not have a formal sign in languages such as American Sign Language or Langue des signes du Québec).

Recording the session means that students who miss a class will be able to keep up; everyone will be able to review it if desired (e.g., in preparation for an exam). For additional flexibility, you may wish to make it possible

to complete your course asynchronously. The ongoing pandemic is likely to cause students to be absent from classes more frequently, at least if they are isolating sensibly after catching COVID. Recording lectures makes it easier for them to stay up to date, which will also help with demands on instructor time as well. Lecture recordings can usually be managed on modern classrooms in universities and colleges, but even in the absence of such facilities, simply recording a lecture in audio format and accompanying that with slides will help. Such strategies cannot completely address challenges encountered in more specialized settings, such as in lab or hands-on learning environments. Those situations might require bespoke solutions.

Consider arriving a few minutes early and staying late to answer questions, as formal or informal student/office hours.

Teaching *online*? You can enable transcription, share your slides, and invite students to ask questions in flexible ways (e.g., aloud, chat to everyone, private chat to you or a TA). There are many creative options, whether the course is synchronous, asynchronous, or a mix of the two.

Teaching *in-person*? At the least, use the microphone. While you may have strong voice that projects well or the room may be small, many people will still struggle to hear you when you turn or move. The microphone is a simple tool that can make a big difference. Have a guest speaker? Be your students' best advocate by insisting the guest use the mic, too. You could also use the same principles as teaching online (e.g., enabling transcription), either through a tech-enabled classroom or running a simultaneous Zoom/Teams session.

Teaching in a *bimodal (multi-access)* format? The same principles apply. You can also ask that students in class connect online, so that everyone is connected together. Students should either use a microphone when participating or their comments/questions should be repeated. Consider how any in-person demonstrations will be visible to those online.

In any mode of instruction, you can do a test run before the courses starts with student volunteers or colleagues to make sure everything will work as intended.

Use inclusive language

There are many ways to address a group! Addresses such as “guys” have a male slant even though many intend the greeting to be casual and inclusive. Check out some of the ones in the graphic below.



Alexandra Scott
@scott_classroom

...

Today is Transgender Day of Remembrance and as we remember the victims of transphobic violence, let's not forget how simple it is to make everyone feel included. I've always disliked "boys and girls" as a way to address my class, here are more inclusive ways to address your group



Did you know?

Professors' beliefs about learning correlate with students' achievement (Canning et al., 2019). In that study, STEM faculty who believe ability was fixed (e.g., you're either a math person or you're not) had larger racial achievement gaps and inspired less student motivation in their classes than faculty who believe ability is malleable (i.e., a growth mindset).

Want to help your students develop their learning skills, including a growth mindset? Check out the Growth & Goals module, an open education resource that can be integrated in courses (and imported directly into an LMS).

Flexibility in ways to participate

Flexibility comes in many forms and can offer advantages in terms of accommodations, motivation, and academic resilience.

Assessments: approaches include flexible grading schemes (e.g., using a range of weightings), dropping the lowest quiz score, optional assignments, and options for submission formats (e.g., presentation, infographic, essay, video).

When participation is graded in the course, allowing students to miss a given number of classes without having to provide a reason makes it easier for them to manage other life events (e.g., busy week at school, illness, side effects from a new medication, death in the family, part-time job).

How can students participate in your course? A student response system can be used for students and instructors to gauge understanding and progress toward the intended learning outcomes (e.g., Wooclap, Mentimeter). Other ways work, too: ask for answers through the chat or annotating the screen directly (we like to “hide names of annotators” to keep things pseudo-anonymous, but it's up to you). There may also be many opportunities where group work is advantageous; consider explaining to students *how* to work in a group, including assigning a facilitator and what that person's role should be.

Chat spaces (e.g., Discord, Slack, discussion forum in a learning management system) offer other ways to connect and communicate ideas. These platforms can be used synchronously (e.g., during class time) or asynchronously.

Looking to break the ice? Have a screen ready when students arrive with a survey, icebreaker questions, or other activities. Consider asking for a student or TA to act as ambassador to host these activities and be an ear for student feedback. A recent eBook on Arrival Activities has other great ideas, including some for building rapport or reminding of past content (retrieval practice); the book also explains how such activities can build inclusion and accessibility.

Have a quiet room or a concept that's tough for students? One way to get ideas flowing is to ask for wrong answers only—and watch the creativity fly!

Addressing microaggressions

Sometimes, conversations in class can go awry and comments may be made that need to be (or should be) addressed. This Micropedia of Microaggressions offers substantive suggestions.

Learn more

- Creating accessible Office documents
- Bol, Linda, et al. "A Comparison of Academic Outcomes in Courses Taught With Open Educational Resources and Publisher Content." *Educational Researcher*, 2021, p. 13189–, doi.org/10.3102/0013189X211052563.
- Universal Design for Inclusive Science
- Dolmage, J.T. (2017). *Academic Ableism: Disability and Higher Education*. Ann Arbor: University of Michigan Press., doi:10.1353/book.57058.
- Online Resources: From *Academic Ableism: Disability and Higher Education* by Jay Timothy Dolmage
- What Physics Instructors Might Do to Support Immunosuppressed Students in the Return to In-Person Instruction: Thoughts from one chronically ill and immunosuppressed physicist.
- Accessibility checklist for alternative assessments
- Enhancing Accessibility in Post-Secondary Education Institutions
- Accessible Syllabus
- Inventory of inclusive teaching strategies

5. Other course opportunities: student/office hours, tutorials/DGDs

In this section, you identify ways to make office hours and tutorial sessions (e.g., discussion groups) more inclusive. With every contact point with students, we have opportunities to make the educational space more welcoming. For many students, the university environment is a daunting environment. The **hidden curriculum** makes it even more so, particular for students who are the first in their generation to attend university, lack a support system, or face systemic barriers (e.g., racialized students). While we only touch on the hidden curriculum here, there many other resources that take a deeper dive (e.g., Uncovering the hidden curriculum, Boston University).

As with other parts of your course, you can build in new aspects with time—there is no need to do everything at once. Students will respond well and appreciate the respect and clear communication you bring to the course, and won't be counting how many ways you demonstrate inclusion. New professors, we're especially speaking to you. 😊

Student/Office hours

Having a flexible way for students to meet with you can be more inclusive for students in a few ways:

- Make it less daunting to meet with you (indeed, students may be quite apprehensive about approaching you)
 - *E.g.*, hold student hours right after a class and in the same space. Students are already there and can see how others ask questions.
- Make access easier with online student hours
 - *E.g.*, Hold all/some student hours online can make access easier for some. A trip to campus or to the professor's office can be challenging if they are also working, have classes across campus, are sick, or have mobility issues. Even in-person classes can benefit from the flexibility of virtual hours or other options.
- Clarify the purpose
 - *E.g.*, A name change to "Student hours" (or other names!) changes the focus to indicate the students are the priority during that time. You can also describe the purpose of student hours (e.g., in the syllabus, in class). Many students don't know what the time is for or what they can ask about.
 - *E.g.*, Give a theme to their office hours, especially early in the term. These could include: how to learn effectively in this course, research opportunities at the university.
 - *E.g.*, have one or more office hours designed as a social time (Quaf with the Prof, Glass with the Class: with an invitation to bring a drink such as water, tea...)
- Build rapport
 - *E.g.*, When holding student hours in person or online, consider taking some time to get to know the students themselves. Many students are also interested in research or your career decisions and would be happy to hear more.
- Give the option to schedule a time to meet with you at a time that fits both your schedules

- E.g., Suggest that students schedule times through email, a scheduling app (e.g., Calendly), or other means. Despite excellent intentions to find a suitable time for Student/Office hours, many students will likely have conflicts that would force them to choose between asking questions for your course and satisfying their other commitments (e.g., job, laboratory course).

Tutorial (DGD) sessions

Running tutorials or **DGDs** follows the same principles as classes, with the added advantage of smaller groups (usually). You can support teaching assistants' training by:

- Encouraging TAs to attend training (including using TAs' contract hours for this purpose)
- Sharing a Guide for Teaching Assistants and other resources
- Communicating and modelling your own expectations with respect to teaching and learning, as well as inclusive practices

Teaching assistants are typically early in their careers and can learn a lot from you about equity and inclusion in a professional work space. What an opportunity to support a new generation of highly-trained graduates!

6. Assessments

Designing inclusive assessments

Designing any assessment should consider:

1. The intended **learning outcomes** (LOs),
2. What evidence would be needed to demonstrate that a learner has achieved that intended LO, and
3. What approaches would allow students to provide that evidence.

Assessments include all of the ongoing activities in the course that show the learner and you the learner's progress toward the course's intended learning outcomes, which can include **formative** (for learning) and **summative** (for learning and graded) assessments.

Assessments can take many forms, including essays, projects, and exams; further, assessment requirements can range from authentic assessments (e.g., a learner demonstrating their ability in a co-op or experiential learning setting, a project that closely mimics or is actually used in a professional setting) to more traditional tests of knowledge (e.g., multiple choice).

Remember that some students will have approved academic accommodations, discussed in the chapter on academic accommodations.

With many options to make assessments more inclusive, consider what approaches may be workable in your own course. For example:

- Automatically dropping the lowest in a series of quizzes relieves pressure if students have a bad period (e.g., mental health, illness, family member's death)
- Giving options to re-submit work, which additionally supports and promotes learning
- Letting students know that they can approach/email you if something is hindering their ability to complete an assessment on time (e.g., add that information to the syllabus, send an announcement)
- Designing assessments that students can do using a choice different methods, which engages with their interests and gives them greater agency (e.g., a final report that could be completed in the form of a video, essay, infographic)
- Co-creating the assessment and/or grading expectations
- Asking students to suggest questions for an exam

Here are some other ways to build opportunities for students to successfully achieve the intended learning outcomes:

- Clearly communicate the expectations for each assessment, including academic integrity expectations (see uOttawa's Professors' zone for more info). Some examples include:
 - Providing a rubric or marking scheme
 - Giving examples of past work
 - Specifying whether the assessment is to be done individually or in groups (size?), whether it's open book (any book? any website?)
 - Explaining how to report misconduct
- Provide low stakes or practice assessments
- Create feedback opportunities (e.g., from you, current classmates, senior students)

In our eBook on Remote Teaching, we describe further considerations for **assessment and academic integrity**, particular for an online environment.

Read more

- *Ungrading: Why Rating Students Undermines Learning (and What to Do Instead)* | West Virginia University Press. 2020. wvupressonline.com/ungrading.
- Preparing for assessments other than in-person exams, from the University of Waterloo.

7. Designing a Course from Scratch

When we created this resource, we assumed that most of us are trying to make existing courses more inclusive. You have a unique opportunity if you are designing a new course, workshop, program, etc. from the ground up. In doing so, you'll be able to carefully align the course's intended learning outcomes with the other course components (e.g., explanations/lectures, assessments) and to purposefully build in principles of inclusion as you go.

One well-known framework for such a course design is **Universal Design for Learning** (UDL). These guidelines “offer a set of concrete suggestions that can be applied to any discipline or domain to ensure that all learners can access and participate in meaningful, challenging learning opportunities.” Start small or go all-in — you have the choice.

Our advice is simple: don't let perfection be the enemy of progress. Everyone has a journey – perhaps a career-long one – to overcome biases and to ensure learning is as inclusive as possible. Every step toward doing this work better is valuable and contributes to improving the shared academic space.



We strongly encourage you to work with a member of your Teaching and Learning Support Service (Centre for University Teaching) as you plan the learning. They have expertise in instructional design, UDL, and other aspects of course design (e.g., graphics).

Some background info



Preparing for a More Inclusive Course

Welcome! This book was completed as part of a broader eCampusOntario project around improving and expanding inclusive teaching practices. Both authors have been working on these and related issues for many years, contributing to both evolving cultural practices in classrooms and research spaces to make higher education environments more welcoming. We have also helped develop, test, and implement policies intended to achieve those goals.

Over time, our approaches have evolved extensively, and they continue to do so. We have embraced opportunities to learn from students, colleagues, and those with different experiences from ours. More importantly, expertise is a journey and not a destination. Our views and knowledge of ways we can be more effective at inclusive teaching continue to evolve quickly. That rate of evolution hasn't slowed, we don't expect it will, and we wouldn't want it to do so in any event.

We acknowledge that there can be risks in the work of inclusion. Some students or colleagues may not trust that you mean to do it sincerely, or they may view you as a person with too much privilege to ever really know what it feels like to be marginalized. Yet, being an ally to those with less privilege, especially in the already-inequitable environment of a university or college course, is surely worth the occasional difficult conversation. Over time, we have found that people begin to trust the sincerity of efforts around inclusion more and more. There are exceptions, of course, as in any human enterprise, and doing the best work we can as educators should never be met with intolerance. That intolerance is, in our experience, very rare, if not unprecedented. As you engage and expand in your work, find *your* allies from among people who are trying to solve problems.

Please contact the authors (alison.flynn@uOttawa.ca, jkerr@uOttawa.ca) if you have suggestions on this book

Related books

Remote teaching, by Alison Flynn and Jeremy Kerr: a practical guide with tools, tips, and techniques: Français | English

Remote teaching: a guide for teaching assistants, by Meredith Allen, Alisha Szozda, Jeremy Kerr, and Alison Flynn: Français | English

Other books in the inclusive teaching series

Making Lab Based Courses Inclusive, by Allyson MacLean

You can contact Dr. Allyson MacLean (amaclea3@uOttawa.ca) if you have questions about the related resources. We'd also love to hear if you use any of the suggestions herein.

About eCampusOntario

This project is made possible with funding by the Government of Ontario and through *eCampusOntario's* support of the Virtual Learning Strategy. eCampusOntario is a not-for-profit corporation funded by the Government of Ontario. It serves as a centre of excellence in online and technology-enabled learning for all publicly funded colleges and universities in Ontario and has embarked on a bold mission to widen access to post-secondary education and training in Ontario. This textbook is part of eCampusOntario's Open Library, which provides free learning resources in a wide range of subject areas. These open textbooks can be assigned by instructors for their classes and can be downloaded by learners to electronic devices or printed. These free and open educational resources are customizable to meet a wide range of learning needs, and we invite instructors to review and adopt the resources for use in their courses.

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Acknowledgements

Thank you and thank you some more to the students, colleagues, friends, and family we've been able to learn from along the way. And we are still learning!

Thank you to project team members Allyson MacLean and Jaclyn Brusso. We are grateful to the support from uOttawa's Teaching and Learning Support Service, librarians, and many others who advised on the project along the way.