Creating and Implementing High-Quality, Sustainable Online Programs

CREATING AND IMPLEMENTING HIGH-QUALITY, SUSTAINABLE ONLINE PROGRAMS

A Guide for Program Development Leaders

STEPHANIE HORSLEY; LAUREN ANSTEY; GREG YANTZ; AND DENISE STOCKLEY

DENISE QUILDON AND ALLYSON STEWARD

Western University
London, Ontario, Canada

CONTENTS

Module 2: Program Vision, Feasibility, and Planning

Module 3: Course Design and Implementation

Module 4: Building Sustainable Online Programs

ABOUT THIS PRESSBOOK--START HERE!

Land Acknowledgment

The co-creators of this Pressbook acknowledge that this work was undertaken across the traditional territories of the Anishinaabek, Haudenosaunee, Lūnaapéewak, and Chonnonton Nations, on lands connected with the London Township and Sombra Treaties of 1796 and the Dish with One Spoon Covenant Wampum. These lands continue to be home to diverse Indigenous Peoples (First Nations, Métis and Inuit), whom we recognize as contemporary stewards of the land and vital contributors of our society.
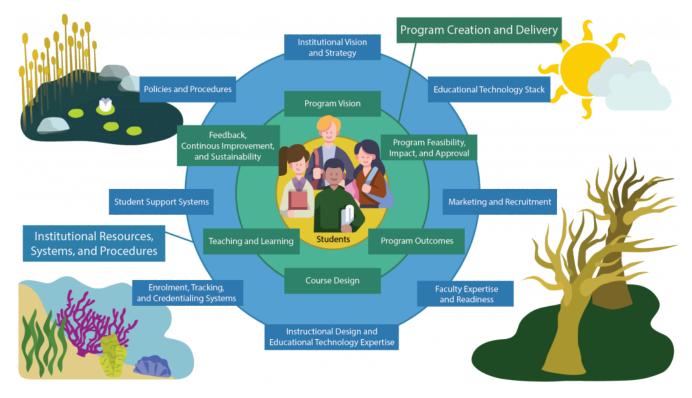
Why Read this Book?

Welcome to *Creating and Implementing High-Quality, Sustainable Online Programs*! In this book, we invite you to learn about, reflect on, and lead planning conversations related to the interconnected elements that together create effective, sustainable, and student-centred online programs.

Online program development and implementation is a complex undertaking with many moving parts. Some are academic in nature. Some are technical. Some are financial. Some are administrative. All involve coordinating and collaborating across multiple areas of vision, expertise, administration, and resources. This book and its accompanying resources empower and enable leaders in Ontario's post-secondary institutions to explore the "big picture" of online programs by engaging with the information and activities found here and applying it to their institutional context, no matter their level of experience with online programs.

The co-creators of this book use a student-centred ecosystem metaphor for online program development and implementation. When the elements of that system are thoughtfully tended and working in relation to one another, your program will thrive in how it supports students, faculty, staff, and the overall objectives of the program, institution, and community. Users of this book are invited to explore these ideas and apply practical activities to their online program development and its supporting "ecosystem" in their institutional context.

A graphic representation of the student-centred online program ecosystem

Who Is This Book For?

This book is primarily for post-secondary academic and staff leaders who are responsible for the development and implementation of one or more elements of the online program ecosystem. The aim is to look at online programs through strategic planning, "big picture" lens rather than focus on daily operations. The information and resources within are aimed at enabling individuals in these roles to assess–within their own institutions–current strengths, opportunities, and gaps in their readiness to design online programs, and then to lead conversations and collaborations that will result in short-, mid-, and long-term program planning and implementation. Leaders may find it helpful to share sections of this book with specific units or individuals responsible for the day-to-day development and implementation of the program to facilitate planning and collaboration.

How To Use This Book

This book is comprised of four modules, each of which has several units that explore the module's topic in depth. Recognizing that readers of this book come to it with different levels of experience in designing online programs or that they may be responsible for different areas of development, each module is designed as a "standalone" unit. You may also choose to work through the book in its entirety.

We encourage you to document your responses to the **reflection prompts** and **practical information** arising from the research and collaboration activities in this book using the editable Workbook developed for this purpose. There are separate workbooks for each module, or you can use the complete **Program Development and Implementation Workboo**k, which compiles all of the module workbooks into a single document. Prompts for workbook activities are enclosed in blue boxes throughout the book. You can find the workbooks by navigating to them from the Table of **Contents** or links provided throughout the book.
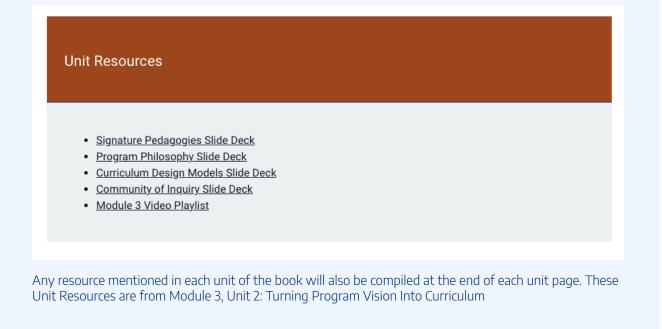
Reflection 1: Now that you've seen the elements of the online student life cycle, in which elements do you feel your program development currently has the potential to be very strong? Where could your program look for future opportunities to enhance how students move through the cycle in ways that benefit both students and the program? Use the checklist in the **Program Design and Implementation Workbook** to indicate your first impressions in response to these questions and/or as tool to facilitate discussions about the online student life cycle at program development meetings.

Example activity prompt and Workbook link from Module 1, Unit 1: Collaborating to Create the Online Student Life Cycle and Its Ecosystem

Self-check activities and questions are provided in each module that indicate when it might be helpful for you to review content in another area of the book before proceeding, if necessary.

Complete the branching scenario below to assess where you're at in the program planning process.

Do you have a vision for the program that summarizes the high-level goals for the program? This will often include a program description that you may also have available to help with this module.

Yes →

No →

Example Self-Check Activity from Module 2, Unit 3: Planning Out the Program

Resources such as retreat plans and example templates are embedded throughout the book and summarized at the bottom of each module page in which they appear.

Unit Resources

- Signature Pedagogies Slide Deck
- Program Philosophy Slide Deck
- Curriculum Design Models Slide Deck
- Community of Inquiry Slide Deck
- Module 3 Video Playlist

Any resource mentioned in each unit of the book will also be compiled at the end of each unit page. These Unit Resources are from Module 3, Unit 2: Turning Program Vision Into Curriculum

Module Summaries

Module 1: The Elements of Online Program Design and Collaboration describes the online student life cycle and the larger online ecosystem that makes up the development of highly effective programs, emphasizing the necessity of cross-unit or cross-institutional collaboration in online program development and implementation. It also provides information on the units and roles commonly included in this work, tools to assess your institutional "readiness" to undertake it, and models for how that work might be structured.

Module 2: Program Vision, Feasibility, and Approval walks readers through the process of setting an online program up for success by creating a strong program vision and assessing its feasibility in relation to guidelines set by your institutional context as part of the program approval process. It emphasizes the role of collaboration in establishing program outcomes and planning wisely for the development of the program, including timelines and resourcing—particularly those that are specific to online programs.

Module 3: Course Design and Implementation explores the process of visioning the program's curriculum, including choosing core competencies and/or teaching approaches and eLearning tools to create a consistent and effective student learner experience in the program. It provides examples and tools to help program designers map out learner pathways through the program and embed essential elements such as learner persistence, teaching and learner-driven technologies, and decolonization into courses.

Module 4: Building Sustainable Online Programs emphasizes the importance of building sustainability into your online program development work from Day 1. It encourages developers to look beyond

participation in mandated academic quality assurance processes to create their own "blueprint" for program sustainability and continuous improvement that accounts for *all* areas of the online program ecosystem. The module contains information and tools to help you assess your institutional or departmental readiness to develop and implement a sustainability plan as well as an editable template to document your plan.

Authors

Dr. Lauren Anstey (she/her) is Associate Director of Educational Development at Queen's University Centre for Teaching and Learning. Her PhD (Faculty of Education, Queen's University) is in Curriculum Theory, and her Educational Development work often focuses on curriculum development, continuous improvement, and blended and online academic program design. Lauren identifies as a cis-gendered woman, and as a settler-Canadian with European heritage. Lauren lives in Kingston, Ontario with her husband and two children.

Dr. Stephanie Horsley (she/her) is Associate Director of eLearning at Western University's Centre for Teaching and Learning and Adjunct Assistant Professor in Music Education at the Don Wright Faculty of Music. Stephanie leads a team of Educational Developers and Instructional Designers focused on course, program, and institutional-level selection and implementation of technology-enhanced learning across all teaching modalities. Her work is guided by her belief in the importance of student-centred learning, specifically the ways in which technology can be leveraged to connect classroom to community and empower students to take an active, confident role in their learning.

Dr. Denise Stockley (she/her) is a Professor and Scholar in Higher Education with the Office of the Provost (Teaching and Learning Portfolio) and the Faculty of Health Sciences at Queen's University. She completed her Doctorate in the Psychology of Education at Simon Fraser University. Denise is the Principal Investigator of several research grants in a variety of areas including those from the Tri-Council (SSHRC, NSERC, and CIHR) focusing on research ethics education, quality assurance, and competency-based medical education to name just a few of her projects.

Mr. Greg Yantz (he/him) currently serves as the Director of the Centre for Academic Excellence (CAE) at Fanshawe College: a team supporting the College's focus on student success through curriculum quality assurance and new program development that meets community needs. Greg also held roles as Associate Dean of Fanshawe's Woodstock/Oxford Regional Campus and worked at Western University in the Don Wright Faculty of Music and the Ivey Business School. Greg is a graduate of New York University having earned a Master of Arts (Politics), and a Master of Philosophy (Politics). He graduated from the University of Michigan with a Bachelor of Arts in Political Science.

Contributors

Denise Quildon is an Instructional Designer at Western University. She holds a master's degree in Educational

Technology. She has held various roles over the last 20 years and counting designing classroom and technology-based learning solutions for both adults and young learners. Denise contributed to this book as project manager and instructional designer.

Allyson Steward is an eLearning Technology Specialist at Western University. She completed her Bachelor of Arts in Film Studies in 2019 and is currently in progress on her Master's of Library and Information Science (Western University). Allyson coordinated the digital content creation for this book with a team of student Digital Media Designers from the Instructional Technology Resource Centre at Western University and oversaw all elements of digital production and integration.

Video Contributors

The following individuals and teams have graciously shared their time to compliment our project with their valuable insights and expertise:

Cebert Adamson, Vice President of Students, International, and Alumni, Mohawk College

Margaret (Maggie) Cusson, Dean of Academic Development, Algonquin College

Patrick Devey, Associate Vice President of Global, Online, and Corporate Learning, Algonquin College in Ottawa

Engineering Team, Queens University

- Brittany McRae, Project Manager and Instructional Designer
- Pierre Laflamme, Content Expert as a Health, Safety and Risk Manager
- John Mckay, Content Expert as a Safety Engineer
- Ernesto Travieso Florez, Media Production Specialist

Flight Services Team, Fanshawe College

- Larry Weir, Associate Dean, Norton Wolf School of Aviation & Aerospace Technology
- Haley Whitelaw, Curriculum Developer & Professor, Norton Wolf School of Aviation & Aerospace Technology
- Melissa Barnard, Curriculum Consultant and Professor, Centre for Academic Excellence, Fanshawe College
- Tracey Davies, Program Manager, Faculty of Science Trades and Technology, Fanshawe College
- Tyson Macklin, Educational Support Technologist, Faculty of Science Trades and Technology, Fanshawe College

Funding

Adopting and Adapting this Book

This resource is licensed under an Ontario Commons Licence and Creative Commons License BY-NC-SA that allows for copying, use, and modifications under the following conditions:

- attribution to this original work (BY),
- noncommercial use (NC), and
- modifications are shared alike (SA) retaining this same CC license.

There are a few exceptions in this book to this license. They occur where the copyright is held by another author or organization who has given their permission to incorporated them into this book. These exemptions **cannot be copied or modified without permission from the original copyright holder**. They appear with a copyright symbol © and shortened citation. Their full citation is found in the Module Conclusion and References page.

HOW TO NAVIGATE THIS PRESSBOOK

The Table of Contents: Accessing the Modules, Units, and Subunits

In the top left corner of the screen is a black tab labelled "Contents." Click this to open the Table of Contents dropdown menu. From there, you can navigate to any of the modules, units, or subunits in the book.
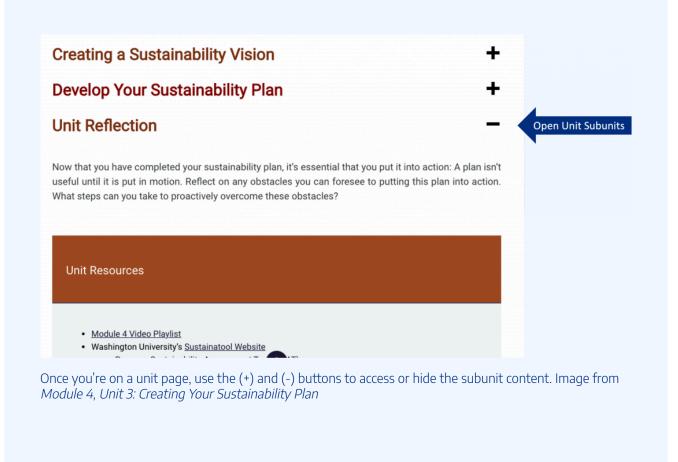
By clicking the plus button (+) to the right of a module name, you can expand the contents to show each unit (e.g., major topic) within that module. These headings are clickable and will take you directly to the unit.

If you want to go to a particular subunit (e.g., subtopic) within the unit, you can do this by clicking the plus button (+) to the right of the unit name.

Use the (+) button to the right of each Module and Unit name in the Table of Contents to quickly navigate to each area of the book

Accessing the Subunits on the Unit Pages

Once you've navigated to a Unit page, you can use the dropdown menus to access the subunits. We've taken this approach to help keep this information on the unit page organized and easy to navigate. Click on any of the dropdown menus to open or close the subunit.

Once you're on a unit page, use the (+) and (-) buttons to access or hide the subunit content. Image from *Module 4, Unit 3: Creating Your Sustainability Plan*

"Next" and "Previous" Page Buttons

At the bottom left or right of any Pressbooks page (including this one!) are the "next" and "previous" buttons. They are labelled with the title of the next section, e.g., "Previous: About this Pressbook–Start Here!" You can use these buttons to go directly to the previous or next unit without navigating back to the Table of Contents.

Glossary

At the end of the book is a glossary of terms for your reference. Where applicable, glossary definitions have also been embedded directly within the modules and appear as underlined in the text. When clicked, the glossary definition will appear as a tooltip window.

Do you know your "why"?

Your vision is the "why" behind your online program, and creating your vision focuses on reflection and discussion with others about the answer to "why?" as well as the foundational principles for the program.

As referenced throughout this book, collaboration is the action of working with others to produce or create something together that improves upon what could be done alone. In the case of creating a vision for an online program, collaboration means taking an evidence-informed, team approach to understanding the "why" behind the need for the program. At the high-level visioning stage, collaborators work together to a...

> The use of evidence that contributes to decision-making about particular problems or issues about best use of resources within institutions and across the healthcare system.
>
> from Canadian Health Services Research Foundation (2006). *Weighing Up the Evidence. Making evidence-informed guidance accurate, achievable, and acceptable*. A summary of the workshop held on September 29, 2005.

- Why is...
- What a...
- How d... broade...
- How do we define success in this program, and how will we know that the program has been successful (what metrics will you use)?

Example of a glossary tooltip pop out from *Module 2, Unit 1: Creating and Aligning Program Vision*

PROGRAM DEVELOPMENT AND IMPLEMENTATION WORKBOOKS

Throughout this Pressbook, you'll be invited to document your reflections, ideas, and other related course development information using one or more of the downloadable Workbooks on this page.

If you plan on working through all of this Pressbook's modules—or want to see all of the reflections and activities compiled together—you can download the "Complete Program Development and Implementation Workbook. You also have the option to download a section of the Workbook specific to a particular module.

- Complete Program Development and Implementation Workbook
- Module 1 Workbook: The Elements of Online Program and the Role of Collaboration
- Module 2 Workbook: Program Vision, Feasibility, and Planning
- Module 3 Workbook: Course Design and Implementation
- Module 4 Workbook: Building Sustainable Online Programs

MODULE 1: THE ELEMENTS OF ONLINE PROGRAM DESIGN AND THE ROLE COLLABORATION

Online learners navigate their program through a cycle of events that exist within a complex ecosystem. Effectively designing and implementing an online program requires careful consideration and collaboration to ensure that the online ecosystem is healthy, effective, and sustainable.

Effective and engaging online programs are the result of vision, collaboration, and effective implementation of evidence-based planning. This work happens within and across various academic, staff, and student units at each institution. Online programs that integrate the knowledge, skills, and resources available across an institution often experience both tangible and intangible benefits. Tangible benefits, for example, might include access to centrally available eLearning tools and expertise, student learning supports, or previously developed course content. While intangible benefits might include opportunities to integrate policies more

smoothly or sharing "lessons learned" from other program developers, thus reducing faculty, student, and staff workload and stress.

This module explores the elements that make up an online program, beginning with a student-centred focus on how online students experience moving through their program. It then situates that experience within a wider network or "ecosystem" of online program design and implementation by exploring the role that institutional or cross-unit collaboration, resources, and policy play in the creation of effective online programs. Lastly, it provides information that will help leaders assess their overall readiness to engage with the elements of creating and implementing online programs. While each institution will differ in the roles and resources that are available to support online programs, we encourage you throughout this module to explore, ask questions, and document what is available at your institution, and then to reflect on how knowledge and collaboration beyond the department or Faculty level can strengthen and shape online program design and implementation.

In this book, we define "Online Program" as any set of learning experiences and associated supports where learners receive a credential for demonstrating institutionally–approved learning outcomes. Learning Outcomes are taught and assessed primarily through digital tools and technologies and attendance in a physical location is not required to meet the program requirements.

Learning Outcomes

By the end of *Unit 1: Collaborating to Create the Online Student Life Cycle and Its Ecosystem,* you will be able to:

- Identify the elements of the online student life cycle and online program ecosystem
- Describe the importance and scope of collaboration necessary to create and sustain an online program ecosystem
- Identify the main units from across your institution that impact online program development and implementation

- Begin documenting key collaborators from those units and where collaborations need to be further developed

You will come away with:

- Online Student Life Cycle Illustration
- Online Program Ecosystem Illustration
- A tool to assess and document current and potential areas of program collaboration within and beyond your institution

---

By the end of *Unit 2: Determining Program Development and Implementation Readiness*, you will be able to:

- Ask key questions to help you assess institutional readiness across the online program ecosystem
- Use a checklist or framework of your choice to identify which areas of online program development and implementation are currently in place to support the online program ecosystem
- Identify different models of support for developing and implementing online program development and consider how they may be suited to your program or institution at this time and in the future

You will come away with:

- Online Program Readiness Checklist
- A tool to facilitate discussions on different models of institutional capacity for online program development

Throughout this module, you will be prompted to reflect on key ideas and complete activities that will enable you to lead conversations and plan future action. You can keep track of your work by downloading and recording it in the **Program Design and Implementation Workbook**.

COLLABORATING TO CREATE THE ONLINE STUDENT LIFE CYCLE AND ITS ECOSYSTEM

Stephanie Horsley

Successful, high-quality online programs are more than well-designed curriculum and courses with excellent instruction. For students, the online program life cycle begins with, "the moment a student expresses interest [in a program], through the admission process, through the courses themselves, all the way to graduation" (Bellantuono, 2020, p. 60). For program creators, it begins even before this. For students to experience a high-quality online program, that program must be developed in and supported by an "ecosystem" of processes, policies, resources, and people that begins with determining if the vision and resources are in place to successfully design and sustain the program.

In this unit, we present a model that outlines, from start to finish, the elements of online programs and how they relate to each other. By exploring the online student life cycle and online program ecosystem, we immediately see the many different areas of expertise from across an institution that contribute to a successful online program.

Learning Outcomes

By the end of this Unit, you will be able to:

- Identify the elements of the online student life cycle and online program ecosystem
- Describe the importance and scope of collaboration necessary to create and sustain an online program ecosystem
- Identify the main units from across your institution that impact online program development and implementation
- Begin documenting key collaborators from those units and where collaborations need to be further developed

You will come away with:

- Online Student Life Cycle Illustration
- Online Program Ecosystem Illustration
- A tool to assess and document current and potential areas of program collaboration within and beyond your institution

Online program design and implementation rely on a large variety of knowledge, skills, and expertise. Knowing how students move through a program (i.e., the online student life cycle) and how to design an effective and engaging online experience for those students (i.e., the online program ecosystem) enables those leading this work to better understand and plan for necessary resources and expertise, as well as for where collaboration with units outside of the department might better serve the program's faculty,

Institution: Any post-secondary credentialing institution
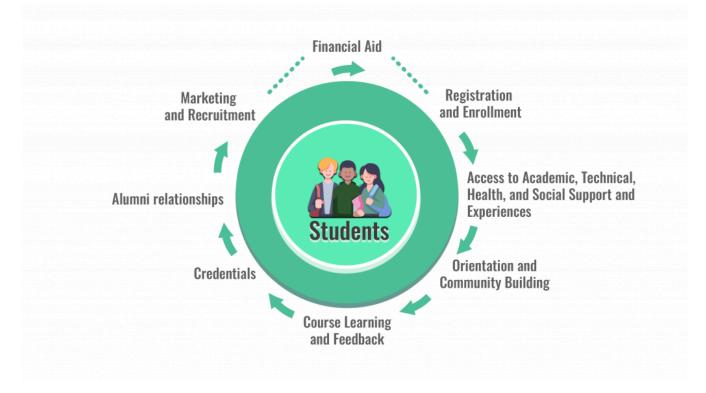
Unit: An organized body within the institution, e.g., academic department, student association, governing body, academic or student support unit, standing committee

staff, and students. At each point in online program development, institutional processes may be put into place to guide and support students, faculty, and staff, while at the same time ensuring that the entire cycle and its processes are effective, sustainable, and equitable. Ultimately, understanding the online student life cycle and its ecosystem enables leaders to proactively plan, efficiently resource, and sustain an online program.

Starting with the Learner: The Online Student Life Cycle

The online student life cycle is one way to think about the many different points at which an online learner, although not physically situated within the walls of your institution, will interact with the people, services, and policies that make up their student experience. For this reason, the models for designing successful, high-quality programs in this book begin with the learner at their centre. It is not uncommon for online students to never visit the physical campus. This means that we need to design our online programs to work with students who may never see our physical facilities—visit a help desk, Library, or medical centre—or attend an in-person graduation ceremony. By examining the online student life cycle, we can start to understand how to design high-quality program experiences for our learners.

Figure 1.1 below is a visual representation of the online learner life cycle, which is followed by a video that describes each element in the cycle. You can also [download and share the image and written descriptions](#) (PDF). While we explain the elements of the online student life cycle individually, it is important to note that there will inevitably be overlap among the elements.

One or more interactive elements has been excluded from this version of the text. You can view them online here: *https://ecampusontario.pressbooks.pub/ creatingsustainableonlineprograms/?p=25#oembed-1*

Reflection 1: Now that you've seen the elements of the online student life cycle, in which elements do you feel your program development currently has the potential to be very strong? Where could you look for future opportunities to enhance how students move through the cycle in ways that benefit both them and the program? Use the checklist in the **Program Design and Implementation Workbook** to indicate your first impressions in response to these questions and/or as a tool to facilitate discussions about the online student life cycle at

program development meetings.

Situating the Online Learner in the Online Program Ecosystem

Now that we have a clearer understanding of how a student moves through the experience of their online program, we can turn our attention to the broader "ecosystem" that makes up the network of people, resources, infrastructure, and policies that create highly effective and sustainable online program experiences. Some elements of the ecosystem are positioned directly within the department, unit, or faculty developing the program, while others are more likely to exist as institution-level resources. In some cases, the elements may exist at both the program and the institutional level. Often where the elements in this ecosystem lie is a result of institutional history and choice, and they may or may not contribute to effective program design in their current configuration. As discussed in the next unit, there is no single "right way" that every institution should allocate who is responsible for each element. Each institution must decide based on its context where primary responsibility should lie to most efficiently and effectively support the online student life cycle, which is situated in the middle of the ecosystem. As you watch the video below that explains the elements illustrated in Figure 1.2, begin thinking about where each lies within your institution and your program's relationship and access to them. You can also download and share Fig. 1.2 and its written description (PDF).
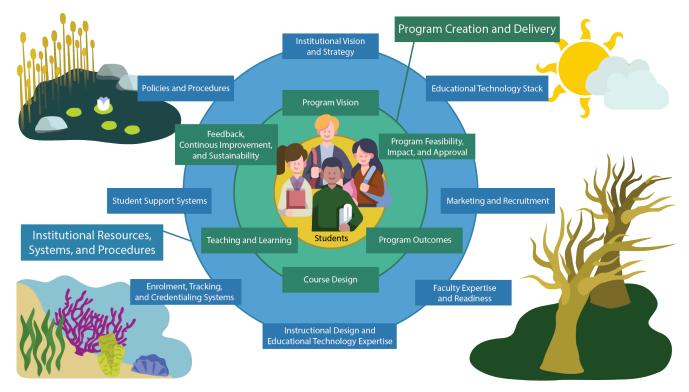
Fig. 1.2: The Online Program Ecosystem. This ecosystem supports the healthy, effective, and sustainable functioning of the online student life cycle and your program.

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=25#oembed-2

Reflection 2: The online program ecosystem is made up of many different elements. Which do you feel you are already quite familiar with, and which do you feel you feel you need to learn more about? Use the checklist in the **Program Design and Implementation Workbook** to indicate your first impressions of how familiar you are with each element and/or as a tool to facilitate discussions about the ecosystem at program development meetings.

No Program Is An Island: The Importance of

Cross-Unit and Institutional Collaboration

Now that we've explored both the online learner life cycle and the online program ecosystem in which it's situated, we have a "big picture" of the many elements that work together to support effective, engaging, and sustainable online programs. You should also have begun to reflect on and document where your program's strengths and areas of opportunity are in relation to these interconnected elements of online program design. You've likely begun to wonder about how you will possibly address all these elements to program design. The answer is collaboration! The varied expertise and resources required usually call for collaboration both within and across various units and stakeholder groups, and even institutions.

In the short video below, two leaders in developing online programs discuss the importance of collaboration when creating new online programs. The first is Denise Stockley, Co-Director of the Master's of Health Professions Education Program, from Queen's University. Her observations are followed by those of Cebert Adamson, Vice President of Students, International, and Alumni, from Mohawk College. As you watch the video, make a mental note of all of the different collaborators they have worked with.

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=25#oembed-3

Reflection 3: The program leaders in the video describe the importance of situating an online program within a wider ecosystem and the role collaboration plays in this, including some specific units and groups that played a key role in the success of their online programs. Where might your program benefit from collaboration? Keeping in mind your responses to Reflections 1 and 2, identify some priority areas where you feel collaboration is very important for your program going forward as well as where collaboration is already happening. At this point, don't worry about naming potential collaborators, instead, focus on identifying relevant areas of the online student life cycle and ecosystem where collaboration is desirable. Use the **Program Design and Implementation Workbook** to document your ideas.

Partners in Online Program Collaborations

As you've seen, we encourage online program leaders to think of their program as part of the broader ecosystem that thrives with careful attention to collaboration and relationship-building both within and across their institution. Module 2 and Module 3 in this book contain detailed descriptions of the types of roles that frequently collaborate on program design and course design as well as *when* in the design and implementation process it is most helpful to connect with them. In this module, it's most helpful to think in terms of specific units or groups at your institution and beyond that can play a significant role as you progress through the online program design and implementation process. In doing so, you'll get a "big picture" of the potential areas of collaboration and how they relate to specific elements of the online student life cycle and ecosystem.

Think of collaborations with these units or groups as a two-way street. In some cases, units may benefit just as much from working with you as you with them. For example, you might share information about your non-traditional learner demographics with a central Student Experience or Student Success unit, which helps them develop new ways of interacting with students that then become a preferred approach across the institution–e.g., virtual career counselling sessions or evening appointments. You might collaborate with Technology Services to introduce a new eLearning tool that is adopted by several other Faculties. Or you might develop a micro-credential within your program after collecting feedback from a potential employer group and then work alongside the Office of the Registrar to pilot a virtual micro-credential program that results in additional resources for them to scale the piloted micro-credentials tracking tool for use across the institution. Engaging these units and groups before and as you develop your programs–rather than after–can save everyone valuable time by sharing information, ideas, and resources that allow planning to be done more efficiently. You may even prevent unnecessary, costly, or time-consuming changes or "do-overs" due to a lack of communication or knowledge around institution policy, procedures, infrastructure, resources, or possible need for the program. And don't forget that you can look outside of your institution for partners who may be eager for the opportunity to co-design programs or share knowledge and resources!

The interactive object below lists common units and groups across colleges and universities that are often part of building and sustaining the online program ecosystem. They are potential collaborators in creating and maintaining high-quality online programs. While the name of the unit or groups and the roles within them might be slightly different at your institution or in your community (or the roles may reside in another unit or organization), the key takeaway here is to begin thinking about who you can connect with as part of creating and sustaining your online program. The information is listed in alphabetical order as there is no prescribed order in which you can or should collaborate with them—that decision is tied closely to where you are in the program development process and what departmental resources you may already have at hand.

An interactive H5P element has been excluded from this version of the text. You can view it

online here:
https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=25#h5p-9

Now that you've thought more about possible collaborators for developing and implementing your online program, you can take some time to research possible collaborators at your institution.

Workbook Activity: Documenting Online Program Collaboration Partners

Use the **Program Design and Implementation Workbook** to document the equivalent roles at your institution. Depending on where you are in the online program development process, you may find that you don't need to document all areas at this time, but we encourage you to keep the form updated as a reminder of opportunities for collaboration and to keep a record of who your primary collaborators are as you develop and implement your program.

If you choose to also complete the other modules in this workbook, you may find some overlap in activities that ask you to document collaborators. In this case, this chart might help you keep a master list of all collaborators on your program and their primary roles. Choose a method of identifying and keeping track of collaborators that works best for your program.

Table 1.1 provides a few examples of form entries.

Table 1.1. Example of Documenting Online Program Collaboration Partners

Collaborators: Centre for Teaching and Learning				
Current (C), Future (F), or No Collaboration (NC)	*Name*	*Role*	*Contact information*	*How will you collaborate?*
C	Jane Smith	Educational Developer	jsmith@yourinstitution.ca	CTL is assisting with SOAR visioning retreat and creating program learning outcomes.
FC	TBD	Instructional Designer	N/A	Member of online course design team
Collaborators: Office of the Registrar				
Current (C), Future (F), or No Collaboration (NC)	*Name*	*Role*	*Contact information*	*How will you collaborate?*
C	Elliott Brown	Assistant Registrar	ebrown@yourinstitution.ca	Pilot project to create continuous intake for new program enrolment
Collaborators: Library				
Current (C), Future (F), or No Collaboration (NC)	*Name*	*Role*	*Contact information*	*How will you collaborate?*
FC	Dale Cowly	Collections Librarian	dcowly@yourinstitution.ca	Research open collections to decrease textbook costs/raise accessibility

Unit Reflection and Resources

Key "takeaways" from this unit are:

- Online students experience programs as a life cycle that begins when they start researching possible programs and ends when they become alumni and can share their knowledge and experiences with program designers for continuous improvement

- Focusing on the online student life cycle when developing and managing programs can help keep programs student-centred and of high quality
- Efficient, effective, and sustainable online programs exist when they are supported by an online program ecosystem that employs expertise and resources from across the institution
- Collaboration and relationship building within and across the institution—and possibly with other institutions and external groups—is a key to creating and managing quality online programs
- It is never too soon to reach out to possible collaborators to begin conversations around the program vision, creating, and implementation

In the next unit, you'll explore ways to assess how to read your department and institution are to create and sustain an online program as well as how and models for how that work might be structured.

Resources

- Module 1 Video Playlist
- Online Student Life Cycle Transcript
- Online Program Ecosystem Transcript

DETERMINING PROGRAM DEVELOPMENT AND IMPLEMENTATION READINESS

Stephanie Horsley

It's one thing to know what you need to do to create a high-quality, sustainable online program, but how do you know if you have all the elements you need in place to develop, implement, and sustain your program?

In the "Collaborating to Create the Online Student Life Cycle and its Ecosystem" section of this book, we explored the elements that make up student-centred, effective, and sustainable online programs as well as the units and roles of individuals who play an important role in its effective and healthy functioning. A key approach to creating the ecosystem, as readers of each module in this book will find, is collaborating with units and individuals who have the expertise to help you understand and assess which elements of the ecosystem are well-supported, where gaps may be present and how to fill them, and the initial and ongoing resources that will be needed to develop, implement, and sustain your program.

This unit presents tools to help determine how ready your department and institution are to do this work. Throughout the unit are prompt questions that you can reflect on and ask in conversation with various collaborators as you explore your readiness. These questions should help guide conversations around what is in place to help your online program and the students, faculty, and staff that interact with it, and each other, thrive. With the move to fully online programs still being relatively new for many intuitions, rarely does an institution excel in all the online ecosystem elements. In places where elements of the online ecosystem may not address the needs of your program, these conversations can also help you with short, mid-, and long-term planning to develop these elements and prioritize which should be developed first.

Learning Outcomes

By the end of this unit, you will be able to:

- Ask key questions to help you assess institutional readiness across the online program ecosystem

- Use a checklist or framework of your choice to identify which areas of online program development and implementation are currently in place to support the online program ecosystem
- Identify different models of support for developing and implementing online program development and consider how they may be suited to your program or institution at this time and in the future

You will come away with:

- An Online Program Development Readiness Checklist
- A tool to facilitate discussions on different models of institutional capacity for online program development

Determining Readiness to Develop, Implement, Administer, and Sustain Your Online Program

One of the first steps you should take in the process of online program development (aside from identifying collaborators) is to undertake a thorough assessment of the existing resources, infrastructures, policies, administrative procedures, etc., currently in place at your institution. From there, you can map out which elements of the online program ecosystem are already well developed, which are present but need more development, or which are not present at all. This approach allows you to realistically assess the resources and effort that will need to go into ensuring your program success and to create mid-, short-, and long-term plans based on priorities arising from your readiness assessment.

Not surprisingly, we suggest taking a collaborative approach to assessing intuitional and program readiness to develop online programs. Why? Because there are just so many areas of expertise, resources, and administrative procedures that network together in a successful online program ecosystem. It's unreasonable to expect that any one person or small group would be able to undertake this assessment without reaching out to the types of collaborative units or roles you identified [in the previous unit](). If you have not yet identified these collaborators, we encourage you to do that before reading on or else use the questions below to start creating a list of collaborators you will need to work with to determine the answers, and then to document who they are using the last activity in the previous unit.

Several freely available or for-profit tools or frameworks to rate your institutional readiness to develop and implement online programs have been developed by for- and non-profit companies, and you can even employ a company to undertake these assessments for you. We've listed some of these in the unit resources in case

your institution prefers to use a branded tool or has the resources and desire to use an external consulting company, but it's not our intention to promote any one tool/service listed here or existing elsewhere over another. We've also created an assessment tool for this work, which you can find in the workbook. As always, it is your institutional context and expertise that guides which approach to assessing your readiness you take.

Readiness assessment tools are usually comprised of "big picture" questions used to give you an overall rating of where your institution lies on the readiness continuum across several areas of effective online programs. What these tools often lack to accurately assess your readiness are guiding questions to help you determine where your reply should be on the readiness scale. For example, it could be challenging to rate your readiness response to the statement: "The technology delivery standards are highly reliable and operable with measurable standards being utilized such as system downtime tracking or tasking benchmarking" (Online Learning Consortium, 2018). Below we present guiding questions that will enable you to have conversations about what it means to be able to reply that you are, for example, at the exemplary level in response to the previous technology question. We've aligned these questions with the elements of the online program ecosystem rather than any readiness tool as each tool tends to find its unique way of structuring its assessment. However, the ecosystem elements are common across any online program, and so conversations prompted by the guiding questions will apply to any readiness assessment. In fact, you may even find that sustained, informed conversations about the prompt questions allow you to draft your readiness report, which is why we've included a workbook activity to help you create your own "big picture readiness" assessment.

Program Vision

- Does a strong vision for the program exist?
- Was the vision developed through a consultation process with all program stakeholders, e.g., faculty, staff, students, potential employers, impacted communities, equity-deserving groups, and technology and teaching specialists?
- Does the vision align with institutional strategies/priorities and the current state of the field?
- Does the vision account for why the program is delivered online?
- Does the program clearly communicate its vision to all stakeholders, including students, who interact with the development, implementation, and sustainability of the program?

Program Feasibility, Impact, and Approval

- How does the institution determine a program's feasibility? Are there criteria that must be met and what processes are used to develop a feasibility assessment?
- What useful tools, templates, or processes are in place to successfully complete an online program feasibility/impact plan? e.g., guides for types of data should be collected and from where?

- What roles exist to assist programs with feasibility planning?
- Does program feasibility reflect conclusions drawn from a wide variety of evidence and reflect the strategic goals of the department and institution?
- Are there suggested timelines for feasibility and approval planning, and are they adequate for the task?
- Is there a dedicated quality assurance office (or equivalent) that assists programs in developing and submitting their approval application?
- What resources and roles exist to assist the program approval planning?
- Are program stakeholders widely consulted in the development of the feasibility and impact elements of the approval application?

Program Outcomes

- Do program outcomes for the program exist? If so, do they reflect the vision for the program?
- Were program outcomes created through a collaborative process involving faculty, staff, students, alumni, potential employers, impacted communities, equity-deserving groups, technology and teaching specialists, etc.?
- Are program outcomes used to map the progression of learning across the program? Who will do this work and how?
- What resources are available to assist in the creation and mapping of program outcomes, e.g., Centre for Teaching and Learning staff, department guidebooks or templates, quality assurance office?
- Is there a coherent "vision" for teaching and learning that runs across all courses, e.g., a signature pedagogy, set of core eLearning tools, and commitment to indigenization?

Course Design

- Are there quality guidelines in place (formally or informally) for online course development? Do the guidelines account for the difference between in-person and online course design considerations and learning approaches?
- What resources and roles are in place to create high-quality online courses? E.g., instructional designers, media designers or technology experts, librarians
- Are instructors engaged in the development of courses?
- Are the learning outcomes for courses clear and do they align with the instructional methods and assessments?
- Have essential considerations such as accessibility and equity been embedded in course design?
- Are course learning outcomes present and aligned with the program learning outcomes?
- Is course design student-centred with an emphasis on active engagement rather than passive learning?

- Does the technology chosen for the course align with the course outcomes and is it user-friendly? Are the courses easy to navigate and find information in?
- What resources are available to ensure that course content meets existing copyright requirements?
- Is there a plan to regularly review and update course material?

Teaching and Learning

- Do instructors have a strong online presence in the course?
- Are there opportunities for regular interaction among students and between students and instructors in courses?
- Do students have access to all resources and roles needed to complete their coursework (e.g., libraries/librarians, software, bookstore)?
- Are students able to track and self-assess their progress in the course?
- Do faculty feel engaged in the teaching process and connected to students?
- Is the course designed so that eLearning technologies assist rather than restrict or impede students and faculty in the course teaching and learning?

Program Feedback, Continuous Improvement, and Sustainability

- Is there an institutional review process that regularly reviews program effectiveness against program and institutional goals?
- Does the online program have a sustainability plan that looks at least 5 years into the future?
- Is a variety of data used to continuously assess and improve the program?
- Have adequate resources been earmarked for the ongoing renewal of the program?
- Are there opportunities to collect feedback on student course experiences and regularly review course design and content?
- What processes are in place to collect feedback from alumni, faculty, and staff on the value, relevance, and administration of your program both in the short and long term?
- How do programs communicate changes based on feedback to their stakeholders?
- Do faculty and staff related to the online program regularly receive reviews and feedback?

Institutional Vision and Strategy

- Is there an institutional vision and strategy for online learning in place? Has it been clearly communicated to the faculties/departments, students, and general community?

- Does online learning appear to be a strategic priority and/or is it already part of the institutional "brand"?
- Where in the strategic planning cycle is the institution concerning online learning? Is there a plan to renew the strategy soon? If so, what possibilities are there for future vision and what strategies are there for online programs?
- Does the level of current or designated future resourcing align with the institutional vision and strategy? How does/can program developers access them?
- What future resources have been allocated for the development of online programs and who will be able to access them?

Policies and Procedures

- Are there clear and adequate policies and procedures at the institutional and program level that govern decisions specifically related to online learning where face-to-face policies are not sufficient? If so, what are they? If not, which still need to be developed?
- What is the program application and quality assurance process? Is there a commitment to ongoing continuous improvement of all programs?
- Do policies need to be amended so that fully online students don't pay user fees for services to which they do not have access? Are there fees that only apply to online student services?

Educational Technology Stack

- Which educational technologies are currently in place, and which units currently administer and provide support services for them? Do you have access to them? If not, what are the pathways and costs to access?
- Is there a technology renewal or sustainability plan in place that indicates their essential role in facilitating online learning? Have resources been set aside for their ongoing support and renewal?
- Are there clear governance structures in place for the selection and ongoing review of eLearning Technologies? If so, do they involve stakeholder (e.g., faculty, staff, student, etc.) consultation and participation?
- Do you have access to a reliable and current Learning Management System? Does it (or any integrated tools) allow for visual, audio, and video forms of communication?
- What other eLearning tools are available to your department or institution, e.g., peer-assessment, online labs, remote proctoring software. Do they currently meet the teaching and assessment needs of your program?
- Does the institution or program have a well-defined process and the expertise to evaluate technology risk

assessment, e.g., privacy, security, systems integration, legal, data management

- Do the current technologies perform reliably? What difficulties might be encountered if there is a need to "scale up" to address additional enrolment growth, and are the resources available to do so? What contingency plans are in place in case of a prolonged service disruption?
- Is there reproduction or redundancies of digital services where economies of scale and better support services might be realized?
- Are eLearning tools compatible or built with accessibility-supporting devices and programs?
- Are there "low-fi" alternatives for students who may participate from communities with low internet bandwidth?

Marketing and Recruitment

- How easily discoverable is the program through internet searches and advertising?
- How does the institution connect with interested students and ensure that they have all their questions easily and fully answered?
- Is there the ability to track student interest in and follow up with students who show interest in the program?
- How does the institution or program support students in understanding how the program might fit their needs?
- How does the instruction or program help students understand how they will be supported as learners?
- How does the institution communicate what students will need to do to thrive?

Faculty Expertise and Readiness

- Do course instructors understand the pedagogical and course design differences between face-to-face and online instruction? If not, which resources are available for this professional development?
- Do course instructors have access to technical training for using instructional technologies? If not, which resources are available for professional development?
- How do instructors learn about new technology and other course design supports that may become available?
- What guidelines or standards are in place to define and communicate the faculty's role in course design and teaching?
- Are there resources or processes in place to support the extra workload and longer timeline of designing an online course vs. a face-to-face course? If so, what are they?
- Is the instructor supported through a team-based approach to course design (e.g., they are not solely responsible for the subject matter, curricular design, and building of the course in the Learning

Management System)?

Instructional Design and Educational Technology Expertise

- Are there instructional designers available to work with faculty on course design and, if so, how collaborative and sustainable is the course design project?
- Are there educational technologies and/or media designers available to work with faculty on course design? If so, what is the amount of digital development and consultation are they able to give?

Enrolment, Tracking, Credentialing

- Is there an efficient system in place that allows the institution to easily track, record, and share different types of credentials?
- What processes are in place to verify the identity of online students when they enrol?
- Is the process for applying for credentials clearly communicated and straightforward?
- Are there minimal or no costs associated with students accessing or sharing their credentials?
- Is there technology in place for online students to easily access a record of their credentials within a reasonable amount of time?
- How accessible is the credential should a student wish to share it with another party (e.g., future employer, school, or virtual resume)?
- Will the value of the credential be easily understood by other institutions, employers, volunteer organizations, etc.?
- Do online students have the same status as face-to-face students and, if not, does this impede their access to certain resources that require a digital sign-in and/or licensing?
- What processes are in place to ensure students know how to access the course, orient themselves to the program, and meet the technical (e.g., technology) requirements of the program before the first day of class?

Academic Support Services

- Are the same academic supports available to online students as those studying face-to-face? If so, are they offered in a way that is accessible to online students, e.g., video conferencing, toll-free numbers, chatbots, including students with disabilities?
- Is there access to academic and career counselling, online tutoring, writing help, accessibility, and medical accommodations services, etc.?
- Is there an effective communication plan in place to ensure students know where to go for the

appropriate academic service?

Technical Support Services

- Are there opportunities for students to practice or train on the course technology, in particular prior to high-stakes activities such as assessments?
- Does the IT help desk offer virtual consultations and a toll-free phone number? And are they available evenings and/or weekends for students who are in different time zones or are completing their degree part-time in addition to their full-time careers?
- Do the program and its courses include information on how students can access technical support?

Health and Wellness Support Services

- Are the same health and wellness supports available to online students as those studying face-to-face? If so, are they offered in an equitable way that is accessible to online students when they are needed?
- Is there an effective communication plan in place to ensure students know where to go for the appropriate service?

Co-Curricular and Social Engagement

- Are there strategies in place that enable online students in the program and institution to connect with one another both within and outside of their studies?
- How does the institution or program develop a sense of community among its online students?

Now that you've come to the bottom of this rather long list of questions, you may be feeling overwhelmed at the depth and breadth of information you need to assess your readiness. Remember, you don't (and shouldn't) answer all these questions on your own. You have already identified the units and roles that can help you with the answer. The goal is to obtain an honest and accurate representation of where your strengths in online program development and implementation already lie and where there is a need for improvement. As you will see in the next section of this module, it's very unlikely that you will find yourself in the "perfect" position to develop a program. What an institutional readiness plan will allow you to do, however, is be realistic about whether there are any "mission critical" gaps in your online program vision (e.g., a key eLearning tool will not support the number of learners you will have in the program or you have no way to support faculty knowledge or readiness online course development and no forthcoming resources to do so) that need immediate solutions to move forward vs. those that you are aware of that can be addressed over the mid- or long-term (e.g. developing alumni networks or improving the communication of supports for online learners).

Models for the Distribution of Online Program Expertise, Resources, and Development Processes

Now that you have a good idea of which elements of the online program ecosystem are well-developed, need to be developed, or need to be improved in relation to your program, you can give some consideration to where the expertise and resources for those elements might be ideally located now and in the future. As we've seen throughout this Module and discuss more in the [Module on Sustainability](#), the ecosystem elements function as part of a larger network or system, where changes to one can ripple out to affect others, in turn impacting online students, and the faculty and staff that support your programs.

Three main models guide the distribution of the elements of online program administration, expertise, and resources: 1) Centralized, 2) Decentralized, and 3) Outsourced. Which model your department or institution chooses depends largely on your context, including your institutional vision for online learning and where you are along the continuum of program development readiness.

The three models are presented here in "textbook" form. In practice, the lines between them can be blurry in places, and you may move among them as part of your short-, mid-, and long-term program development planning. The three short cases studies included below illustrate what they might look like "in action."

Centralized Model

In a centralized model, all or most online program expertise, infrastructure, and resources that are common to any online program are located at the level of the instruction or shared across one or more institutions. They are available to all faculties or departments (e.g., market research, marketing and recruitment, educational technology stack tools, instructional design and educational technology expertise, enrolment and credentialing systems, student support services). The primary role of the department or faculty is to provide discipline-based program guidance, expertise, and instruction (e.g., lead the program visioning and learning outcomes process, identify subject matter experts for the team-based course design process and teach courses, decide on the core teaching elements of the program as it fits the discipline, provide any student support services specific to the discipline).

Decentralized Model

In this model, all or most online program expertise, infrastructure, and resources are located within the specific faculty or department or shared across several related disciplines, but they are not available to all faculties or departments developing an online program at the institution.

Outsourced Model (Full Service or "A la Carte")

Outsourcing or contracting out expertise is the practice of shifting all or some of the business processes, program design and/or student supports for online learning from in-house to an outside contractor or other organization. In some cases, Online Program Management (OPM) companies will provide full-service models where almost all elements of the online program are designed and implemented by the OPM. Other service providers may offer an "a la carte" style of service, meaning that an institution or department doesn't need to commit to the online program development and administration fully residing with an outside company. A provider may also specialize in a particular element of online program design. In these cases, the institution or department might contract out one or more program design elements such as Marketing and Recruitment, Course Design, Instructional Design or Media Development, or Learning Management System/eLearning tool development, administration, and maintenance.

Tables 1.1 through 1.3 outline the general advantages or disadvantages of each model (Tables adapted from Western University, 2020.)

Centralized Model	
Advantages	**Disadvantages**
- cultivates and can reflect a common understanding of best practices in program development across the institution - avoids unnecessary duplication of resources across campus - faculties and departments that could not afford online program start-up costs have access to program development and implementation services - potential for economies of scale, reducing costs for program development, implementation, and sustainability - opportunity to create cogent, well-defined marketing, recruitment, enrolment, and credentialing strategies across the intuition - faculty and departments can benefit from full brand and institutional weight to garner sufficient attention - opportunities for sharing resources and knowledge across campus - higher levels of coordination with central university resources for students to ensure a consistent, equitable set of student supports across campus	- requires financial investment at the institutional level for various support functions - requires a level of organizational change readiness management to ensure and revisit historical administrative practices - requires a high level of coordination of various units across campus - faculty and subject matter experts need to perceive this type of support from outside of their department/faculty as being helpful to academic interests - coordinating efforts across the campus can be challenging when executing strategy - program development may take longer as the resources are shared across the university and/or access to resources may be limited

Table 1.1: Advantages and Disadvantages of a Centralized Model of Online Program Development and Administration

Decentralized Model	
Advantages	**Disadvantages**
- promotes a sense of ownership over all aspects of the program - allows for innovation at the faculty or department level - relatively little to no cost at the institutional level for program development and launch - program development may progress more quickly because services are more readily available to work with selected faculties or departments - eLearning tools can be tailored to the specific discipline	- unequal access to business and technology resources across campus - developing all types of expertise and resourcing is costly (e.g., marketing, recruitment, technology expertise and tools) - creates redundancies for roles, activities, and infrastructure investments across the campus - need to focus on all elements of program design may lead to high workload demand on instructors and staff - may not have the "economies of scale" to meet the academic, technical, wellness, and social needs of all students

Table 1.2: Advantages and Disadvantages of a Decentralized Model of Online Program Development and Administration

Outsourced Model	
Advantages	**Disadvantages**
- lower upfront costs borne by the intuition - improved shortened start-up times - greater initial efficiencies - immediate access to business development expertise - In "a la carte" or specialty service models, the institution can focus on developing capacity in-house in priority areas without holding up program implementation	- little opportunity for institutional capacity building in "full service" models - potential loss of potential revenue – OPMs can typically claim 50-70% of enrolled student tuition (Mckenzie, 2018) - potential loss of 'brand control' - potential issues around transparency, e.g., how work is completed or what quality assurance measures are in place - faculty member's perceptions of outsourcing can be difficult to overcome - ownership of infrastructure lies outside the control of the institution - OPM may have more success in growing enrolment in some programs or areas (e.g., undergraduate vs. graduate) that others (Garrett, 2018; Lurie, 2018)

Table 1.3: Advantages and Disadvantages of an Outsourced Model of Online Program Development and Administration

Case Study I: (Mostly) Centralized Model

The Continuing Education Department (CED) at Azure University has been developing stand-alone credit and non-credit online courses and micro-credentials for over 3 years. The University's Strategic Plan, now 1.5 years old, included expanding online learning to raise enrolment across most academic units and becoming a "destination" for online learning in identified disciplines. The CED now has a strong mandate to develop fully accredited online programs for professionals looking to upgrade their skills in the areas of marketing, communication, and language acquisition. They currently use a successful combination of contracted out and in-house resources for assessing demand for and marketing new courses developed for post-degree learners and plan to use the same processes for their online program development. Because the CED is new to program development, they will work with the Centre for Teaching and Learning to facilitate program visioning, program learning outcomes creation, and curriculum mapping alongside CED subject matter experts and stakeholders. The institutional Quality Assurance Office will partner with them to conduct a program feasibility study and apply for program approval once possible programs have been identified. Although the CED has its Instructional Designers and Media Specialists (a reflection of how much earlier they began offering

online courses than other departments in the university), there is an agreement between the CED and the university that a certain amount of "overflow" instructional design and media specialist work—due to the rapid increase in the number of new courses the CED will be developing— will be taken on by a central unit recently created to help all departments improve their online offerings. The CED has a three-year plan to migrate its registration and credentialing process to the Office of the Registrar for greater efficiency, cost savings, and quicker customer service, and it has recently begun holding conversations with the central Student Experience, EDI, and Indigenous Initiatives Offices at their institution and the two local Colleges to look for opportunities for further collaboration and resource sharing as they develop the courses in their program.

Case Study II: (Mostly) Decentralized Model

The business department at Granite College was an early adopter of online programs, having offered online versions of most of its diplomas for the last 8 years. They have slowly been building their capacity to research, market, develop, and teach online programs, and they can lead the visioning and planning for new and existing programs almost entirely within the department. When provincial funding became available for the development of micro-credentials, they decide to introduce a certificate in Organizational Communication that can be obtained through a stackable series of micro-credentials—a first for the department. They use their departmental in-house expertise to undertake market research and consult with other colleges who have offered stackable micro-credentials. Working with the institutional Quality Assurance Office, they develop their feasibly plan and can go forward with the program approval process. At a departmental retreat, they identify an opportunity to develop much of the course material through the process of revitalizing a certificate that is due for renewal, then work with educational developers from the institution's Centre for Teaching to map out the learning pathway through the program. The courses are developed by the department's in-house subject matter experts and course design teams, then taught using the institutionally available eLearning tools. While students usually go through the Office of the Registrar for enrolment and credentialing, the department will need to adopt a digital micro-credentialing platform as there is currently no such technology available at the institution. The department has agreed to take this work on as a pilot to assess if it is feasible for the institution to develop or adopt a micro-credentialing platform in the next 3-5 years. Granite College has been building out its technical, academic, and wellness services over the past three years as part of a strategic commitment to making continuing education more accessible to adult learners in the workplace, so remote and after-hours access to these services is very good. The business department has transitioned over to using the technical and wellness services for its online program but still prefers to direct students to the robust academic, co-curricular, and career counselling services developed in their department because of how they offer opportunities for students in the department to network with other learners, mentors, and the business community.

Case Study III: (Mostly) Outsourced Model

The Faculties of Science and Social Science at Maple University have documented increasing demand for their unique interdisciplinary degree in Climate Change. Based on information from applications over the past 3 years and external market research commissioned by the Faculty of Science, the program is projected to attract continued interest resulting in potential long-term growth—far more than the physical space at the university will currently allow. After conducting a feasibility study, the program applied for and received a university Special Initiative Grant designed to support curricular innovation in areas of strategic importance for the university, of which addressing climate change is one. A readiness assessment of Maple University and the program's home Facilities indicates that the current Learning Management System and remaining educational technology stack can support an online degree program, but that little other infrastructure, resources, or policy exists to support fully online degrees, and faculty are not particularly fluent in online teaching: not surprising, as this will be the first online program at Maple. Program leaders have been in conversation with leaders at several other institutions who have been offering online programs for at least five years, and they are currently working with university governing bodies to create new policies and procedures for the faculty and students who will be associated with the online version of the degree. Current instructors in the face-to-face version of the program have worked with the Centre for Teaching and Learning and the central Instructional Technology unit to map existing program and course outcomes and to create a "menu" of available technology and digital teaching and learning activities that are currently available to online students and faculty. In addition, a 3-year program lead role has been hired to oversee the project of creating the online program, as have two limited-term faculty members who have experience in online instruction. An outside company has been hired to create the online courses with the Lead and new faculty members, based on the mapping work already done with the current program and using the guidelines provided by Instructional Technology Unit. The Faculties will also share the cost of hiring a marketing and recruitment company that specializes in online students and are exploring both external and internal access to student technical and academic supports–an identified priority area. A long-term goal of the program to use revenues from incremental growth to fund a permanent program manager, permanent faculty roles that specialize in online learning, and a Digital Media Specialist so that ongoing course revisions can be undertaken by the program.

Reflecting on the Case Studies

As the case studies above demonstrate, there is no "right way" to structure where online program expertise, resources, and administration procedures should lie. The structure of where these elements lie in the case studies is grounded in institutional context and history, particularly around early, mid-, or later adoption of online program development; institutional structure and vision; revenue streams; and where the priority lies for developing elements of the online ecosystem. While mostly reflecting a particular model, each has incorporated elements of centralized, decentralized, or outsourced support as they navigate the process of

creating an effective online program. Where these elements lie over time may change based on long-term planning for greater effectiveness, efficiency, and desired ownership over the development process.

Workbook Activity: Using the three tables above, map out the potential advantages and disadvantages for your online program across the three models in the [Program Development and Implementation Workbook](). Adapt or add specific detail where necessary. In cases where you think some elements of the program may be outsourced, note that as well. You may find it helpful to review your work for the previous activity when thinking about the advantages and disadvantages of each model and where outsourcing may be desirable.

Unit Reflection and Resources

Key takeaways from this module:

- Before beginning the work of designing and implementing an online program, do a complete assessment of the resources, collaborators, policies, procedures, and technology that are related to online learning at your institution and department
- Create a plan that prioritizes any development of the online program ecosystem in the short-, mid-, and long-term and discuss what the impact will be on student, faculty, and staff experience in the areas where you need to make improvements across time. Be honest about whether you are currently equipped to develop the program or if key elements still need to be in place before moving forward
- Choose a model for program development support that works for your institutional context and consider how it might be adjusted to meet your long-term vision for the program and/or institution

Unit Resources

Example readiness assessment tools:

[Online Consortium Quality Scorecard for the Administration of Online Programs](#) (Free, but users must register with the site)

[Gartner Higher Education Online Maturity Model](#) assessment (paid service)

[Blackboard Quality Learning Matrix](#). (Free. Blackboard is also an example of a company that offers consulting services for online readiness strategic planning and implementation)

CONCLUSION AND REFERENCES

Stephanie Horsley

Module 1 has introduced you to the elements that make up an effective online program and the vital role that collaboration has in program creation and implementation. Unit 1 situated program design around the Online Student Life Cycle by taking a student-centred focus on how online students experience moving through their programs. From there, we explored how a system of interrelated resources, units, and people work together to create an Online Program Ecosystem that enables online program leaders and administrators to ensure a high-quality, sustainable program. You also identify and document key units and collaborators that will be partners in your program development. Unit 2 invited you to assess your department or institution's overall readiness to create and sustain an online program and to begin planning for immediate, mid-, and long-term Online Program Ecosystem resourcing and improvements. Lastly, you considered which models of support for developing and implementing online programs might best meet your short and long-term needs.

Taken together, these modules should enable you to lead conversations about which elements of online program development and implementation your department or institution is currently excelling at and where additional development is needed, as well as who you will partner with in your development work. You should now have a realistic picture of your readiness to begin the work of developing and implementing your online program. Module 2 will lead you through the process of visioning your online program through to the program approval process.

References

Bailey, T. L., & Brown, A. (2016). Online student services: Current practices and recommendations for implementation. *Journal of Educational Technology Systems*, *44*(4), 450-462. https://journals.sagepub.com/doi/ pdf/10.1177/0047239515616956

Bellantuono, L. A. (2020). Supporting the online student: From suspect to graduate (alumni). In J. Vivolo (Ed). *Managing online learning: The life-cycle of successful programs* (pp. 59-69). New York, NY: Routledge.

Blackboard (n.d.) Blackboard quality learning matrix. https://www.blackboard.com/resources/blackboard-quality-learning-matrix?pf_recommendation=recommended&pf_rec_id=62222df26222ceec28bd46e3&pf_rec_click_id=617385c94a8bccd6d319d663&pf_promoter=guide&_ga=2.196782377.426767239.1646407120-31349814.1646407120

Kerrick, S. A, Miller, K, & Ziegler, C. (2015). Using continuous quality improvement (CQI) to sustain success in faculty development for online teaching. *Journal of Faculty Development*, *29*(1), 33-40.

King, E., & Alperstein, N. (2017). Best practices for planning strategically for online educational programs. New York: Routledge.

Online Learning Consortium. (2018). Quality scorecard for the administration of online programs (Ver. 3). https://onlinelearningconsortium.org/consult/olcquality-scorecard-administration-online-programs/

Redmond, P., Heffernan, A.,Abawi, L., Brown, A., & Henderson, R. (2018). An online engagement framework for higher education. *Online Learning, 22*(1), 183-204. https://doi. org/10.24059/olj.v22i1.1175

Vivolo, J. (Ed.) (2020). Managing online learning: The life-cycle of effective programs. New York: NY: Routledge.

Western University (2020). Report of the Provost's Task Force for Online Education. https://provost.uwo.ca/pdf/planning_reports/OTF_final_report_2020June10.pdf

MODULE 2: PROGRAM VISION, FEASIBILITY, AND PLANNING

Creating a program is a journey that begins with your vision for the program. Where will your vision take you and how adventurous will the trip be?

Why create a new online program? Where do you begin? How can you plan for its success?

This module considers these questions and how the answers are often required and influenced by internal and external decision-makers who want to know the rationale and plans for the program before its approval and development. In this module, we explore some considerations, decision-making frameworks, and strategies that apply to the development of post-secondary credentials that align with the Ontario Qualifications Framework. If your institution uses other frameworks, the principles from this module are also applicable.

In the following video, we hear some ideas about what we should consider in deciding to create an online program from three educational leaders who have created successful online programs.

One or more interactive elements has been excluded from this version of the text. You can view

them online here: [*https://ecampusontario.pressbooks.pub/*](https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=34#oembed-1)
[*creatingsustainableonlineprograms/?p=34#oembed-1*](https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=34#oembed-1)

Learning Outcomes

By the end of *Unit 1: Creating and Aligning Program Vision*, you will be able to:

- Articulate a vision for the program that aligns with the program discipline(s) and reflects the needs of various stakeholders
- Articulate a vision that aligns with relevant institutional, provincial, and national strategies
- List the required and available resources for program development

You will take away:

- A process you can follow to develop a program vision statement that is aligned with institutional strategies
- A draft resource plan that identifies key partners and the consultations needed to assess the costs of your online program

---

By the end of *Unit 2: Determining the Program's Feasibility*, you will be able to:

- Understand the types of qualitative and quantitative data useful in determining feasibility
- Identify the data collection methods you want to use to demonstrate program feasibility
- Use qualitative and quantitative data to demonstrate the need for a new program
- Produce a business or feasibility plan that can be used for decisions about whether the program will be developed and delivered

You will take away:

- An appreciation of the qualitative and quantitative evidence that can be used to assess the

elements of the feasibility study

- A draft program proposal that has strong data-based justification

---

By the end of *Unit 3: Creating a Development and Implementation Plan*, you will be able to:

- Identify considerations for creating program learning outcomes (PLOs)
- Demonstrate knowledge of quality assurance frameworks, keeping them in mind as planning begins
- Develop a timeline for program development, including milestones
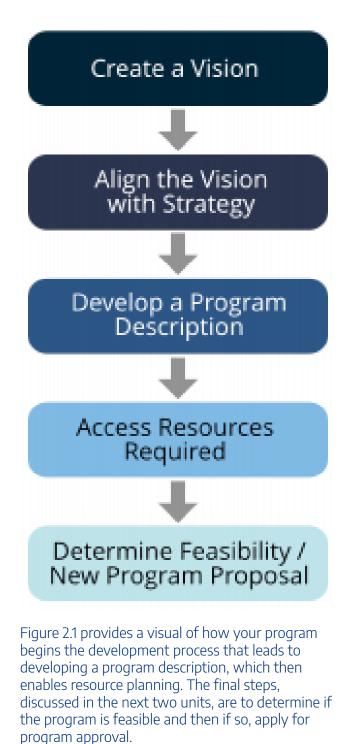
You will take away:

- Tools, processes and a framework to write your Program learning outcomes
- Tools to create the Development Plan for your new online program

Throughout this module, you will be prompted to reflect on key ideas and complete activities that will enable you to lead conversations and plan future action. You can keep track of your work by downloading and recording it in the **Program Design and Implementation Workbook**.

CREATING AND ALIGNING PROGRAM VISION

Greg Yantz

Create a Vision

↓

Align the Vision with Strategy

↓

Develop a Program Description

↓

Access Resources Required

↓

Determine Feasibility / New Program Proposal

Figure 2.1 provides a visual of how your program begins the development process that leads to developing a program description, which then enables resource planning. The final steps, discussed in the next two units, are to determine if the program is feasible and then if so, apply for program approval.

A vision is "a thought, concept, or object formed by the imagination" (Merriam–Webster, n.d.). When thinking about a vision for an online program, what do you imagine the new online program will be, and what does it include? What metrics will you use to measure success?

The program vision reflects the high-level goal(s) and purpose that form the foundation of any program framework; it is central to understanding the program, its needs, and if the goals you've set for the program have been met and can be sustained. If we think of program design as a journey, the vision is the destination,

and the trip to get there is the program development and implementation process. The teams that do this work need to understand and articulate the program vision so they can set program outcomes and goals, then measure and assess whether they have been met. In other words, the vision enables you to determine the destination and how you will know when you've arrived.

Learning Outcomes

By the end of this unit, you will be able to:
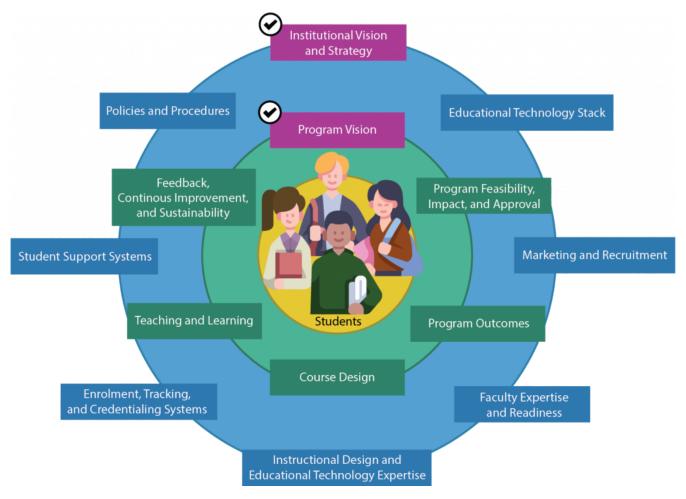
- Articulate a vision for the program that aligns with the discipline/s and reflects the needs of various stakeholders
- Articulate a vision that aligns with relevant institutional, provincial, and national strategies
- List the required and available resources for program development

You will take away:

- A process you can follow to develop a program vision statement that is aligned with institutional strategies
- A draft resource plan that identifies key partners and the consultations needed to assess the costs of your online program

This unit focuses on the **Institutional Vision** and **Program Vision** elements of the Online Program Ecosystem. Read more about the ecosystem in

Why Have a Program Vision?

Simon Sinek (2011) notes in *Start with Why: How Great Leaders Inspire Everyone to Take Action* that a starting point for any vision is determining an answer to the very basic "why" question. In the case of a new program, the answer to "why" addresses the core purpose or the reason for the program. Creating the vision requires collaboration by a team, both within an institution and potentially with those external to the institution who have subject matter expertise and knowledge about the discipline and its purpose. Creating a vision provides the foundation for the program, and the vision should be reviewed regularly to ensure the desired purpose and values for the program remain in focus.

Watch the first three minutes of Simon Sinek's video (TEDX Talks, 2009) about understanding your "why".

One or more interactive elements has been excluded from this version of the text. You can view

them online here: [https://ecampusontario.pressbooks.pub/](https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=37#oembed-1)
[creatingsustainableonlineprograms/?p=37#oembed-1](https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=37#oembed-1)

Workbook Activity: After viewing the video, can you clearly articulate the "why" for your online program? More importantly, is it evident to others? If you have a vision statement, add it to the Program Design and Implementation Workbook for future reference. Use the "What is Your Why" reflection activity that follows it help ensure that your vision is clear, relevant, and reflects the needs of all internal and external stakeholders. In some cases, you may find you need to engage in consultation and collaboration to answer those questions. We suggest processes for this in the "Creating an Online Program Vision" section below.

Do you know your "why"?

Your vision is the "why" behind your online program, and creating your vision focuses on reflection and discussion with others about the answer to "why?" as well as the foundational principles for the program.

As referenced throughout this book, collaboration is the action of working with others to produce or create something together that improves upon what could be done alone. In the case of creating a vision for an online program, collaboration means taking an **evidence-informed**, team approach to understanding the "why" behind the need for the program. At the high-level visioning stage, collaborators work together to address the following questions:

- Why is this program important?
- What are the unique advantages of the program—what makes it distinctive?
- How does the program contribute to the needs of the university or college community and the broader local, provincial, and global community?
- How do we define success in this program, and how will we know that the program has been successful (what metrics will you use)?

The above questions are useful when visioning *any* new program. There are also some additional questions specific to online programs that should be considered during your visioning process:

- Why online? What is your rationale for developing an online program specifically?
- How will offering the program online build institutional capacity by allowing connections with new types of students, whether in new geographical areas or those who were previously underserved?
- Does an online offering provide better access and flexibility for students?
- Is institutional strength enhanced through offering a program in an online delivery format?

Before we share more about how you might go about answering these questions and creating a program vision, let's hear from a leader who has experienced firsthand how important it is to create an evidence-based program vision that speaks to your strengths.

One or more interactive elements has been excluded from this version of the text. You can view them online here: [*https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=37#oembed-2*](https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=37#oembed-2)

Now that we've thought more about the importance of the online program vision, we can see how some of the "Do You Know Your Why?" questions are embedded in two real-world online program examples.

Examples of Program Vision Statements

❶ The Social Media Communications Program

The Social Media Communications Program develops intermediate-level critical thinking and writing skills together with technical knowledge of social media platforms. The goal of the program is to develop individuals who can understand and use social media in an ethical and meaningful way. The program provides graduates with the necessary background to enter the workforce as social media coordinators or social media strategists.

❷ The Higher Education Program

The Higher Education Program inspires and supports high-quality practice in community colleges, universities, and college transition programs throughout the region and nation. Its curriculum reflects leading-edge thinking in design as well as implementation, and its graduates routinely:

- assume leadership positions in teaching and administration in community colleges and universities throughout North Carolina and beyond;
- are relied upon as catalysts for meeting the evolving social, economic, political, and global challenges facing higher education; and
- are recognized for their strong academic preparation and achievements as they continue their education.

In addition, the Higher Education Program faculty is utilized as a vital professional development resource for community colleges and universities in the areas of instructional improvement, institutional leadership and change, college- and career-readiness, and college access and success for non-traditional and adult students. Faculty, students, and graduates, together with their partners in the field, promote effective and compassionate higher education practice at the individual, program, and institutional level and proactively negotiate the shifting demands of an increasingly diverse and complex world. (Appalachian State University, n.d.)

Creating an Online Program Vision

As you might have guessed from the "Do You Know Your Why?" questions and video, creating an online program vision involves gathering information from multiple stakeholders and data sources. While the process you use for this may be guided by your institutional policies and procedures, there are some common stakeholders and steps that will contribute to your visioning success.

Identify Program Stakeholders

Identify individuals to be included in the discussion and creation of the vision. Individuals or groups involved in visioning should be able to respond to the "why" for the potential program idea and articulate how a successful program will create impact. Examples of individuals or groups to include:

- Current faculty who are experts on the topic or discipline
- Experts in online delivery, such as educational developers or online curriculum specialists, instructional designers, and learning management system specialists
- Community partners who may also be subject matter experts, want to hire graduates and know what is required to be successful
- Current students and potentially those who may be interested in taking the program
- Alumni who may have an interest or expertise in the subject area
- Administrators and staff who will need to support the program such as librarians, academic advisors, marketers, recruiters, and those from international focused areas of the institution
- Individuals who can provide expertise specific to equity, diversity, and inclusion and First Nations, Inuit, and Metis knowledge

Create a Plan Where Stakeholders Can Exchange Ideas and Information

Most commonly, you might organize a series of meetings or a retreat with the visioning team. Retreats work best as a way to focus the discussion and make the most efficient use of everyone's time. Not everyone can always make in-person meetings, however, so consider how you might also collect data using surveys or shared documents such as a Google Doc or Office 365. One facilitation model for holding a visioning retreat is a Strengths, Opportunities, Aspirations, and Results (SOAR) retreat, described in more detail below. An example facilitation plan is also included at the end of this unit.

We suggest a smaller, core group be responsible for drafting the vision after an initial visioning retreat or series of meetings. They can then circulate the draft to the larger group for feedback and make any final revisions. And remember, you are visioning for an *online* program, so part of your discussion should be related to the "why" of developing the program for an online audience.

Creating an Online Program Vision in Five Steps

The process for creating a vision will commonly follow four steps:

1. Complete a creative/drafting process (e.g., SOAR retreat)
2. Create a draft program vision
3. Collect reflection and feedback comments from stakeholders on the draft vision
4. Revision of the vision statement (and sometimes back to step 2, as necessary)
5. Finalize the vision statement & share it with the community (note: steps 3-5 may be repeated depending on feedback at this point)

Example Visioning Retreat Process: SOAR

What is SOAR?

"SOAR (an acronym for Strengths, Opportunities, Aspirations, and Results) is a framework to guide strategic conversations related to leveraging and building on academic program strengths. A SOAR retreat allows those envisioning an online program to take a strengths-based and data-driven approach to curricular visioning and planning. Retreat participants can include a range of program stakeholders (instructors, administrative staff, students, employers) to ensure that program visioning incorporates a broad set of perspectives." – (Anstey & Haque, n.d.)

STRENGTHS   **OPPORTUNITIES**   **ASPIRATIONS**   **RESULTS**

The following SOAR resources can be used and modified as necessary to plan and facilitate a program visioning retreat:

- Creative/drafting process Sample Retreat (Anstey & Haque, n.d.)
- SOAR Facilitator Notes (Hundey, et al., 2019)
- SOAR Retreat Participant Agenda (Hundey, et al., 2019)

Workbook Activity: Use the "What is Your Why" questions and/or a process such as the SOAR retreat to collaborate with your program stakeholders to discover and document guiding information and beliefs about the purpose of your program. You can then use these answers to draft a program vision. If you already have a vision in place, consider undergoing the same activity to ensure that it reflects an up-to-date vision for your program. Once you've answered the questions, follow the steps for drafting and finalizing your program vision, then add it to the workbook for use in future documents and as something to reflect on as program development continues.

Aligning Your Vision

Once you have developed your Program Vision, aligning it with other institutional strategies will support the rationale for its development. Decision-makers want to know why they should provide resources for a new online program and how it will contribute to, or benefit from, institutional and provincial strategies. Alignment with external requirements, such as accreditation standards or strategic goals, is also often required for Ministry approval and funding, particularly for colleges. In these instances, it is important to align the strategic goals and any external requirements with the vision for the program so that its connections can be clearly seen by everyone. Beyond simply the "why," it requires thought with respect to other factors such as cost and resources. As we discuss later, there is a connection between alignment with strategic goals and the feasibility of an online program.

Workbook Activity: After reflecting on the strategic goals and external requirements relevant to your online program, write down your top 3-5 priorities in the workbook that align your program vision to larger strategies.

For example:

1. The program vision must align to the new institutional eLearning or Online Learning Strategy for funding purposes.
2. The program vision must align with the new Strategic Mandate Agreement (SMA).
3. The program vision must align with several key areas of the institution's strategic plan.

If you used the SOAR retreat to articulate your vision, you have already identified key areas to consider for alignment and have noted them in the workbook. If not, then an example and template for aligning the vision to strategies and requirements are provided below. Collaboration with those previously identified to support vision creation will provide the best outcome, and collaboration is important for the inclusion of different perspectives as well as creating buy-in for the program. Remember: this alignment is used to articulate the need for an online program and as a metric for program success. The exercise is best completed at a meeting of the group where the final program vision is provided in advance along with a request to reflect before the meeting discussion.

The following links provide examples of external strategies or requirements to which you might align your program if relevant:

- [eCampusOntario](#)
- [Ministry of Colleges and Universities](#)
- [Council of Ontario Universities](#)
- [Ontario College Quality Assurance Service](#)
- [Postsecondary Education Quality Assessment Board](#)
- [Colleges Ontario](#)
- [Higher Education Quality Council of Ontario](#)
- [Ontario Universities Council on Quality Assurance](#)

Example of Articulating and Aligning the Program Vision to Institutional Strategies:

Program Vision Statement:

Develop an online program that will provide students with interdisciplinary knowledge about artificial intelligence and prepare them to work in the IT sector.

Institutional Strategy: **Alignment to Vision:**

Strategic Mandate Agreement (SMA)   Selected IT programs are an area of institutional approved focus and this program topic is included as an IT program

Digital & eLearning Strategy   The strategy identifies a target for increasing the number of online programs and this supports that goal

President's Target for New Programs   There is an institutional target for the creation of a specific number of new programs each year and this supports that goal

Ministry of Colleges and Universities (MCU) Funding Approval   Funding requests require a vision as part of the program rationale and this vision meets that requirement

Institutional Strategic Plan   The key goal of the strategic plan is to increase access to historically underrepresented populations and offering this program online in a flexible timetabling format will provide access to those unable to attend classes in person.

Creating a Program Description

Using the information you created to this point, write a brief, informative description of the new program that provides high-level insight for those who need to understand it. This should be no more than one or two paragraphs that summarize the program and that can be modified for later use in websites, brochures, and other marketing documents. You will also use this for the New Program Proposal later in this module. In some cases, the program vision itself will satisfy the need for a program description, whereas in other instances it may need to be expanded slightly. Algonquin College provides some helpful tips for writing program descriptions:

Broadly speaking, the tone of all Program Descriptions is engaging and reader-friendly. Program Descriptions engage the audience by employing the following editorial tips:

- Use the active voice and present tense (avoid the use of the word "will")
- Use personal pronouns to address readers directly (e.g., "you" and "yours")
- Use simple sentence structure and concise language
- Use inclusive, gender-neutral language

(Algonquin College, n.d.)

Program Description Examples

❶ Major in Popular Music Studies at Western University

The BA (Major in Popular Music Studies) is a module unique to Western University that engages students with the interdisciplinary nature of the study of popular music. The program incorporates three dimensions:

- Practical subjects, including song writing and analysis of popular songs and recordings
- Recording practice
- Critical study of musical styles, recordings, artists, and genres in their broader historical and cultural contexts.

In addition to courses in popular music and culture, the program includes post-1945 popular music, musical theatre, jazz, and more advanced courses on indigenous music and music of the

world, film studies, literature, and sociology. Introductory and advanced courses in song writing and desktop music production allow students to compose, produce, and record their own music (Western Music, n.d.).

❷ General BA in English at Queen's University

When you study English online at Queen's with this General BA, you'll learn to read perceptively, analyze clearly, and communicate effectively. You'll explore writers such as Shakespeare, Austen, and Bronte, but also engage with current forms such as graphic novels and works of contemporary writers (Queens University, n.d.).

❸ Oneida Language Immersion, Culture, and Teaching at Fanshawe College

The Oneida Language Immersion, Culture, and Teaching program is an Ontario College Advanced Diploma (Accelerated) offered in-community at the Oneida settlement, southwest of London, Ontario. This program includes immersive language learning that prepares students for a variety of language-related careers including teacher of On^yote'a:ka as a second language, translator, language consultant, language specialist or storyteller. The program's unique structure supports the building of language skills and enables the immersive and cultural integration qualities of the curriculum. Students will learn best teaching practices such as classroom management, lesson planning and education theory, which will provide a pathway to further studies in teaching. The program is intensive by its very nature and requires a strong commitment from students to attend each lesson and take advantage of practice opportunities. Students may find employment in school boards, communities, government agencies, educational facilities and more (Fanshawe College, n.d.).

Considering Barriers to Online Program Development

You have now collaborated to create a vision, aligned it with strategies, and used all that information to draft a program description. Before moving to determine the resources required and the feasibility of the program, it's useful to reflect on the challenges that might be faced. This will help inform what is needed in terms of resources to overcome the challenges in developing an online program. In the video below are some examples of challenges faced by others.

> *One or more interactive elements has been excluded from this version of the text. You can view them online here:* [*https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=37#oembed-3*](https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=37#oembed-3)

Online Program Development Resource Assessment

Determining costs and other resource needs requires collaboration with those who have the knowledge and expertise to provide accurate estimates. For example, the administrator of the Learning Management System (LMS) can provide information about any additional LMS costs associated with an online program, such as licensing. The Finance and Human Resource Departments can provide samples of costs for other online programs and resources, and the Information Technology (IT) Department can provide information about software that may already be supported or that will need to be purchased. Consultations are necessary to support an accurate cost assessment, and such collaboration will also legitimate the feasibility of the program. In the video below, two educational leaders discuss some of the main challenges and opportunities related to resourcing and sustaining online programs.
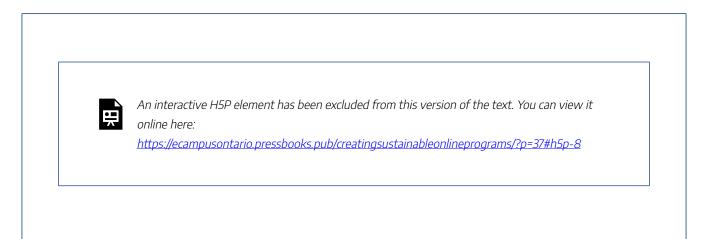
> *One or more interactive elements has been excluded from this version of the text. You can view them online here:* [*https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=37#oembed-4*](https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=37#oembed-4)

As you can see, from the video, articulating the vision for a new program naturally leads to questions about the necessary resources to realize that vision. If the vision is the "why," then resources are the "who" and "what" in terms of the needs for creating the new online program. If you followed the SOAR process for visioning—or even if you used another approach—various resource needs may have been identified and discussed as part of creating the program vision. The workbook activity below will allow you to list those needs in preparation for a more detailed business plan in the next section on feasibility, including:

- Creating a list of what is necessary to develop the program: assessing resources in this section can be specific to program development needs or the resources for delivering the program itself. For example, developing the program may require hiring a subject matter expert to support the creation of program learning outcomes and course content, and delivering the program may require IT infrastructure or software investment in the **educational technology stack**.
- Identifying which resources on the checklist currently exist and which need to be acquired.
- Identifying costs for development and for the program itself (this can be used for the next unit on program feasibility)
- Starting to consider who you might need to hire as an additional resource and the cost associated with the hire. Use the interactive object below to click through a list of possible roles that might support your program development. Note that some of these roles may already exist at your institution and be available to work with you at no additional charge. Part of your feasibility planning will be to determine to what extent you need to budget for the necessary expertise and where it is available in kind.

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=37#h5p-8

Workbook Activity: Complete the list of required resources in the workbook for use in your New Program Proposal.

Sample:

Required Resources

Resource	Contact for Consultation/Information/Support
Subject matter experts to support costing of equipment and development of learning outcomes	Associate Dean, Department Administrator, or Human Resources to determine the cost for hiring
Full time or part-time faculty to develop course curriculum	Associate Dean, Department Administrator, or Human Resources to determine the cost for hiring
Software or technology infrastructure expense (e.g., simulation software, servers)	IT Administrator, LMS Administrator
Operational expense (e.g., consumables that are used for the program each time it is offered, software)	Department Administrator, Finance Department
Non-faculty human resource needs (e.g., lab technicians, teaching assistants, program coordinator)	Department Administrator, Human Resources Department
Marketing (e.g., recruiting, promotion items, advertising)	Marketing Department or Department Communications/Marketing
One-time start-up expenses (e.g., launch event, travel, professional development)	Marketing Department or Department Communications/Marketing
Library resources (e.g., purchase of new resources such as e-books, journal articles, software)	Librarian/s
Additional student service supports (e.g., specialized career service support, additional resources for accessibility, counselling, and advising resources)	Administrators in Student Services or the International Office depending on needs
Other:	

Unit Resources

Unit Resources

- [Sample – SOAR Retreat](#)
- [SOAR Facilitator Notes](#)
- [Template SOAR Agenda for Participants](#)
- [Module 2 Video Playlist](#)

DETERMINING THE PROGRAM'S FEASIBILITY FOR APPROVAL

Greg Yantz

In the previous unit, you focused on creating a program vision, description, and getting a sense of the resources necessary to create your online program. You're now ready to determine if the program is feasible. Decision-makers who approve new programs, whether internal or external, often ask about program feasibility with a focus on the financial "bottom line," and there may be other considerations too, such as the potential for enhancing community connections, meeting a societal need, or developing prestige for a department or Faculty. Your institution may have a formal process to determine feasibility based on a new product development model such as Stage-Gate or it may be a more informal or formal process with a committee or decision-maker. Regardless, program leaders need to collect and share evidence that the program meets institutional and often provincial criteria for feasibility. Evidence-informed decision-making is core for determining whether a program can move forward and be developed.

Learning Objectives
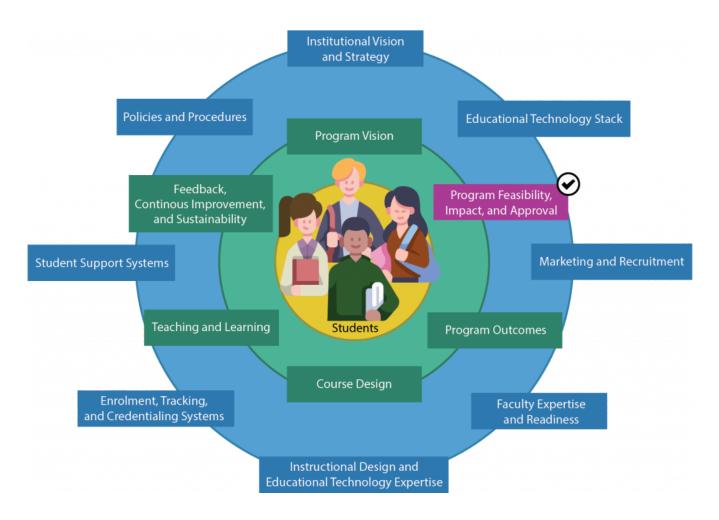
By the end of this unit, you will be able to:

- Understand the types of qualitative and quantitative data useful in determining feasibility
- Identify the data collection methods you want to use to demonstrate program feasibility
- Use qualitative and quantitative data to demonstrate the need for a new program
- Produce a business or feasibility plan that can be used for decisions about whether the program will be developed and delivered

You will take away:

- An appreciation of the qualitative and quantitative evidence that can be used to assess the elements of the feasibility study

- A draft program proposal that has strong data-based justification

This unit focuses on the Program Feasibility, Impact, and Approval elements of the Online Program Ecosystem. Read more about the ecosystem in [Module 1, Unit 1: Collaborating to Create the Online Learner Life Cycle and its Ecosystem](#)

The following are elements generally included in a feasibility or business plan for a new online program. Each element also includes some ways in which data can be collected to demonstrate feasibility.

Labour Market Demand

Understanding employment opportunities for program graduates is especially important for applied programs or professional programs that require evidence of employment after graduation for provincial funding. For example, evidence of labour market demand is required when Ontario community colleges apply for credential validation and provincial funding. This information can be shared through quantitative or qualitative data. In other online programs, for example, those that are not directly tied to the labour market in a specific industry or accreditation, qualitative data collection methods can be used to demonstrate the importance of transferrable skills or pathways to future careers, graduate school, or other educational training. You can also combine quantitative and qualitative data in your feasibility study.

   Possible sources of quantitative data: Institutional Research Departments can support the collection of labour market demand for a specific occupation and a specific region. For example, by using the [National Occupation Code (NOC)](), it's possible to pull quantitative data from [EMSI]() or other national databases that document this demand. Finding a close match between the NOC and the program is challenging; consulting with experts in Institutional Research or Planning is advisable.

   Possible sources of qualitative data: Focus groups with employers, community members, or other stakeholders such as scholars in the field can provide a sense of whether there would be future educational pathways or jobs available for graduates as well as the type of job opportunities. "External focus groups" can also be consulted about the types of training they see as important which, in turn, will inform curriculum requirements. This example of an external focus group meeting agenda provides possible discussion topics in an external focus group: [External Advisory Panel Agenda]() (Fanshawe College, 2021).

> 🔎 **Evidence to validate employment demand can be based on the following sources:**
>
> - Trend data (employment trends for related employment)
> - Other data sources (e.g., local, provincial, national and/or international economic development corporations, industry/professional associations)
> - Feedback and/or letters of support from a related Program Advisory Committee, external advisory panel, or potential employers of co-operative education students and/or graduates

Student Demand

Understanding how many students may enrol in a program will support any required financial modelling.

Possible sources of quantitative data: Institutional Research/Planning or the Admissions Office/ Registrar can provide data from [Ontario College Application Service (OCAS)](#) or [Ontario Universities' Application Centre(OUAC)](#) that demonstrate enrolment trends for the same or similar programs offered at other colleges or universities.

Possible sources of qualitative data: Focus groups with current students or with graduates of related, pathway, or comparable programs provide a sense of future demand. This [Student Focus Group Sample Agenda](#) (Fanshawe College, 2021) provides you with the topics that could be discussed and noted for determining feasibility and for future curriculum or marketing.

Note: For community colleges, evidence of student demand is required when applying for credential validation and provincial funding.

> 🔍 **Evidence to validate domestic and international student demand can be gathered from the following sources:**
>
> - Enrolment summaries and growth trends for similar programs
> - Demographic projections for relevant sub-populations
> - Recruiter feedback
> - Student feedback – survey, focus group

Societal Need

The new program idea could be so innovative or emergent that no labour market or student data exists. It might also be that the program feasibility is being evaluated based on contribution to scholarship and knowledge, community or social impact, or other factors that do not align solely with financial considerations. In this instance, the goal is to provide a rationale that is based on scholarly evidence and citations that support the need for the new program. Evidence can also include:

- outcomes from scholarly conferences
- research questions raised in journals or other publications
- information from conversations with community partners, and/or

- local, regional, national, or global calls to action

🔎 **Evidence to validate societal need can be gathered from the following sources:**

- Academic sources such as journals or other scholarly publications
- Panels and outcomes from attending scholarly conferences
- Focus groups with community partners or with scholars in the field
- Local through to global calls to action
- Local, provincial, or federal policies or strategic priorities

Financial Feasibility

Financial feasibility can literally be the million-dollar question depending on how many and which types of resources are required to deliver the program. In general (and depending on your institutional context), the goal for financial feasibility is to determine what the costs are and if the revenues can cover the costs or, in some cases, provide excess revenue that can be used to support other initiatives or improve/grow the program. It may be that it is acceptable for the program to operate at a financial loss for some time or if the societal need for the program outweighs financial feasibility to some extent. In some instances, you can use a traditional business Profit and Loss Statement (P&L) ([Sample Profit and Loss Statement](#), Fanshawe College, 2021) to demonstrate financial feasibility for a specific offering. If there is a need to explore profitability over a longer time horizon, then a Net Present Value (NPV) is an option for a five or ten-year timeframe ([NPV sample](#), Fanshawe College, 2021).

Regardless of the method to project financial feasibility, you will need to use your list of required resources, and their cost, as an input. While ongoing costs are often–but not always!–reduced once an online program is implemented, the required start-up costs, which are often more than in traditional, in-person delivery formats, as well as the costs related to sustaining the program, need to be accounted for. In instances where the program is not financially viable, alternate options that reduce costs may need to be explored. Determining cost-saving will require further collaboration and consultation to determine if other software might be used or if hiring needs can be reconsidered, as two examples. Return to your previous list of required resources to determine areas where cost savings can support better financial outcomes, and don't forget that collaboration plays a vital role in gathering all the information you need and where reductions might be possible without compromising the effectiveness of the program.

Understanding the funding model for the institution is important in deciding how to account for whether

an online program is feasible. For example, provincial funding in Ontario is now based on a corridor funding model. In this model, incremental student enrolment provides only additional tuition revenues since the institution is provided with a constant grant amount as long as domestic enrolment levels remain within the allowable corridor. For other models, such as with professional schools, there is no government funding, and so revenue is calculated on a student-by-student basis and the model is entirely cost-recovery.

> 🔎 **Evidence to validate the program is affordable by determining if revenue exceeds costs:**
>
> - Profit and Loss Statement can provide a minimum number of students necessary to offer a program or course
> - Net Present Value provides a sense of financial viability over a longer time horizon

Other Considerations

At this point, refer back to the institutional strategies and external requirements for the alignment list you created in the "Creating and Aligning Program Vision" unit in this module to determine if there are other factors that need to be considered with respect to feasibility. For example, if the new program must align with the SMA, then it's important to factor that into your business plan and calculations. Or perhaps all-new programs at your institution must include a commitment to equity, diversity, and inclusion that needs to be noted in the business plan together with the required resources.

In the workbook, there is a space for noting the required elements with respect to alignment, and you can use those to highlight costs and the intention of including them in the new online program.

Feasibility Meeting

Holding a Feasibility Meeting with stakeholders provides validation of all the elements necessary for a business plan; it allows everyone to double-check various assumptions that have been made about the new online program. The [School Feasibility Meeting](#) (Fanshawe College, 2021) and [School Feasibility Meeting Preparation Checklist](#) (Fanshawe College, 2021) can be used to support both the preparation and meeting.

New Program Proposal

Using the program vision, description, and feasibility materials, program leaders can now move on to begin creating a New Program Proposal. An example of one Program Proposal template is located in the **Program Development and Implementation Workbook**.

   The program proposal can be used for decision-makers within an institution as well as for those external to the institution that are reviewing proposals for credential validation and funding. It provides a business plan for the new program and a way to summarize aspects of the program for later use in developing curriculum or in reviewing success.

Unit Resources

Unit Resources

- External Advisory Panel Agenda
- Student Focus Group Sample Agenda
- Sample Profit and Loss Statement
- NPV sample
- School Feasibility Meeting
- School Feasibility Meeting Preparation Checklist
- Module 2 Video Playlist

PLANNING OUT THE PROGRAM

Greg Yantz

In Unit 1 of this module, "Creating and Aligning Program Vision," you began creating a blueprint with your collaborators for an online program by identifying the program's "why" and end goal (program vision). In Unit 2, you analyzed whether it was feasible to begin the journey to program development. Now it's time to develop the blueprint further as well as plan your journey to the final program destination. You can now create your Program Outcomes. create your plan for the structure of the program, and estimate how long it will take to finish development and launch. As noted throughout this Pressbook, you need to collaborate to be successful with program development, and this is especially true with respect to program planning. As you begin the early stages, include and communicate with stakeholders in your online program ecosystem regularly—it will support your ability to meet timelines and successfully launch the new program.

Learning Objectives
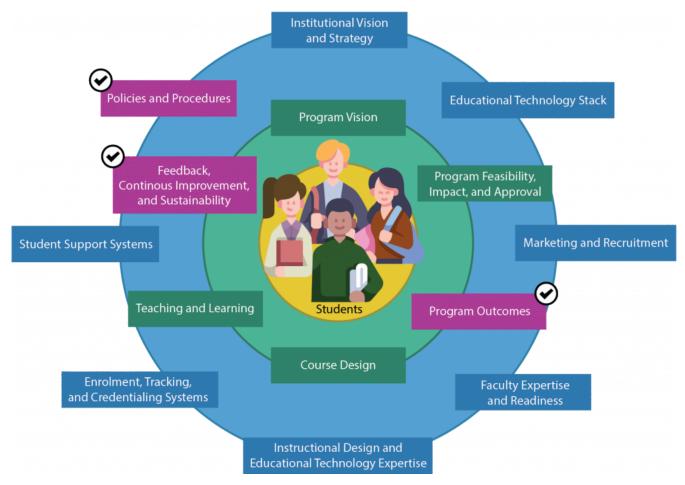
By the end of this unit, you will be able to:

- Identify considerations for creating program learning outcomes (PLOs)
- Demonstrate knowledge of institutional quality assurance (QA) frameworks and supports by mapping a QA process
- Develop a timeline for program development, including milestones

You will take away:

- Tools, processes and a framework to write your Program learning outcomes
- Tools to create the Development Plan for your new online program

This unit focuses on the Policies and Procedures, Program Outcomes, Feedback, Continuous Improvement, and Sustainability elements of the Online Program Ecosystem. Read more about the ecosystem in [Module 1, Unit 1: Collaborating to Create the Online Learner Life Cycle and its Ecosystem](#)

Pre-Check: Assess Where You're At in the Program Planning Process

Complete the branching scenario below to assess where you're at in the program planning process.

An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=41#h5p-5

What are Program Learning Outcomes?

Learning outcomes are statements that specify what learners will know or be able to do when they graduate (Ontario College Quality Assurance Service, 2019).

Writing Program Learning outcomes is about taking your program vision and expressing it so that it defines the destination for the students as they move through their learning journey during the program. Program Learning Outcomes inform decision-making about **course design**, so it may be useful to also consider course design at the same time given that course outcomes will need to eventually be mapped to program outcomes. Normally this is a linear process that begins with the program outcomes, which then inform subsequent curriculum development. It is this scaffolding that holds the academic elements of the program together. Watch the video below to hear one leader's comments on important considerations for how Program Learning Outcomes guide program development.

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=41#oembed-1

Considerations for Writing Program Learning Outcomes

It's worth noting that there is no difference between the process of creating program learning outcomes for online programs compared to in-person programs. There *may* be some differences in the outcomes themselves, for example, an online program's outcomes can include the ability to understand and use certain technologies, but the process for writing the outcomes is the same. There are also important considerations to take into account depending on your institutional context. And, as always, taking a collaborative approach to writing your outcomes is best.

❶ **Are there required program learning outcomes?**

Colleges in Ontario, for example, differentiate between program standards (see [Published College Program Standards](), Ontario Ministry of Colleges and Universities), where the Ministry defines program outcomes as well as other required program elements such as essential employability skills, and program descriptions, where there are often developed program learning outcomes that serve as a "starting point for program development and review across the college system" (Ontario College Quality Assurance Service, 2021, p. 9). There is more flexibility–and work–involved with defining program learning outcomes for programs that fall under the program description category. Consult [The Credential Validation Service (CVS) Handbook for New Program Submissions and Program Modifications]() (Ontario College Quality Assurance Service, 2021) prior to developing learning outcomes so that you know what is necessary for your specific program.

Accredited programs are another example where specific learning outcomes may be required. Consult the relevant accrediting body to determine the requirements prior to developing the outcomes.

In Ontario, there are also degree level standards to consider that, "identify the knowledge and skills expected of graduates of bachelor's, honors bachelor's, master's and doctoral degree programs in Ontario" (PEQAB, 2021, p.24). Consult the [Manual for Public Organizations (including Ontario Colleges)]() (PEQAB, 2021) to be sure the development team understands degree-level requirements. This will be important in later application to the Post-Secondary Education Quality Assessment Board (PEQAB) Board for approval.

❷ **Are there program learning outcomes already available at other universities or colleges?**

While you will want to modify program learning outcomes to fit the vision for your online program, a quick environmental scan of websites for other program outcomes that are the same or similar will provide a start for thinking about your outcomes and this can save significant time.

❸ **How will the program learning outcomes connect with the course outcomes?**

Consider how the larger scaffolding of program outcomes will fit with the course-specific outcomes. For example, which course will introduce the program outcome? Which course provides culminating assessments for the outcomes? Keeping this in mind and note various connections that will facilitate the development of course outcomes and assessments later in the development process.

❹ **Who needs to be involved in the creation of program learning outcomes?**

- Subject matter experts who can provide expertise regarding the knowledge and skills necessary for the specific discipline or area of study
- Subject matter experts who can support the use of an inclusive framework for developing learning outcomes so that they include a diverse perspective and a non-colonial approach.
- Education consultants who have expertise in writing the outcomes and can support with language suggestions.
- Potential students in the program

Writing Program Learning Outcomes

You will find that writing program learning outcomes can be challenging. Keep returning to your program vision to ensure your team has the destination in mind as the outcomes are being developed. And return to the resources provided by your institution and in this unit to support you in writing the outcomes.

"Go shopping for the right verb." – Lauren Anstey

Aligning with the appropriate domain of learning is also a challenge. Remember that outcomes can be presented and assessed at different levels multiple times throughout the program. Some outcomes may need

to be reinforced. If your team does not have training in education, be sure to enlist experts in this area to provide advice. Finding the right words, specifically the action verb that describes what the students will learn, can be most challenging. Sometimes it feels as though all of the outcomes begin to sound the same after a while. Western University provides a [simple guide for writing program-level learning outcomes](#) that includes writing tips, taxonomies of verbs, and examples of program learning outcomes from the cognitive (knowledge-based), affective (values, attitudes, or emotion-based), or psychomotor (physical skills) based learning domains. A simple Google search for verbs for learning outcomes can help too, for example, you will find sites like Montana State's [Bloom's Action Verbs for Learning Outcomes](#) or SUNY Potsdam's [Action-Verb-List-For-Writing-Student-Outcomes.pdf](#) (2003). Similarly, collaborating as a team with subject matter experts and education consultants will allow for multiple perspectives and ideas with respect to word choice.

It can also be a challenge to incorporate equity, diversity, and inclusion (EDI) in your program learning outcomes. New scholarship on this is emerging all the time, and there are resources available such as the notion of equity-focused principles, strategies, and resources at the University of Michigan Centre for Research on Learning & Teaching ([Equity-focused Principles, Strategies & Resources](#)). As a team, be sure to continuously reflect on the principles you want included with respect to EDI.

Remember, at the end of the writing process, the program collaborators and stakeholders should be able to agree that the Program Learning Outcomes capture the key knowledge, skills, and attitudes that a successful graduate of the program will acquire. As a final check, be sure to review if the learning outcomes align with the vision and description of the program. See this sample [Program Learning Outcomes Retreat](#) and the resource about [Faculty-Driven Program Learning Outcomes](#) to help with your strategy for the writing process.

Additional resources that support you in how to write effective outcomes can be found within an institution's Centre for Teaching and Learning, or from accrediting and quality assurance bodies such as the Ontario College Quality Assurance Service (OCQAS) for colleges. We've included some of these resources below.

Resources for Writing Learning Outcomes

- [Bloom's Taxonomy](#) (A foundational understanding of Bloom's taxonomy and the principles of learning outcomes will be helpful as background.)
- [Writing Vocational Learning Outcomes](#) (Ontario College Quality Assurance Service, 2019)
- [Developing Effective Learning Outcomes, A Practical Guide](#) (Queen's University, Centre for

Teaching and Learning)
- The Educational Value of Course-level Learning Objectives/Outcomes (Carnegie Mellon, Eberly Center for Teaching Excellence)

Write Program Learning Outcomes

Workbook Activity: In the Program Development and Implementation Workbook, use the chart provided to list your program learning outcomes. This will be used to map your courses and their specific learning outcomes in Module 3.

Provincial Program Outcomes for Program Standard, or Program Description (if applicable)	Proposed Program Learning Outcomes	Equity-focused principles included in program learning outcomes

Program Learning Outcomes and Quality Assurance/Sustainability

Module 4 addresses considerations for sustainability with specific reference to the unique needs of delivering online. At this stage, as you are planning the program, keep the various internal and external quality assurance processes in mind because you will need to provide evidence about how the program was created in a collaborative manner, how learning outcomes were developed and mapped, and how the online program is being evaluated through development and launch. In addition, formal review processes will be undertaken at various points in the program's future, and this is included as part of policy, both institutional policy and Ministry policy. Listen as one online program development leader talks about their journey in considering how they looked to the future of the program from the outset of program design.

One or more interactive elements has been excluded from this version of the text. You can view them online here: *https://ecampusontario.pressbooks.pub/ creatingsustainableonlineprograms/?p=41#oembed-2*

In the video above, Cebert touches on some key questions related to program outcomes, quality assurance, and sustainability:

How will the quality of the program be formally reviewed in the future?

There are formal processes such as degree renewal through PEQAB, or the College Quality Assurance Audit Process (CQAAP) that take place every five years. These audits have specific requirements related to learning outcomes and curriculum that must be included, such as breadth requirements or Essential Employability Skills, and they require provision of evidence that continuous improvement is being considered through various internal processes, including from the very start of the program delivery. Evidence is important—both in terms of process and continuous improvement. Keep all the materials, for example the meeting notes and the curriculum maps, that were created as part of the development process because they will be your evidence.

What should I consider for future quality assurance/sustainability from the beginning?

Informal processes are necessary to ensure that the program vision and program learning outcomes continue to be achieved. Ideally, they include an annual process of reflection for the program team as well as a formal internal review process every 3 to 5 years. Considerations for both the annual reflection and internal review include, but are not limited to, questions such as:

- Is the student voice included? Whether through surveys or focus groups, student feedback is a part of any review process and serves as an important feedback loop for continuous improvement.
- Are the relevant community partners or academic colleagues included? These are the partners who will advise about changes in the environment, whether labour market or new scholarship that will inform changes to the curriculum for continuous improvement.
- Are the roles and units that support your overall online program ecosystem involved? For example, if you have introduced new tools and technologies, have you consulted with IT or Educational Technology Units to see if your changes are sustainable?
- Are equity, diversity, inclusion, and anti-colonial perspectives included in the feedback? Having the right partners for providing this feedback is vital to ensure continuous improvement in this area.

Workbook Activity: In your workbook, there is a space to include the processes and partners

that need to be considered as part of program quality assurance. Review the process requirements with respect to evidence and other needs, and be sure to include partners as part of your development meetings since they can continue to be champions for the online program in the future. It is never too early to begin collecting evidence for continuous improvement and program sustainability!

Creating an Online Program Development Plan

You have your vision. You have your program description and your program learning outcomes, and you are collecting various pieces of evidence for future quality assurance processes. Now what?

The next step is to develop a plan for your online program's development. Leaders at the institution will want to know when the program will launch for budget and recruiting considerations. The plan needs to include the timelines and milestones for development. For example, if you want to launch the new online program in an upcoming fall semester, and you know that internal and external approvals will take up to eight months and that you have to hire and train several new roles to develop the program, then you need to work backwards from your launch date to determine when various items will be needed.

The importance of timelines and setting expectations about timelines for approval is vital to planning effectively. Approvals will often take a year or more and are normally required before the development can take place. Creating a schedule for your institution of various approval milestones will support your planning, as this example illustrates:

Idea Submission Deadline	Internal Approval (Department or School)	Internal Approval (Faculty or Institution)	Board of Governors or Senate		Credential Validation Service (Colleges) or PEQAB	Ministry (MCU)	Curriculum Development
			Materials Due	Meeting Date			
November 20, 2020	December 18, 2020	April 27, 2021	August 19, 2021	September 23, 2021	2-3 weeks for CVS	Months	4-6 weeks
			October 21, 2021	November 25, 2021	Months for new degrees		
February 19, 2021	April 20, 2021	September 20, 2021	December 23, 2021	January 27, 2022			
			January 20, 2022	February 24, 2022			
June 18, 2021	September 21, 2021	November 29, 2021	February 17, 2022	March 24, 2022			
			March 24, 2022	April 28, 2022			
September 17, 2021	November 23, 2021	February 2022 (TBC)	May 19, 2022	June 23, 2022			
			August 2022 (TBC)	September 2022 (TBC)			

Using the example above, for a new college diploma with an idea generated by February 19, 2021, the graphic below demonstrates the projected timeline.

Faculty/Institution Approval
September 2021

CVS Approval
February 2022

Development
July-August 2022

School Approval
April 2021

Board Approval
January 2022

MCU Approval
June 2022

Launch
September 2023*

*At the earliest

Specific collaborators should be included in developing the plan as they can help you create realistic timelines for each part of the development process, particularly the development phase, which generally takes much longer than for in-person course development (anywhere from 4 months to a year for a course, not including any hiring or software/hardware integration that you may need to do). In this instance, they will include your subject matter experts and those roles noted earlier in Unit 2 of this module because they will be accountable for various deliverables and can advise on realistic timelines. If you have innovative or new-to-you aspects of your program, then review the information in Module 1, Unit 2, which will help you decide which partners you might collaborate with and the questions you can ask to help clarify what needs to be developed and the time and resources it will take. The Program Development and Implementation Workbook has a sample agenda for a planning meeting to determine what is available, what is then needed, and when things must be delivered to meet the launch date.

Consider the following when planning the online program development:

- Which collaborator will be required to complete which task?
- When do you plan to submit for Ministry approval? For colleges, this also requires validation by the Credential Validation Service (CVS) and course descriptions are required and their development needs to be included in the plan. There will be other considerations like this that need to be included.
- What are the timelines for approvals and launch?

Unit Resources

- [Bloom's Taxonomy](#)
- [Writing Vocational Learning Outcomes](#)
- [Developing Effective Learning Outcomes, A Practical Guide](#)
- [Learning Outcomes](#)
- [The Educational Value of Course-level Learning Objectives/Outcomes](#) (Carnegie Mellon, Eberly Center for Teaching Excellence)
- [Module 2 Video Playlist](#)

CONCLUSION AND REFERENCES

Greg Yantz

This Module has provided information and resources to assist you as you begin planning for a new, online program. It focused on pragmatic process issues, beginning with identifying your destination—your vision—and working through the feasibility of your program as well as the initial planning for the online program. Module 3 will now move deeper into the program creation process by providing information about course and instructional design in an online environment.

References

Algonquin College. (n.d.). Program Development. https://www.algonquincollege.com/program-development/program-development/

Anstey, L. Haque, A. (n.d.). *SOAR Retreat*. Centre for Teaching and Learning at Western University. https://teaching.uwo.ca/pdf/curriculum/Sample%20Retreat%20-%20SOAR%20Retreat.pdf

Appalachian State University | Higher Education. (n.d.). *Mission, Vision, Values*. Retrieved December 8, 2021 from https://highered.appstate.edu/node/29

Fanshawe College (2021, April). *Program Development Guide: Post-Secondary Credentials*. Centre for Academic Excellence.

Fanshawe College. (n.d.). *Oneida – Language Immersion, Culture and Teaching*. Retrieved December 8, 2021 from https://www.fanshawec.ca/programs/oni1-oneida-language-immersion-culture-and-teaching/next

Merriam-Webster. (n.d.). Vision. *In Merriam-Webster.com dictionary*. Retrieved December 8, 2021, from https://www.merriam-webster.com/dictionary/vision

Kennedy, D., Hyland, Áine, H., Norma R. (2007). *Writing and Using Learning Outcomes: a Practical Guide*. University College Cork.

Ontario College Quality Assurance Service (OCQAS). (February 17, 2021). *The Credential Validation Service (CVS) Handbook for New Program Submissions and Program Modifications*. https://www.ocqas.org/wp-content/uploads/2021/03/Handbook-The-Credential-Validation-Service_v8_Final_Feb17_2021.pdf

Ontario College Quality Assurance Service (OCQAS). (July 5, 2019). *Writing Vocational Learning Outcome*. https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.ocqas.org%2Fwp-content%2Fuploads%2F2015%2F01%2FWriting-Vocational-Learning-Outcomes_OCQASWebsite_July5_2019_Voice.pptx&wdOrigin=BROWSELINK

Ontario Ministry of Colleges and Universities. (2018). *Ontario Qualifications Framework (OQF)*. Retrieved December 8, 2021 from http://www.tcu.gov.on.ca/pepg/programs/oqf/

Queens University. (n.d.). *BA English (3 year)*. Retrieved December 8, 2021 from https://www.queensu.ca/artsci_online/programs/bachelor-of-arts/english-degree

Sinek, S. (2011). *Start with Why: How Great Leaders Inspire Everyone to Take Action*. Portfolio/Penguin.

TEDx Talks. (2009, September 28). *Start with why – how great leaders inspire action* [Video]. YouTube. https://youtu.be/u4ZoJKF_VuA

The Post Secondary Education Quality Assessment Board (PEQAB). (2021). *Manual for Public Organizations (including Ontario Colleges)*. http://www.peqab.ca/Publications/Handbooks%20Guidelines/MANUAL_COLLEGES_PUBLICS%20MARCH2021.pdf

Western Music. (n.d.). *Bachelor of Arts – Major in Popular Music Studies*. Retrieved December 8, 2021 from https://music.uwo.ca/future-students/undergraduate/programs/bachelor-of-arts-major-in-popular-music-studies.html

MODULE 3: COURSE DESIGN AND IMPLEMENTATION

This marsh can be a metaphor for course design. At the program level are the big sky and the major waterways. At the course level, there are reeds and vegetation. While we tend to the reeds (the courses and their specifics), we can always look up to see the river and sky around us (the program vision).

Courses make a program. It's where learning and assessment typically occur. It's where students gain the knowledge, skills, and values that shape their learning. Course design is the process of planning the course-based curriculum that makes the primary academic element of your program. If you've got your vision and case for developing the new program (Module 2) and understand how the program is situated within the wider online program ecosystem (Module 1), you're ready to shift your attention to turning the program into reality through the courses and learning experiences that students will engage in.

In some instances, you may be looking to create brand new courses. In other instances, existing courses are integrated into the new program – requiring careful review of curricular changes that may be necessary for aligning to program outcomes. While this stage may bring the focus of program development down into the specifics of curriculum design (i.e., specific details of what is happening within specific courses, how, and when), it also presents an opportunity to design with the broader picture in mind by answering the question:

How does each course fit with the overall vision and outcomes of the program?

This module takes a high-level overview approach to curriculum design, intending to support program developers in devising a plan and aligning suitable resources to successfully engage in a course design process that will see your program through to development and implementation.

This module is grounded on the value that a team-based approach is ultimately required for coordinated course planning, design, and implementation, which is particularly true of online programs. Not only will this process involve multiple instructors, but it also requires a complement of various skillsets and resources to turn design into reality. As a result, this module helps program developers work through a process of course design that:

- Aligns with the overarching program vision and intended outcomes for guiding course development and planning
- Centres the design process on essential design considerations, including accessibility; intellectual property; equity, diversity, and inclusion

Learning Outcomes

By the end of *Unit 1, Start with Collaboration*, you will be able to:

- Recognize the complex nature of online course design and the role that collaboration plays in

creating quality online courses

- Identify your own institutional resources for supporting the program's course design process, including educational developers, instructional designers, librarians, and subject matter experts

You will take away:

- An ability to recognize what expertise and skills are currently part of the team compliment, what expertise and skillsets are needed, and who can be sought out in supporting course design efforts

---

By the end of *Unit 2, Turning Program Vision Into Curriculum* you will be able to:

- Translate overall program vision, outcomes, and students' needs into a curriculum plan shaping course development
- Select models of curriculum design for framing a cohesive and habitual approach to course development

You will take away:

- Strategies and ideas for creating a curriculum design plan with your team

---

By the end of *Unit 3, Program Design into Course Development*, you will be able to:

- Articulate the value of curriculum mapping as an approach to visualizing connections between the program/curriculum visions, program outcomes, and course plans
- Plan and initiate a team-based conversation to initiate curriculum mapping for program development

You will take away:

- A plan for leading a program design team on curriculum mapping strategies for guiding course development

---

By the end of *Unit 4, Curriculum Mapping*, you will be able to:

- Identify key features of your own curriculum mapping approach, as inspired by example curriculum maps
- Plan for a curriculum mapping approach that will enable decision-making such as:

  - What courses happen when and how in the program;
  - What teaching and learning activities and major forms of assessment fit with each course in the program and why; and
  - What materials you will need to develop or source for each course you're planning, such as instructional content, teaching and learning activities, multimedia, assessment materials, rubrics, syllabi, and more.

- Reflect on the current state of course-level planning, design, and development

You will take away:

- A draft curriculum map that aligns program outcomes with what is currently known of course design within the program

---

By the end of *Unit 5, Essential Considerations for Online Course Design*, you will be able to:

- Reflect on seven interconnected and essential design considerations to their own plans for online course design
- Identify next steps for tapping into the wealth of resources and expertise that allow for essential considerations to be enacted within course design

You will take away:

- An understanding of the interconnected ecosystem of essential design considerations for online course design
- An appreciation for the resources (within the design team and beyond) that can help prioritize selected essentials into online course design

Throughout this module, you will be prompted to reflect on key ideas and complete activities that will enable you to lead conversations and plan future action. You can keep track of your work by downloading and recording it in the **Program Design and Implementation Workbook**.

START WITH COLLABORATION

Lauren Anstey

At the outset of online program design, program leaders often invest a great deal of time into the <u>overall vision</u> and <u>plan for success</u> of the program as a whole. Now it's time to get into the reeds of course design. There's an important shift that takes place from planning the big picture to planning and orchestrating the specifics of when and how learners will be supported in successfully achieving program learning outcomes. While a small group of leaders may have been involved in the overall program design (with consultation at critical junctures), the course design phase will expand that team. It necessitates more people be involved in day-to-day conversations about the program's curriculum and its evolving creation. How this collaboration is facilitated and fostered by program leaders will have a big impact on overall program success. This unit is focused on navigating this collaboration.

Learning Outcomes

By the end of this unit, you will be able to:

- Recognize the complex nature of online course design and the role that collaboration plays in creating quality online courses
- Identify your own institutional resources for supporting the program's course design process, including educational developers, instructional designers, librarians, and subject matter experts

You will take away:

- An ability to recognize what expertise and skills are currently part of the team compliment, what expertise and skillsets are needed, and who can be sought out in supporting course design efforts

This unit focuses on Course Design; Instructional Design and Educational Technology Expertise; Student

Support Systems; Feedback, Continuous Improvement, and Sustainability; Faculty Expertise and Readiness, Educational Technology Stack; Program Vision; and Program Outcomes. Read more about the ecosystem in
[Module 1, Unit 1: Collaborating to Create the Online Learner Life Cycle and its Ecosystem](#)

The design and implementation of online courses involve everything from course learning outcomes and curriculum mapping to coordinating subject matter expertise, technological and visual creativity, accessibility, and copyright considerations. A team approach is therefore essential. Program directors are often interested to know who should or could comprise their team and how their team can be supported for effective, efficient, and creative work. Ultimately, the hope is that a team comprised of all the right skill sets will effectively work together and creatively develop courses in a way that advances and enacts the program's vision.

Later units in this module will work on developing a cohesive plan for course design and development. This unit starts with considering who's needed and who to bring in from the outset of the course design process.

The Power of Collaboration

Collaboration is the action of working with others to produce or create something together. In the case of online course design, collaboration is about taking a team approach to the design, planning, development, and delivery of online courses. Instructors need not be alone in navigating all the complex tasks of designing

"The whole point of collaboration is that you give and take from each other, and that's how you create things that are totally new" – Virgil Abloh

the course curriculum and building the online course environment. In fact, taking a collaborative approach that draws on an interdisciplinary team, with wide-ranging skillsets, such as instructional designers and educational technology specialists, offers infinitely more possibilities to meaningfully and effectively design, build, and facilitate a course.

Case Study

The following two videos offer two case studies each from a university and college perspective. In both cases, you'll hear from a team of people who worked together and each contributed to online course development. As you watch, consider how each person talks of collaboration between themselves and others.

> *One or more interactive elements has been excluded from this version of the text. You can view them online here:* https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=45#oembed-1

In the above video, a team of four shares their case example of working together on a project to create micro-credentialed OERs related to safety practices in Engineering. The team consists of the Project Manager/Instructional Design Lead, two Subject Matter Experts, and a Multimedia Specialist. They outline the project, how they worked together, what value a collaborative approach has been to the project, and what recommendations they would have for other teams.

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/ creatingsustainableonlineprograms/?p=45#oembed-2

A second team from a College program share similar insights on their project and work as a team.

Reflection: Now that you've had a chance to hear from two different teams, reflect on the following questions for yourself:

- Why was collaborative work important to these teams?
- How did their collaborative approach benefit program and course design?

You can keep track of your written reflections in the **Program Design and Implementation Workbook**.

The Evidence for Collaborative Online Course Design

In the case studies above, you heard just how valuable a collaborative approach is for online course development. These sentiments are widely shared. Consistently, experts in the field convey the message: a team approach is not just valuable, it's critical to successful online course development.

"Online delivery challenges traditional notions of academics working in isolation and instead brings together teams of people each with unique skills, into a course design and development team" (Ellis & Phelps, 2000, p. 1).

"The instructors and faculty members found that working with a design team was ultimately a more enriching professional experience and pedagogical practice than working alone" (Brown, Eaton, Jacobsen, Roy, & Friesen, 2013, p. 449).

Taken together, the perspectives shared above highlight how a team approach not only results in excellent conditions for learning but makes the process an enriching and enjoyable process.

Reflection: Consider collaboration in context of your program course development:

- In what ways will it be easily accomplished?
- In what ways will it be challenging?
- How has collaboration already been a part of the process?
- In what ways will it be important going forward?

You can keep track of your written reflections in the **Program Design and Implementation Workbook.**

Whose Job is it Anyway?

The availability of different roles related to online course design varies greatly from institution to institution. At times, program administrators may need to consider who they might hire or recruit to support program development. Often though, leaders are surprised to learn of the various supports at their institutions are already available to them. This section is intended to give users a sense of the types of staff and professional roles often associated with online course design. If you completed Module 1, Unit 1: Collaborating to Create the Online Student Life Cycle and Its Ecosystem, you may have already begun to document ideas about possible units and associated roles that are potential collaborators, so this section will build off of that work.

It's important to note that many of the roles described below may be covered in different ways, depending on the institutional structure and culture. For example, it's common to find someone doing the role of Project Management, Subject Matter Expertise, and Instructional Design!

Consider this list in addition to the people already involved as part of your team – such as Academic Leaders,

Deans, Directors, and Program Administration. The roles here represent team members who are more likely to come on board as you expand to course design and development needs.

Common Roles & Skill Sets in Course Development & Design

> 📊 *An interactive H5P element has been excluded from this version of the text. You can view it online here:*
> *https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=45#h5p-8*

Determine Collaborators

The above list is massive and may be overwhelming to some. You may be wondering: How am I supposed to involve all these people? Do I really need to think about adding 16 new people to our course design work? That sounds ineffective!

That's a fair response, and it flags some important points:

First, you'll want to build a team based on the skillsets that you: A) need, and B) have available to you. This will look different for each program as you take stock of what's needed in context of the resources available.

Second, you might distinguish between roles that are core (they are involved week-to-week through the course design process) and others who are peripheral (those who consult, review, or offer feedback at key checkpoints). Again, this will look different for different groups.

Finally, consider the division of labour between members. One person may represent a couple of the roles articulated above or there may be overlapping skillsets.

These considerations, taken together, will help you bring together a team that is neither too small nor too large, consisting of all the needed skillsets to either do the work themselves or know who to consult with at key junctures.

> **Workbook Activity:** Use the **Program Design and Implementation Workbook** to reflect on:

- Who's already part of your team and who's not, but integral?
- Who's available and who's not?
- Who should be consulted, but doesn't need to be a core member of the team?

Building on Early Collaboration Efforts

Taking a collaborative approach to course development and design is likely a continuation of and expansion upon the collaborative approaches you initiated through the earlier stages of the program's inception. In the following video, one program Director (Denise Stockley, Co-Director, Masters' of Health Professions Education Program, Queen's University) shares a broader picture of collaboration taken by her team.

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=45#oembed-3

Guiding Questions for Prioritizing Collaboration from Program Inception into Course Planning

Denise's insights highlight some guiding questions that might be considered in taking a broader look at the overall spirit of collaboration you're fostering from program inception into course development and design:

- When and how will you bring people on board in the course design process? At what point in the process will different perspectives be needed?
- Given their roles and skillsets, what's each person's relationship to the project? What aspects of the program and its development will be most relevant to them?
- How will different roles be resourced and staffed? What will be the reporting structure?
- How will you foster a sense of motivation and fun in working together?
- How will leaders work to ensure that involvement from a diversity of perspectives is not tokenized, but meaningfully integrated into the fabric of the program's development?

These questions highlight the importance of timely, motivating, and sustained team-based approaches to development that prioritize relationships. As discussed in the [unit on collaboration](#) in Module 1, connecting with other departments and units that have successfully navigated this process can help you effectively plan. Other team members, such as project managers, instructional designers, and educational developers may also be able to help with this type of planning. Consider the following three priorities:

When to Onboard: Consider the timeline of your onboarding process as new team members come on board. Aim to orient different people and roles to the program in a timely manner that brings them into the team when sufficient context and information is available for effectively easing their orientation to the project when granting them the autonomy to exercise their professional input. In other words, involve people early, but not so early that their participation lacks clarity and not so late that their capacity to influence and offer insight towards positive impact from their professional position is constrained. Involving people early builds a collective sense of ownership to the program.

Meaningful, Sustained Collaboration: Avoid a 'parachute-in approach' or 'box-checking' approach of quickly seeking limited involvement on a pressured timeline without attention to sustained relationship-building, as well as time, space, and capacity for valued input.

Clarify Expectations, Deliverables, and Timelines: As people join your team and begin contributing to program and course development, be clear on a variety of expectations including time commitment, what deliverables each person is responsible for, how they are expected to work with others, and timelines for delivery. Who is your Project Manager – the person who is going to oversee, plan, and manage the project timeline and schedule for deliverables? The Project Manager should plan to work closely with other members of the team to not only make these expectations clear but to support and enable other members of the team to be successful.

Reflection: Consider the above questions for how they shape and inform your efforts towards course design collaboration.

You can keep track of your written reflections in the **Program Design and Implementation Workbook**.

Unit Reflection and Resources

"We need not be excellent at everything; we must leverage the expertise and contributions of stakeholders at every step of the way

and seek out unexpected opportunities for collaboration. An effective, team-based approach reveals efficiencies, promotes faculty buy-in, and leads to the creation of excellent learning experiences"

– Bonnie Budd, Manager of Learning Design and Analytics in the Graduate School of Education at Harvard University (Budd, 2016).

This unit has made the case for a collaborative approach to course design. The key takeaway of this unit is best articulated by interviewee, Brittany McRae (Instructional Designer, Engineering Teaching and Learning Team, Queen's University):

"Twenty-first-century learning is very different than it used to be. Gone are the days when you just create a PowerPoint and deliver a lecture and walk out of the class and say you've done your job. We need to be very intentional with the way that we prepare the learning to make sure we are meeting diverse needs, that we're reaching students in a way that gets them to want to engage with the materials. And to do that, not any one person has the skills to do all of those pieces. It takes a lot of creativity to take an abstract idea of what could be created and turn it into a high-quality learning experience. Having those clearly defined roles lets everybody play to their strengths."

Actionable Tasks

Reflect on the quotations above.

- If you've already begun with a collaborative approach, consider how you will continue to foster and prioritize a team-based approach throughout the program's course development stages.
- If you've identified a few places where further collaboration could be of value, how will you seek out and connect with the people whose expertise, perspectives, and input are needed?

Unit Resources

- [Module 3 Video Playlist](#)

TURNING PROGRAM VISION INTO CURRICULUM

Lauren Anstey

Imagine building a house with no blueprint. The contractors have all the right skills and tools to construct the foundation and the walls of the home, but they need to know the overall configuration and design of the home to build something that's not only structurally sound but is ultimately functional and aesthetically pleasing for the people who will live in it day-to-day.

The blueprint is designed to reflect the builder's or homeowner's desired functionality, design, and architectural intentions. For example, the roof of a barn has been intentionally designed as gambrel shaped, or a Tudor archway is planned as the entryway of a home taking inspiration from the Medieval architecture in England and Wales. There is intentionality behind the blueprint that reflects early decision-making and overall design.

"Fulham Palace Tudor arch" adapted from Images George Rex from London, England, CC BY-SA 2.0, via Wikimedia Commons. Designers of these buildings made intentional design choices.

This is an analogy for course design. A course design team may have the requisite skills for designing and building courses for the program, and yet they need the 'blueprint' to guide the overall structure of the course explicitly and purposefully. The 'blueprint' in this case is a curriculum design plan that may inform how learning will be facilitated, the sequence of course events, how learners will be assessed, how aspects of a course relate to one another, and how the course relates to other courses in the program. Just as a developer plans a whole neighbourhood by designing and building multiple houses that are each unique yet similar in their common architectural design, an academic program can plan for a cohesive whole – a common architectural design that intersects each course in the program while also allowing each course design to be unique to the needs of the learning outcomes, instructor, and students.

Your program has already begun to build the 'blueprint' by articulating the program's vision. In Module 2: Why Have a Program Vision? a program vision was defined as the high-level goal or "why" statement that forms the foundation of any program framework. The vision is central to understanding the program and its needs and is something to return to regularly to ensure the desired purpose and values for the program remain in focus. A program's vision is directly influential upon the program's curriculum. However, there's an important distinction to make here. While the program's vision is the high-level intention and foundation

to the program's framework, the curriculum is the enacted qualities of teaching and learning within and across courses. If the vision is the "why?" of the program, the curriculum is the "how?" and "through what pedagogical means?" will learners engage in achieving that "why?"

After articulating a program vision and set of program learning outcomes, "the next task was to consider how to translate these lofty goals and desired outcomes into a set of educational experiences that would provide students with the necessary skills and knowledge to succeed in achieving those outcomes," say program developers Backenroth and Sinclair (2014, p. 130). Structural and curricular decisions had to be made as "guided by our existential vision" (p. 130).

While your vision may be lofty, existential, and high-level, your robust curriculum plan will be enacted, nuanced, and fine-detailed. This unit will help you take the program vision and advance it into an aligned and cohesive curriculum plan that will serve to guide course-by-course design and development.

Learning Outcomes
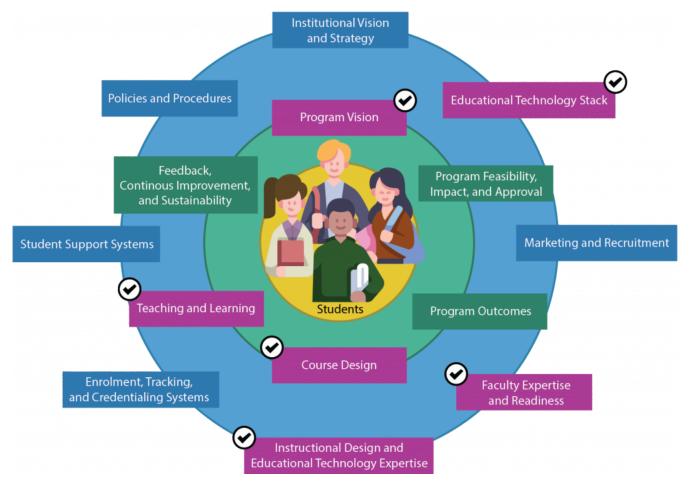
By the end of this unit, you will be able to:

- Translate overall program vision, outcomes, and students' needs into a curriculum plan shaping course development
- Select models of curriculum design for framing a cohesive and habitual approach to course development

You will take away:

- Strategies and ideas for creating a curriculum design plan with their team

This unit focuses on the Program Vision, Course Design, and Teaching and Learning elements of the Online Program Ecosystem. Read more about the ecosystem in [Module 1, Unit 1: Collaborating to Create the Online Learner Life Cycle and its Ecosystem](#)

Designing a new course or a series of new courses is a rare opportunity to create conditions for success from the start. The success of your online program will be measured by your ability to enact the program's vision and foster students' learning toward achieving intended outcomes. This learning ultimately happens at the course level. Make key course design decisions now, at the start of the design process. This will not only result in a well-designed program that consists of cohesive, innovative courses, but it will also save time as courses get designed and developed in connection to the overall program vision rather than needing to be reworked or redesigned later on, once misalignments have been flagged.

Core Components, Philosophies, Pedagogies, or Forms of Engagement Shaping Curriculum

You might be wondering what shapes curriculum design (hint: it's not the content). This section intends to present various sources of inspiration that will help address this question. We might ask:

What core components, philosophies, pedagogies, or forms of engagement would you expect to see if observing the teaching and

learning happening within the courses that comprise your program?

It is by no means the intention of this module to outline and present all the possible components, philosophies, pedagogies, and forms of engagement that could be drawn upon in shaping that 'blueprint' for course design. It's impossible! In fact, some of the best 'blueprints' are shaped by pulling on disciplinary perspectives or disparate and creative ideas that arise out of deeply contextualized conversations between visionaries of the program. It is the intention of this section to offer a few starting points and critical questions for guiding that conversation so that creative and transformative possibilities can arise as a new signature quality of your program. You'll also notice this unit is not focused on clarifying course content. This is not about the key concepts and material that will be covered in courses. This is about *how* students will learn and instructors will teach rather than *what* instructors will teach or students will learn.

Pre-Check: Assess your Readiness for Exploring Models

Before entering into a process of course planning based on alignment to program outcomes, there are a few things you can consider in assessing readiness. Answer the questions below to assess your readiness to engage in an exploration of course design models.

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=53#h5p-7

Reflection: Pause here. Before moving on, record what initial thoughts arise when you reflect on this question:
What core components, philosophies, pedagogies, or forms of engagement would you expect to see if observing the teaching and learning happening in the courses that make up your program?

You can keep track of your written reflections in the **Program Design and Implementation Workbook**.

Various Perspectives on Core Components, Philosophies,

Pedagogies, and Approaches

This section offers an initial overview of the various perspectives that may resonate with program leaders as they explore the main question of this unit further: What core components, philosophies, pedagogies, or forms of engagement would you expect to see if observing the teaching and learning happening within the courses that comprise your program?

Reflection: At the end of this unit, we'll ask you to reflect on the ideas below that resonate. you can then use the various perspectives here to explore, adopt, or adapt based on what resonates with your program and course design teams. Each section takes a slightly different perspective on essentially the same thing – that is, giving you a way of framing and thinking about what qualities will shape your course design 'blueprint.' For some, core components will resonate. For others, philosophy might fit better. Others will integrate a combination of ideas, such as the language of core components met with a consideration of signature pedagogies or various forms of engagement. There's no one set of rules or common language here. Use the words, questions, and approaches that fit best with your team and the program.
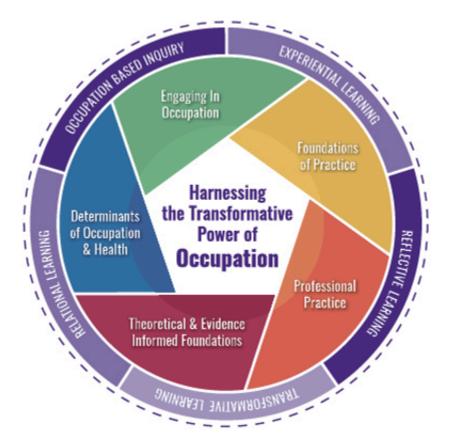
You can keep track of your written reflections in the **Program Design and Implementation Workbook** in the Unit Reflection section for this module.

Core Components

Core components or key characteristics of a program are the essential factors, traits, and qualities that consistently shape the program's curriculum. Consider these three examples (keep in mind – these examples and the visual representation of core components reflected in each are the polished versions after much deliberation and iteration!):

Example 1: Queen's University Health Professions Education Core Competencies Honeycomb.

Example 2: Western University Master's of Science in Occupational Therapy Program Educational Conceptual Framework.

The two exemplar visuals shared above were shared with permission by the creators. These visuals are the copyright of the respective institutions and cannot be copied or used in their entirety or in parts by another person/institution without expressed permission of the original developers.

Denise Stockley (Co-Director of the Master's in Health Professions Education, Queen's University) is interviewed to explain what Example 1 represents, how she and colleagues first came up with the model, and how the model continues to be utilized in the program.

One or more interactive elements has been excluded from this version of the text. You can view

them online here: https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=53#oembed-1
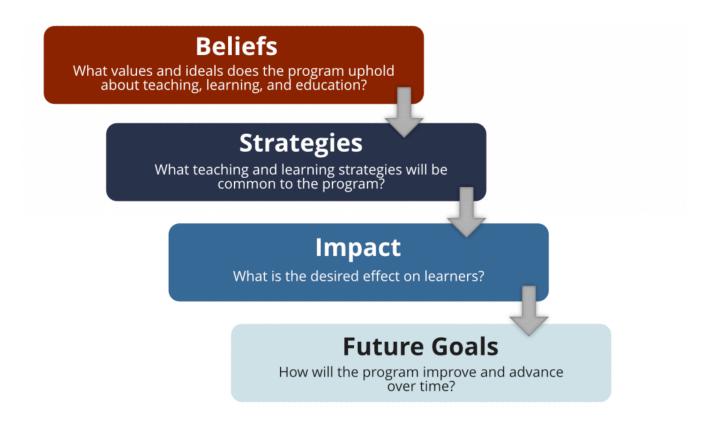
Philosophy of Teaching

Borrowing from the concept of a Teaching Philosophy, this section is focused on developing and articulating a Program Teaching Philosophy as a frame of reference for informing curriculum and course design. Schönwetter et al. (2002) defined a teaching philosophy statement as "a systematic and critical rationale that focuses on the important components defining effective teaching and learning in a particular discipline and/or institutional context" (p. 84). Commonly expressed by individual instructors in articulating their teaching philosophy that informs their teaching practice, here we extend the concept of a teaching philosophy to the program. Though it may become expressed as a statement (possibly even as part of your program vision statement), what's important here is to consider the distinctive aims, values, beliefs, and convictions that provide an organizing vision of the [program's] direction and a rationale towards which [program] efforts are geared" (p. 84).

As a personal philosophy statement, a program's philosophy identifies:

- Beliefs (what values and ideals the program upholds about teaching, learning, and education?)
- Strategies (what teaching and learning strategies will be common to the program?)
- Impact (what is the desired effect on learners?)
- Future Goals (How will the program improve and advance over time?)

The following questions have been adapted from the literature (Schönwetter et al., 2002; Kenny et al., 2018) that typically guides individual instructors on articulating and writing their statement to apply at a program level. While at first you may reflect on these questions independently as you read, these questions are intended as conversation starters for members of the program design team, such that a program philosophy is developed collaboratively. For this reason, you can download the [Program Philosophy Slide Deck](#) as a resource for facilitating conversation with your group.

Collaborative approaches invite us to consider whose beliefs, values, and goals are shaping this process, and who's missing, undervalued or underrepresented. Before leading this conversation, consider how equity-deserving persons and under-represented perspectives can be included, centred, and prioritized so that the program's philosophy is inclusive, diverse, and equity-driven.

Beliefs

- What are our beliefs about teaching and learning in this program?
- What assumptions are we making about the essential skills, knowledge, and values we aim to teach through this program?
- Why do we hold these beliefs?
- What attributes and values do we wish to impart to students?
- What code of ethics guides teaching in the program?

Strategies

- What does good teaching look like in this program?
- What kinds of student-teacher relationships do we strive for in this program?
- What themes pervade teaching in the program?
- Under what opportunities and parameters will enable students to learn effectively in this program?

Impact

- How will we measure successful teaching in the program? What does successful teaching look like?
- What habits, attitudes, methods will mark successful teaching in the program?
- What are we trying to achieve with our students?

Future Goals

- What are our future goals and aspirations for the program?
- Where will we be in 7 years?
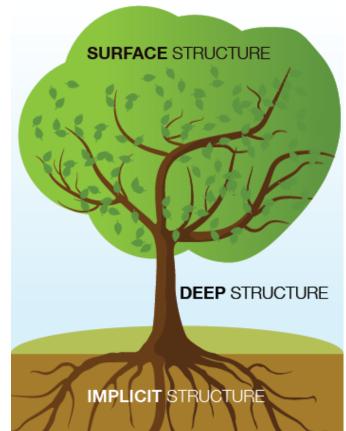
Signature Pedagogies

Signature Pedagogies are "the types of teaching that organize the fundamental ways in which future practitioners are educated for their new professions" (Schulman, 2005). They are the pervasive and routine ways of teaching and learning that cut through all topics and courses and typically entail public student performance. In other words, what kinds of performances might students need to engage in and demonstrate to express their growth into becoming future practitioners of the discipline?

There are three dimensions to a signature pedagogy:

- **Surface Structure:** Concrete, operational acts of showing and demonstrating, of questioning and answering, of interacting and withholding.
- **Deep Structure:** A set of assumptions about how best to impart a certain body of knowledge and know-how
- **Implicit Structure:** A moral dimension that comprises a set of beliefs about professional attitudes, values, and dispositions.

The following questions are based on Shulman's concept of Signature Pedagogies. While at first you may reflect on these questions independently as you read, these questions are intended as conversation starters for members of the program design team,

such that the team might identify those pervasive pedagogies of your program that will "cut through all topics and courses." For this reason, you can download the [Signature Pedagogies Slide Deck](#) as a resource for facilitating conversation with your group.

Thinking of the teaching and learning practices perceived, imagined, or planned for the program, reflect on these types of questions that target each of the three dimensions –

Surface Structure:

- What are or what should be concrete, operational acts of showing and demonstrating learning within this field of study?

Deep Structure:

- What assumptions are we making about how best to impart knowledge and know-how within this program?

Implicit Structure:

- What professional attitudes, values, and dispositions comprise this program?
- What teaching and learning practices would you be proud to see included in the courses comprising this program?
- What is unique or special about what you do when you're teaching in the areas/topics that will become a part of this program?
- What pedagogical practices will enable students to think, perform, or act with integrity for the profession/engagement in the field? Why is this a valuable pedagogy for the program?

Forms of Engagement
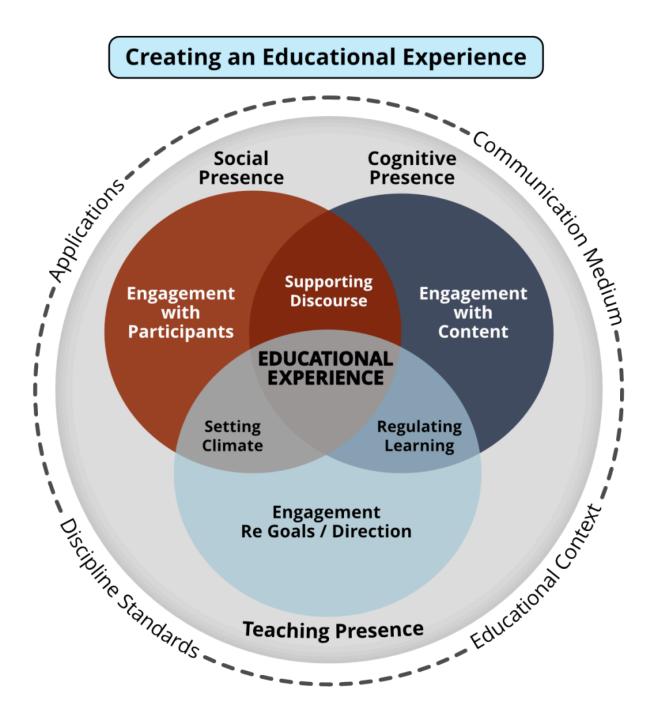
Various models of education – particularly those representing conceptions of student engagement and/or online student engagement more specifically – can inspire conversations regarding program curriculum and course design. Below, two such models are introduced: (1) Community of Inquiry, and a (2) Holistic Framework for Student Success.

Community of Inquiry

The Community of Inquiry (CoI) model was specifically developed to capture online teaching as a "complex process that requires rethinking the role of the instructor, student interactions, and meaningful ways of learning" (Garrison et al., n.d.). "The CoI framework gets at the heart of establishing and sustaining online

educational experiences" (Perova-Mello & Pitterson, 2020) through a process of "creating a deep and meaningful (collaborative-constructivist) learning experience through the development of three interdependent elements – social, cognitive, and teaching presence" (Garrison et al., n.d.). For many online educators, the CoI framework has played a critical role in thoughtful design of online education, by offering "practical ways of helping students learn through active participation and shared meaning making" (Perova-Mello & Pitterson, 2020).

In the CoI model, teaching presence is the design, facilitation, and direct instruction. It is the thoughtful

ways in which instructors design and organize their teaching and the course curriculum, how they facilitate discourse by setting the learning environment within a course, and how they engage in direct instruction (for example, how they present information or summarize discussion), while "social presence is described as the ability to project one's self and establish personal and purposeful relationships" (Garrison, 2007, p. 63). This presence recognizes the social aspects of learning where group cohesion is shaped by effective and open communication between learners. Cognitive presence is, "the exploration, construction, resolution and confirmation of understanding through collaboration and reflection" (Garrison, 2007, p. 65). Drawing heavily on concepts of inquiry and experiential learning (such as the foundational works of Dewey and Kolb), cognitive presence is informed by a cycle of practical inquiry where "participants move deliberately from understanding the problem or issue through to exploration, integration and application" (p. 65).

Conceptualize your program as a Community of Inquiry.

How do teaching, social, and cognitive presence get reflected in your program? The following questions are organized based on each of the CoI presence areas. While at first you may reflect on these questions independently as you read, these questions are intended as conversation starters for members of the program design team, such that the team might identify draw on elements of cognitive, social, and teaching presence to articulate the defining nature of the program and course curriculum. For this reason, you can download the [Community of Inquiry Slide Deck](#) as a resource for facilitating conversation with your group.

Teaching Presence

- What course design elements and eLearning tools could be commonly used to support teaching presence through design, facilitation, and direct instruction?
- How and when throughout the program will instructors directly facilitate and instruct students? What does this look like for the program?
- Thinking about how instructors might set a particular course climate, are there commonalities between courses that students would expect to experience in each course they take?
- Generally, how might instructors facilitate discourse within the program? What characteristics do instructors teaching in the program share? When do the unique qualities/characteristics of individual instructors strongly align with the overall intentions of the program?
- How will learners receive feedback from their instructors throughout the program?

Social Presence

- What course design elements, including eLearning tools, could be commonly used to support social presence, (emotional affective) expressions, open communication, and group cohesion?
- How will students be supported to develop trust and interact among peers?

- What etiquette or moral guidelines characterize what open and effective communication among learners looks like for the program?
- When and how will students work together?

Cognitive Presence

- What course design elements could be commonly used to support students' exploration, construction, resolution and confirmation of understanding through collaboration and reflection?
- How will students be supported to move deliberately from understanding the problem or issue through to exploration, integration, and application both within courses and across courses?
- When and how will learners be first introduced to concepts and how will they be encouraged to explore those concepts?
- When and how will learners engage in analysis and synthesis?
- When and how will learners pause to reflect on learning?

Holistic Framework for Student Success

The second model presented here is the Holistic Framework for Student Success designed by Yunyi Chen (Centre for Teaching and Learning, Queen's University). The tool below walks curriculum designers through a process for designing curriculum around Fink's (2003) Taxonomy of Significant Learning, as oriented and integrated with Indigenous Ways of Knowing.

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=53#h5p-3

Curriculum Design Models

Exploring the various core components, philosophies, pedagogies, or forms of engagement that will shape your curriculum has hopefully offered new ways of articulating the design principles that will guide curriculum development, carrying the thread of program vision into the curricular considerations of teaching and

learning. Next, your goal is to advance this principled start into a scaffold for curriculum design. For that, we need to purposely consider curricular structures in terms of sequence and degree of interconnectedness between significant components of learning. In other words: What learning will happen when and in what order? To what degree will pieces of the curriculum intersect, relate, or connect to one another?

Click through the interactive object below to learn more about four ways of structuring and designing curriculum.

📽️ *An interactive H5P element has been excluded from this version of the text. You can view it online here:*
https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=53#h5p-6

Unit Reflection and Resources

Overall, this unit has presented a wide range of models, approaches, and frameworks for conceptualizing a program's curriculum. These ideas are intended to inspire and inform your approaches to building a cohesive and habitual approach to course development that reflects the program's vision and essential qualities of learning. With a shared understanding of the core components, philosophies, pedagogies, or forms of engagement that enact the program's vision into the curriculum, you'll be in a position to work these values into the fabric of students' learning experiences.

Reflecting on this unit, consider:

- What resonates?
- Which elements of this unit resonate with you and other leaders of the program?
- How do you plan to adopt or adapt the pieces that resonate with your program curriculum design work?

Actionable Tasks

What's next? On reflection of what resonates, consider as well what your next steps will be

with this information. How will you proceed in working with these ideas as you progress with program developments?

How can this be used to drive conversation? One of the most critical elements of curriculum design is ongoing conversation with key stakeholders such as program leaders, identified instructors, course developers, future students, and other stakeholders as identified.

Unit Resources

- [Signature Pedagogies Slide Deck](#)
- [Program Philosophy Slide Deck](#)
- [Curriculum Design Models Slide Deck](#)
- [Community of Inquiry Slide Deck](#)
- [Module 3 Video Playlist](#)

PROGRAM DESIGN TO COURSE DEVELOPMENT

Lauren Anstey

Up to this point, you've developed a [vision for the curricular structure of your program](#) as a whole, and you've [articulated program-level learning outcomes](#) that determine what students will be able to know, value, and do by the end of the program.

How do you turn these visions and intended outcomes into a curriculum that supports learners from program entry to graduation?

The next step to program development is to plan the curriculum. Here, we introduce curriculum mapping as a flexible method for curriculum planning. The ultimate goal of curriculum mapping is to develop plans for student learning and assessment (i.e., through courses and other formalized learning experiences). This unit is focused on orienting academic leaders and program administrators to what curriculum mapping is and why it's a recommended approach to curriculum development. With such a focus, the unit provides a high-level overview. For many academic leaders, this overview will provide sufficient context to key concepts and strategies for managing, guiding, or leading others to engage in a curriculum mapping process (e.g., your program design/development team).

Learning Outcomes
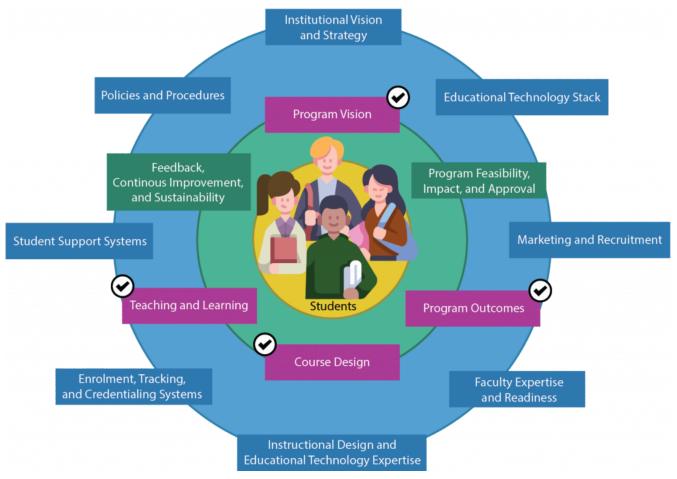
By the end of this unit, you will be able to:

- Articulate the value of curriculum mapping as an approach to visualizing connections between the program/curriculum visions, program outcomes, and course plans
- Plan and initiate a team-based conversation to initiate curriculum mapping for program development

You will take away:

- A plan for leading one's program design team on curriculum mapping strategies for guiding course development

This unit focuses on the Program Outcomes, Program Vision, Course Design, Teaching and Learning elements of the Online Program Ecosystem. Read more about the ecosystem in Module 1, Unit 1: Collaborating to Create the Online Learner Life Cycle and its Ecosystem

We recognize that some readers will want more – they will want to get into the specifics of how to conduct curriculum mapping for program and course design. For this, we recommend Unit 4: Curriculum Mapping in this module – a separate unit that expands and elaborates on curriculum mapping at the program level.

Fig. 3.1 Curriculum mapping is the process of aligning program-level learning outcomes inspired by the program and curriculum vision to the course-level learning outcomes and course activities and assessments.

Program and curriculum visions set the direction and overall intentions of a program and its curricular structure. For students to be successful in the program as a whole, everything they do for learning and assessment should aid them in progressing toward those goals.

The rationale for this unit is grounded in two related concepts – **Constructive Alignment** and **Backward Design**. When educators use curriculum mapping strategies, they engage constructive alignment and backwards design principles into curriculum planning.

The What and Why of Curriculum Mapping

Curriculum mapping is "the process of associating course outcomes with program-level learning outcomes and aligning elements of courses (e.g., teaching and learning activities, assessment strategies) within a program, to ensure that it is structured in a strategic, thoughtful way that enhances student learning" (Dyjur, Grant, & Kalu, 2019, p. 4). Mapping enables designers to plan a course in a way that is strategically and thoughtfully aligned to program intended outcomes (Harden, 2001). While curriculum mapping is taken up in a variety of ways depending on the intended conversation, this unit applies the concept of curriculum mapping to the initial design and development of an academic program and the courses that will shape it.

A 'map' is commonly presented as a diagram, table, or matrix that visually shows the connections between elements of a curriculum, such as program learning outcomes, and course-based details, such as course outcomes, teaching & learning activities, or assessments.

Review the various images of curriculum maps below and click the question mark icons to reveal information about each. Map #1 (top) is an excerpt from a theoretical biology program curriculum matrix by the University of Hawai'i at Mānoa (2022). Map #2 (middle) is an example map by the Office of Teaching and Learning (n.d.) at the University of Guelph. Map #3 (bottom) is a map generated by Cecil & Krohn (2012) for a competency-based tourism program. Notice how no two maps look quite the same.

An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=56#h5p-4

Why Engage in Curriculum Mapping?

The following list is adapted from Dyjur et al. (2019) to summarize the many benefits of curriculum mapping:

- It provides a view of the program's curriculum as a whole (Jacobs & Johnson, 2009)
- Relationships within the curriculum can be easily identified, such as connections between learning outcomes, student assessments, and teaching and learning activities (Tariq, Scott, Cochrane, Lee, & Ryles, 2004)
- Engaging in mapping activities encourages communication amongst faculty members within a program (Metzler, Rehrey, Kurz, & Middendorf, 2017)
- Mapping conversations and resulting products provide opportunities for reflection (Fraser, Crook, & Park, 2007; Tariq et al., 2004)
- It helps faculty members to articulate tacit understandings about a program
- It provides a context for planning and discussing the curriculum

Curriculum mapping for new online program development seeks to devise initial plans for the arising course-level planning. Doing so frames the scope of each course to the individuals and teams who go on to develop each respective course. This helps to ensure that each course is developed within the decided bounds or scope of the intended learning outcomes.

Many institutions have a Curriculum Mapping tool or resources that can be used to create curriculum maps. If you're not already familiar with an available tool, connect with your Teaching and Learning administration and/or your Centre for Teaching & Learning, who may be able to recommend their tools, strategies, and approaches. Quality Assurance Offices may also be able to connect you with any institutionally available tools.

Leading Curriculum Mapping

There is no singular "right" way to begin engaging in the curriculum mapping process for course design. The process must ultimately be organic to best serve your program and the program development team. In addition, curriculum mapping is a process of data collection requiring both dialogue and informed team-based decision-making about a program and its overall design. Since no one person singularly designs and teaches an entire academic program, no one person can possibly capture all the elements of program and course design into a curriculum map; it must be a team effort. Here are some ideas for collaborative mapping:

- Host a program retreat to engage in a curriculum mapping exercise as a group.
- Have each member of the team design their draft map, such as how they would represent the program visually or as a mind-map. Then, come together to share design ideas. Where your ideas compare and contrast could lead to exciting new revelations about the overall program structure and course design.
- Connect with stakeholders (e.g., prospective students of the program, recent graduates in a similar discipline, employers). Ask them: What should students learn in this program? What lasting knowledge, skills, values, or attitudes are important for graduates 5 years after graduation?

Unit Reflection and Resources

If you plan to engage in curriculum mapping – what's your why? What value do you see in taking this approach? What would you like to get out of your curriculum mapping process?

Actionable Tasks

Review the list of benefits outlined in this unit and consider which benefits are most attractive to you.

Are you looking to...	Consider the Following Mapping Approaches
Build a visual overview of your program as a whole?	Take high-level and visual approaches to mapping out the program as a whole
Clarify or strengthen relationships within the curriculum, such as connections between learning outcomes, student assessments, and teaching and learning activities?	Plan a curriculum map that's designed to map the relationships you're seeking to emphasize
Engage in mapping activities to encourage communication amongst faculty members within a program?	Prioritize collaborative approaches to mapping. Giving enough time and scheduled opportunities for conversation are essential here
Engage in mapping to provide opportunities for reflection?	Build time for conversation and reflection into the workflow
Support curriculum designers and instructors to articulate tacit understandings about a program?	Plan a curriculum mapping approach that requires input from your team and guides their input around those tacit understandings you're seeking to clarify (e.g., where will students purposefully develop writing skills?)

As you wrap up this unit, turn to your **Program Design and Implementation Workbook**. The activity outlined in the workbook poses some questions for consideration as you devise your plans forleading the program design team to engage in curriculum mapping strategies for course and curriculum development.

CURRICULUM MAPPING

Lauren Anstey

This unit uses case studies to illustrate various approaches to curriculum mapping. It expands upon the previous unit, "[Turning Program Vision Into Curriculum](#)," to introduce the what and why of curriculum mapping.

Learning Outcomes

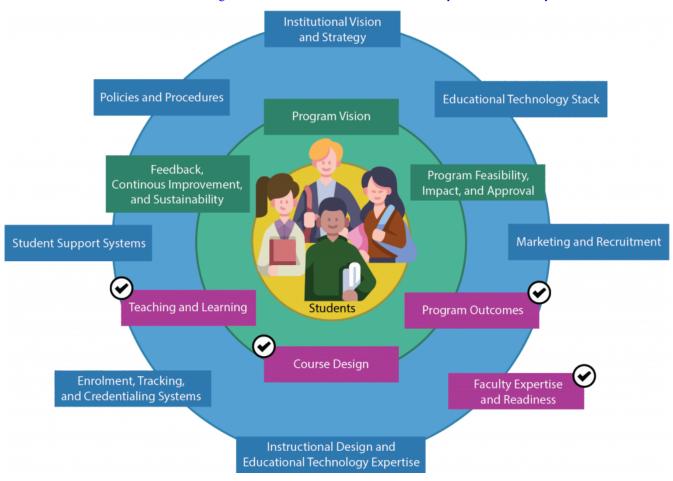**By the end of this unit, you will be able to:**

- Identify key features of your own curriculum mapping approach, as inspired by example curriculum maps
- Plan for a curriculum mapping approach that will enable decision-making such as:

    - What courses happen when and how in the program;
    - What teaching and learning activities and major forms of assessment fit with each course in the program and why; and
    - What materials you will need to develop or source for each course you're planning such as instructional content, teaching and learning activities, multimedia, assessment materials, rubrics, syllabi, and more.

- Reflect on the current state of course-level planning, design, and development

You will take away:

- A draft curriculum map that aligns program outcomes with what is currently known of course design within the program

This unit focuses on the Program Outcomes, Course Design Teaching and Learning, and Faculty Expertise

and Readiness elements of the Online Program Ecosystem. Read more about the ecosystem in Module 1, Unit 1: Collaborating to Create the Online Learner Life Cycle and its Ecosystem

There is no one correct way to engage in curriculum mapping. Curriculum mapping is "the process of associating course outcomes with program-level learning outcomes and aligning elements of courses (e.g., teaching and learning activities, assessment strategies) within a program, to ensure that it is structured in a strategic, thoughtful way that enhances student learning" (Dyjur et al., 2019, p. 4). The process and output (the map itself) ought to be flexible in context of the designers, their curriculum, and the unique conversations that drive the development of their curriculum map.

Given this variability and the conversational nature of curriculum mapping, we employ a case study approach in this unit to illustrate the nuances of curriculum mapping while also illustrating the process.

Introducing the Case Studies

Throughout this unit, we present three different case studies. Read the short description below and consider which case might resonate most closely with you.

Case Study I follows program leader, Sam, as they build a curriculum map for a new online undergraduate certificate in Biology Research with a case study approach as the program's signature pedagogy. Case Study I reflects development of a new program where a new curriculum is being envisioned with no pre-existing courses in mind.

Case Study II follows program leaders, Amanda and Brian, who are working together to design a competency-based Tourism Management program. This case study is inspired by a paper published by Cecil and Krohn (2012). Case Study II is similar to Case Study I but with a different industry/disciplinary and curricular focus.

Case Study III follows program leader, Eric, who is creating a new online program by taking an existing in-person Germanic Studies program and transitioning it to a revised and reimagined online program. This case was inspired by a paper by Metzler et al. (2017). In this case, Eric and his team were working with pre-existing courses and course content that could inform their mapping.

Pre-Check: Assess your Readiness for Curriculum Mapping

Before entering into a curriculum mapping exercise, it's best that:

- Program-level learning outcomes have been finalized (See [Module 2: Planning Out the Program](#))
- The overall curriculum vision has been articulated (See [Module 3: Turning Program Vision Into Curriculum](#))

Reflection: Recording Initial Thoughts

- What are you already working with?

  ◦ Pre-existing courses?
  ◦ Previously identified ideas for new courses?

- How do you imagine students will progress through the program?
- What will they need to learn or do, and when?

Progression of Learning

The first step of the mapping process is to consider the progression of learning. This refers to how students' learning develops and builds across the program, i.e., how they go from incoming students to graduates able to demonstrate achievement of program learning outcomes. Progression of learning considers how learning advances, changes, or deepens as learners progress through the program of study.

Consider working with a selected Taxonomy of Learning or a combination of Taxonomies, which give educators a structure and language for considering what deepening or advancing on learning looks like over time. Bloom's Taxonomy is a very common source. In addition to Bloom's or in compliment, designers might also explore:

- SOLO Taxonomy (Biggs & Collis, 1982)
- The ICE Model (Fostaty Young & Troop, 2022)

Click through the models of these taxonomies below.

📠 *An interactive H5P element has been excluded from this version of the text. You can view it online here:*
https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=58#h5p-1

Image 1: Bloom's Taxonomy, Vanderbilt University Center for Teaching, CC BY 2.0., via Flickr.
Image 2: SOLO Taxonomy, Doug Belshaw, CC0, via Wikimedia Commons.
Image 3: ICE Model, CC BY-NC-ND 4.0, via Teaching, Learning, and Assessment Across the Disciplines: ICE Stories.

Let's turn to our case studies to see how a conversation about the progression of learning helped designers get started with their curriculum mapping.

Case Study I: Progression of Learning of evidence-based decision-making in Biology Research

Sam was working to develop a new online undergraduate certificate in Biology Research. With their team, Sam had previously articulated program learning outcomes and identified case-based learning as the program's signature pedagogy. When Sam sat down to consider the progression of learning, one program outcome immediately came to mind: Students will be able to use biology research to make evidence-based decisions, and Sam decided to start there.

Sam thought to themselves, "This is an easy one. I know students will be starting the program with very little sense as to what constitutes research within the field, so we'll be starting from the basics. Before students can start developing the skills to use research for decision-making, they will need to appreciate what Biology research is and how we determine what's research over other forms of knowing within the field. From there, we can support students in developing the skills of evidence-based decision-making, but these skills take practice over time." Sam paused to think about this in relation to case-based learning.

"This works well for a case-based approach," they thought, "I think the program should start with small opportunities to practice through cases and build from there. Ultimately, I know we'd like to see students completing major assignments towards the end of their program that demonstrate their evidence-informed decision-making–again this is best done through cases. That way students can show one another what evidence-informed practice looks like in a variety of academic and professional settings and through a variety of perspectives."

Case Study II: Progression of Learning for a competency-focused on tourism business operations

When Amanda and Brian began designing their Tourism Management program, they identified three broad principal categories for learning related to the work done by the Program Learning Outcomes team:

1. general business operation principles,
2. principles of tourism and event management, and
3. principles of professional and life skills.

Under each broad category, they had identified competencies. For example, under the first category of general business operation principles was a competency of being able to effectively manage a business by implementing organizational vision, mission, goals, and objectives. Through program and curriculum visioning, the developers had also begun to shape their curriculum design by identifying three learning domains for the program: Domain 1: Foundations, Domain 2: Application, and Domain 3: Execution.

Their next step was to consider the progression of learning by asking what would learning look like across the curriculum as students developed this competency? How would students progress from Foundations to Application to Execution?

> **Amanda:** "Students need to be competent with implementing a tourism organization's vision, mission, goals and objectives. That's what it looks like to execute this competency."
>
> **Brian:** "Right. Implement and critique, I would add. In order to get to that level of performance, students will need to know what qualities make vision, mission, and objectives of organizations effective or successful. I guess it's also about being able to plan and operationalize objectives based on the organization's vision and mission."
>
> **Amanda:** "For sure. That's all part of managing the business and implementing its mission. The Foundations are being able to identify components of successful vision and mission statements, the application is being able to operationalize it, and the final outcome of learning, the execution, is being able to implement and critique."

Case Study III: Progression of Learning in Germanic Studies courses

To revitalize a Germanic Studies program and attract a new demographic of students, Program Leader Eric began working with a small team of faculty colleagues and educational developers to take the existing program structure and reimagine it for a New Program Proposal as a revitalized, made-for-online Germanic Studies program. The team had lots to draw from as they set out with their planning – they reviewed the existing program outcomes and decided the online program would uphold the same intentions.

Regardless of modality (in-person or online) the goals and intended outcomes of the program would remain the same. For example, the program goal of Cultural Understanding and Awareness aligned with three program learning outcomes:

1. Describe the values of one's own culture
2. Articulate the cultural perspectives of others
3. Evaluate the values of another's culture

The team knew the new online program would involve four core courses, similar to the in-person version. Eric sat down with the faculty instructors who had previously taught the in-person courses. "I think we can all agree, these outcomes have been taught in various ways through the courses you've each taught. However, the new online program is a chance to take a closer look at the curriculum, take a collaborative approach, and consider new approaches – especially to teaching and assessments that could strengthen our values of engaged and active online learning."

Through conversation, instructors discussed how they had been teaching elements of the goal: Cultural Understanding and Awareness, and where they could address gaps and redundancies in redesigning for online.

For example, they agreed that Course W introduced novice students to articulating the cultural perspectives of others, while Course X assumed that introduction and focused more on the intermediate and advanced elements of that skill. They also agreed that Course Z was a great place for students to demonstrate advanced performance of Outcomes 1 and 2, but that the program had been missing an opportunity for advanced performance of Outcome 3. They noted the online program was an opportunity to address this curricular gap.

Drafting Curriculum Maps for Emerging Course Structure and Design

There is no 'right' way to map a curriculum. The curriculum maps you might aim to develop at this initial stage of design will be shaped by the unique context of your work. In this section, we pick back up on the three case studies of this unit to exemplify three different approaches to curriculum mapping. Your curriculum map may take inspiration from one or all these examples. Alternatively, you may devise new ways of representing your unique curriculum in a way that best serves your course development process.

Case Study I: Organizing a curriculum map for evidence-based decision-making in Biology Research

Recall that Sam began by focusing on one program outcome and identified how students would progress on their learning toward it. Based on Sam's reflections, Sam created a curriculum map to represent their initial ideas:

Program Outcome	Early in the Program	Mid-Program	Late in the Program
Students will be able to use Biology research to make evidence-based decisions	Identify what constitutes research in the field of Biology	Introduction and rehearsal of component skills that lead to an ability to make decisions informed by research	Culminating assignments where evidence-informed decision making is critical to success

Table 1: A draft curriculum map displaying the progression of learning for one program outcome in the Biology Research Program.

Sam's thoughts were organized into ideas for early in the program to more complex learning at the end. Notice how Sam's map has not elaborated on any specific courses of the program at this time. What Sam is noting is that, sometime in the course(s) that come early in the program, students will need to learn an ability to

identify research. Later in Sam's planning, Sam can collaborate with others to decide which course or courses this type of performance could be included, how it would be taught, and how it would be assessed.

Given that Sam and their team had previously identified case-based learning as the program's signature pedagogy, their curriculum mapping progress could be further informed by the literature in generating ideas for teaching evidence-based decision-making through a case-based approach.

Case Study II: A Curriculum Map for Tourism Management

Amanda and Brian moved from their progression of learning conversation to curriculum mapping by drawing on their established curriculum structure of the three domains – Domain I: Foundations, Domain II: Application, and Domain III: Execution. They had an overall sense of how learners progressed across these domains for each of their competency outcomes and refined their ideas by organizing them in a table:

Principle Category: General Business Operation **Competency Outcome:** Effectively manage a business by implementing organizational vision, mission, goals, and objectives			
Task within management competency	**Assessment of task at Learning Domain I: Foundation**	**Assessment of task at Learning Domain II: Application**	**Assessment of task at Learning Domain III: Execution**
Organizational vision, mission, goals, and objectives	Identify components of successful vision, mission, and objectives	Plan operational objectives to meet the mission, goals, and objectives of the organization	Implement and critique organizational vision, mission, goals, and objectives

Table 2: A draft curriculum map for Tourism Management that organizes the progression of learning from foundations to application to execution as related to one learning outcome.

Amanda and Brian's map is like Sam's map from Case Study I, though different in the way it organizes the map upon a selected, and more specific, curricular structure. Note how this map also remains focused on broad rather than granular details about the courses.

Case Study III: Mapping Courses in Germanic Studies

Eric and his faculty colleagues had discussed how courses across the program related to their various program learning outcomes, identifying where learning was introduced, reinforced or culminated in advanced

performance. They had also identified opportunities to address gaps they had noted of their in-person program.

The group captured the nuances of that conversation in a curriculum map that plotted the overall goal and the three related outcomes to the four core courses they were working with. In this curriculum map, they used the following three levels of learning:

- N = Novice. "The course introduces students to important concepts and disciplinary thinking. The level is intended for students who have no previous experience with the material."
- I = Intermediate. "The course is pitched to students who have taken at least one previous course in the discipline. It is for neither novices nor advanced learners."
- A = Advanced. "The course is designed for students who have taken several courses in the discipline and are well familiar with the basic concepts, theories, and terminology of the discipline." Metzler et al. (2017)

Program Goals	Program Student Learning Outcomes	Course W	Course X	Course Y	Course Z
Cultural Understanding and Awareness	Describe the values of one's own culture	N, I, A			A
	Articulate the cultural perspectives of others.	N	I, A		A
	Analyze the values of another's culture.		N, I	N, I, A	

Table 3: A NIA (Novice, Intermediate, Advanced) Curriculum Map for Germanic Studies, as adapted from Metzler et al. (2017). This map shows four core courses of the program (Course W – Z) and whether each course addresses novice (N), Intermediate (I), or Advanced (A) levels of learning.

Eric and his group used language that felt comfortable to them. Common alternatives to this language include:

- I = Introduce. The course introduces students to knowledge, skills, or values related to the performance of the learning outcome
- R = Reinforce. The course builds upon knowledge, skills, or values already introduced to students. It's assumed that students have some prior knowledge that is then reinforced.
- P = Proficient. The course supports students to demonstrate proficiency in the learning outcome.

I, D, A:

- I = Introduce
- D = Developing
- A = Advanced

I, D, C:

- I = Introduce
- D = Developing
- C = Culminating/Capstone

While the language communicates essentially the same meaning, different groups will find some words resonate over others. If you're attracted to this approach of curriculum mapping, seek to clarify with colleagues what language you will use as a team and clarify understandings before beginning the mapping process.

Like Case II, this map remains focused on broad rather than granular details about the courses. What Eric's team was able to map was that Course W, for example, will introduce students to the knowledge, skills, values, and attitudes needed for articulating the cultural perspectives of others. Course X will expand on this learning and support students in advancing their abilities. Course Z will serve as a capstone for the program where the learning will be practiced at an advanced level. Later in the design process, these broad details of each course will then guide further course design planning, such as how instructors of Courses W, X, and Z will plan for teaching and learning activities that enable the targeted level of learning and how students will be assessed.

Getting Granular: Elaborating on Course-Level Learning Outcomes and Constructive Alignment within Courses

Work to expand upon, add detail, or refine upon the overall progression of learning by building in further detail about course-level curriculum. Your map might seek to include:

- Course-level learning outcomes mapped to program outcomes
- Major forms of teaching and learning activities (e.g., lecture, case-based learning, experiential learning) specific to individual courses
- Major forms of assessment, both at the course level (e.g., essay assignment, presentation) and/or as capstone assessments (e.g., a portfolio produced over the program)

Case Study I: Where Outcomes are Taught and Assessed in Biology Research Courses

Sam's initial draft map helped frame conversations with others – faculty instructors, educational developers, and instructional designers who had come together to support the Biology Research online certificate. Through multiple rounds of conversation, the team got to the point where their curriculum map significantly advanced upon Sam's first draft.

	Learning Outcome 1: Students will be able to use Biology research to make evidence-based decisions			**Learning Outcome 2**		**Learning Outcome 3**		**...**	
Progression of learning	Identify what constitutes research in the field of Biology	Introduction and rehearsal of component skills that lead to an ability to make decisions informed by research	Use Biology research to make evidence-based decisions						
Courses									
BIOR-100	T&A								
BIOR-101	T	T&A	T						
BIOR-202	A	T&A							
BIOR-374			T&A						
BIOR-400			A						

Table 4: An advanced curriculum map for the Biology Research Program illustrating an example of how specific courses have been mapped to the program learning outcome and specified progression of learning milestones. Courses are mapped based on whether the outcome is taught (T), assessed (A), or taught and assessed (T&A).

They had taken Sam's outcome and progression of learning and adapted it into a new table as they worked. The group knew they had to get detailed as to what courses would either teach, assess, or both teach and assess

the outcome. Sam's notes on progression of learning helped here. For example, it was easy for the group to recognize that BIOR-100 should both teach and assess students' ability to identify what constitutes research.

Notice how their map indicates where the outcome may be only taught or only assessed. This made sense to the group as well as they reviewed their ideas for the progression of learning. For example, they knew that students took BIOR-374 before BIOR-400. It was acceptable then that BIO-374 would teach and assess the culminating performance of using research to make evidence-based decisions where BIOR-400 was heavily focused on assessment alone.

This map served as the guide for subject matter experts and instructors who would go on to develop each of these courses. They had the initial blueprint to know that the specific courses they were developing needed to include aspects of teaching and/or assessment. This opened up further conversations as to how and with what resources/technologies this would occur. As syllabi were planned and course resources were developed, the team could refer back to this map to inform their decisions.

Case Study II: Flow of Competencies in Tourism Management Courses

Amanda and Brian chose to note which courses aligned with the various Domains and performances directly into their evolving curriculum map.

Principle Category: General Business Operation			
Competency Outcome: Effectively manage a business by implementing organizational vision, mission, goals, and objectives (MN1)			
Task within management competency	**Assessment of task at Learning Domain I – Foundation** **(MN1-D1)**	**Assessment of task at Learning Domain II – Application** **(MN1-D2)**	**Assessment of task at Learning Domain III – Execution** **(MN1-D3)**
Organizational vision, mission, goals, and objectives	Identify components of successful vision, mission, and objectives Courses: 112, 171, 231, 252, 306	Plan operational objectives to meet the mission, goals, and objectives of the organization Courses: 219, 271, 306, 310, 312	Implement and critique organizational vision, mission, goals, and objectives Courses: 306, 310, 312, 499

Table 5: An advanced curriculum map for Tourism Management. In this map, course codes have been listed in association with each of the Domains. The leader's coding system has also been added to the chart (MN1, and MN1-D1, MN1-D2, MN1-D3). This chart has been adapted from Metzler et al. (2017).

While elaborating on the initial map was helpful, Amanda and Brain also felt they needed to see the big picture. As they developed tables like the one above, repeating the process for all the competencies and outcomes of the program, it was getting complex, almost unwieldy. So, they mapped their curriculum using an alternative approach.

They developed a coding system to label outcomes and performances at each of the three Domains. For example, the above table became coded with MN1-D1, MN1-D2, and MN1-D3 for Management Outcome 1-Domain 1, -Domain 2, and -Domain 3. This coding approach enabled Amanda and Brian to develop the following sample flow chart in Figure 1 that offered them another view of their curriculum:
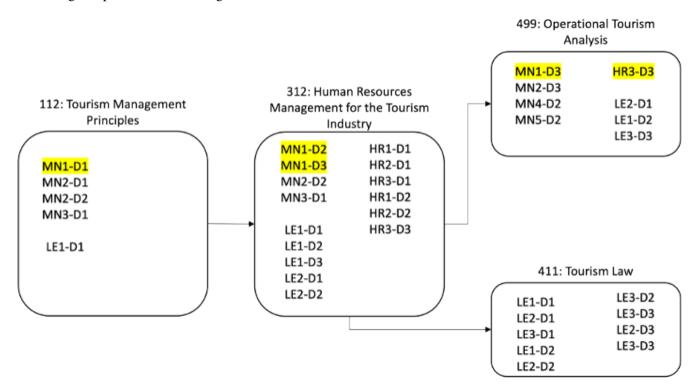

Figure 1: Sample Flow Chart for Tourism Management. This flow chart represents part of the curriculum – four courses (112: Tourism Management Principles, 312: Human Resources Management for the Tourism Industry, 499: Operational Tourism Analysis, and 411: Tourism Law). The codes marked in each of the boxes represent the various outcomes and domains associated with the course. Yellow highlighted text marks the coding that corresponds with Table X. For example, Course 112: Tourism Management Principles is associated with Management Outcome 1- Domain 1 (MN1-D1), identify components of successful vision, mission, and objectives. This flow chart has been adapted from Metzler et al. (2017).

Like Case I, these approaches to mapping enabled Amanda and Brian to develop the course-level curriculum for each of the courses in Tourism Management. Taken all together, they knew exactly which outcomes and which domains of performance were to be a part of each course in terms of the content, teaching, and assessment.

Case Study III: Course Planning for Germanic Studies

The next time the Germanic Studies team met, they focused on developing each of the courses they had mapped. Working in small, course-based teams, faculty member instructors (the subject matter experts) worked with an Educational Developer, Instructional Designer, Librarian, and Equity Advisor to:

1. Write/Revise course learning outcomes based on the curriculum map. For example, the course outcomes for Course W were elaborated upon based on program outcomes of describing the values of one's own culture and articulating the cultural perspectives of others. Writing outcomes at the course level meant contextualizing these overall performances for Course W specifically.

2. Identify major forms of teaching and assessment that would address the program learning outcomes and level of performance previously mapped. If Course Z, for example, was to represent advanced forms of learning for two of the three program outcomes, what teaching and learning activities would shape the course in an online context? How would students demonstrate their advanced performance? Recall that Course Z was already taught in person. Leaders could therefore draw on the previous course structure to inform this conversation and consider how technology might be used to substitute, augment, modify, or redefine activities and assessments.

3. Identify the availability and creative use of educational technologies that each course might utilize. The team knew they would be building courses in the institution's learning management system (LMS) and the Instructional Designer was particularly well-versed in what LMS tools and technologies could be leveraged given the teaching and assessment strategies being devised.

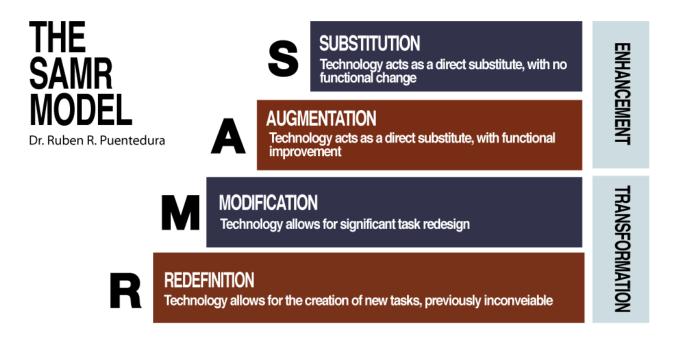# Reviewing Existing Courses for Inclusion into a New Program

Case III highlighted the situation where previous courses exist, and program leaders have identified them for inclusion in the new program curriculum. This can be an effective and efficient way of drawing on established courses and curriculum in new program development. Here are some guiding questions to apply when drawing upon existing courses:

How does the course get mapped into the new program curriculum map? Where does it connect to program learning outcomes?

To what degree does the course align with the program? Are there elements about the course that do not relate to or align with the program?

Consider the situational factors of your program – your learners' needs, the way the program will be offered – what adjustments, if any, will be needed of the existing course to work well for the program and its students?

As existing courses are reviewed and adjusted for inclusion in the program, keep this adapted SAMR model in mind:

Adapted from Lefflerd, CC BY-SA 4.0, via Wikimedia Commons.

Originally developed by Dr. R. Puentedura to focus on the use of technology, the SAMR model is adapted here in application to course review.

Consider these questions:

- Does the course get incorporated into the new program by substituting it in as-is with no functional change?
- Are functional improvements required as the course is adjusted to the new program curriculum?
- Does the course require significant redesign for aligning it to the program and its situational factors?
- Are there ways of redefining the course itself, such that previously inconceivable ways of teaching and assessing student learning within that course are explored as it is incorporated into the program?

Overall Lessons from Cases

- Initial and draft curriculum maps are intended to capture general, high-level ideas of curriculum design. Mapping is an iterative process to return to again and again with different and deepening perspectives.
- As you develop your curriculum map, revisit identified frameworks, philosophies, or pedagogies

identified in the curriculum vision phase to help guide the mapping process.

- Eventually, a curriculum map can help program leaders develop the course-level curriculum, that is, what will be taught and assessed, as well as which technologies will be utilized to support learning within the course.

Workbook Activity: Devise Your Own Draft Map

Try creating a draft curriculum map for yourself based on the Case examples you've seen so far. Remember, the goal is to capture broad, initial ideas for program structure rather than finer details of course specifics. Based on your interpretation of this as informed by your contextual factors, the level of specificity of your draft map will vary. You may be able to use this draft as a starting point for future conversations with your curriculum development team.

Unit Reflection and Resources

In this unit, you've:

- Considered the value of curriculum mapping as an approach to visualizing connections between the program/curriculum visions, program outcomes, and course plans
- Planned a curriculum mapping approach that will enable decision-making such as:
  - What courses happen when and how in the program;
  - What teaching and learning activities and major forms of assessment fit with each course in the program and why;
  - And, what materials you will need to develop or source for each course you're planning such as instructional content, teaching and learning activities, multimedia, assessment materials, rubrics, syllabi, and more.

Throughout the unit, you may have also found opportunities to:

- Reflect on the current state of course-level planning, design, and development
- Plan and initiate a team-based approach for curriculum mapping and course development arising from the mapping process

Actionable Tasks

In your [Program Design and Implementation Workbook](#), consider the following questions next:

- Whose perspectives will be important in taking a team-based approach to curriculum mapping?
- What approaches will work best for continuing with curriculum mapping activities for program planning?
- When will you take action on curriculum mapping tasks?
- What obstacles do you anticipate in taking this approach? What might be some solutions or strategies for addressing these concerns?

Unit Resources

- [Bloom's Taxonomy](#)
- [SOLO Taxonomy](#) (Biggs & Collis, 1982)
- [The ICE Model](#) (Fostaty Young & Troop, 2022)

ESSENTIAL CONSIDERATIONS FOR ONLINE COURSE DESIGN

Lauren Anstey

Online pedagogy and in-person pedagogy are fundamentally different, requiring vastly different methods. Additionally, post-secondary institutions are being called upon to consider important and foundational priorities, such as universal design, anti-racism, and reconciliation. This unit will orient you to those essential considerations and methods that not only define online teaching, learning, and assessment but also shape the future of Ontario universities and colleges.

This unit does not attempt to replicate the vast wealth of knowledge available in guiding on the essential considerations presented here. What it does aim to do is orient you to this wealth of knowledge so that you can get a sense of the big picture and lead program and course design with these essential considerations in mind. In other words, this unit offers guidance for tapping into essential considerations for your deeper exploration and application.

Much of this knowledge and expertise might very well come from your own team. Unit 1 in this module, "Start with Collaboration" as well as "Collaborating to Create the Online Learner Life Cycle and Its Ecosystem" in Module 1, introduced you to the various units, roles, and positions often involved in online course design and development. There is a strong link between the various roles represented in those lists and the essential considerations of this unit. Your team and those you consult with throughout course design each bring their own wealth of knowledge related to the essential considerations presented here. Their work serves to navigate, incorporate, and focus on these pieces throughout the course design process. While this module unit might orient you, it's the members of your team who will bring unique and valued perspectives on these considerations in application to your program, courses, and institutional contexts.
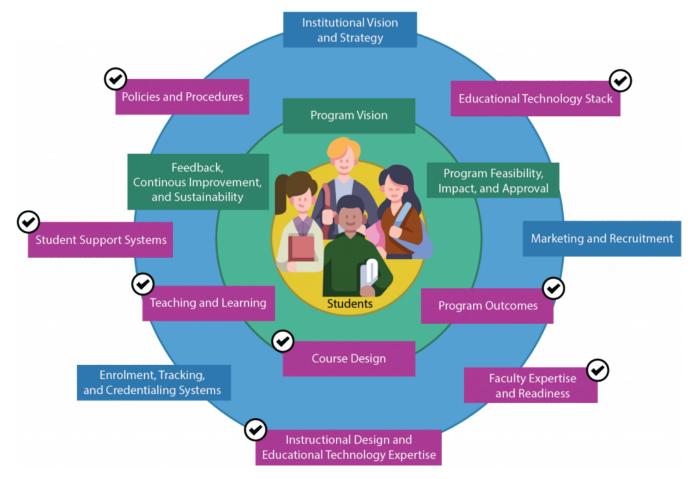
Learning Outcomes

By the end of this unit, you will be able to:

- Reflect on seven interconnected and essential design considerations and apply them to your own plans for online course design
- Identify next steps for tapping into the wealth of resources and expertise that allow for essential considerations to be enacted within course design

You will come away with:

- An understanding of the interconnected landscape of essential design considerations for online course design
- An appreciation for the resources (within the design team and beyond) that can help prioritize selected essentials into online course design

This unit focuses on the Feedback, Continuous Improvement, & Sustainability; Educational Technology Stack; Instructional Design & Educational Technology Expertise; Course Design; Teaching and Learning; Course Design; Faculty Expertise & Readiness; Student Support Systems; and Policies and Procedures elements of the Online Program Ecosystem. Read more about the ecosystem in Module 1, Unit 1: Collaborating to Create the Online Learner Life Cycle and its Ecosystem

There's a common fallacy that online courses are identical to in-person or face-to-face classes: that they are the same but just happen online. Inexperience and rushing to get something up and running often cause online course designers and instructors to overlook some of the key differences between these modes of teaching and learning (Baldwin & Ching, 2019). By focusing on seven interconnected and essential design considerations for online courses, teaching, and assessment, program leaders can mitigate this fallacy and truly design for online.

Additionally, some considerations presented here take essentials beyond the uniqueness of online pedagogy to the broader intentions and goals of teaching and learning in higher education. As universities and colleges shift in response to global priorities, all academic leaders must hold their programs accountable to what is taught, valued, and prioritized.

Introducing the Essential Considerations of Online Course Design

What are these seven essential considerations? Click on each consideration below for a description.

- **Quality**
- **Leveraging Technology**
- **Learner Persistence**
- **Accessible and Universal Design**
- **Academic Integrity**
- **Decolonization and Indigenization**
- **Equity Diversity, and Inclusion**

These considerations are inextricably linked. In focusing on one, the connections to other considerations are soon illuminated. For example, the characteristics defining quality for online courses necessarily involve elements of accessible and universal design. In this first section, each consideration is briefly introduced. Following this section, each consideration is brought to the foreground for elaboration, where we introduce foundational concepts, recommend follow-up resources, and prompt reflection for deeper exploration and application.
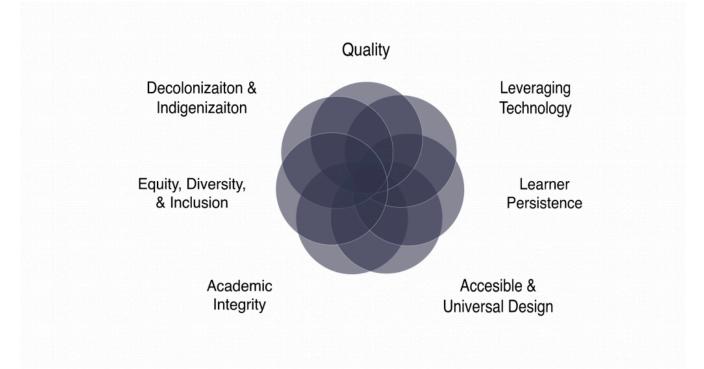

Figure 1: Venn Diagram of the 7 essential considerations for online course design

Quality

What constitutes a high-quality online course? How do we measure, deliver on, and guarantee a quality

online course? These essential questions have driven many groups to develop standards and rubrics as guidelines and measures of high-quality online teaching and learning.

Common sources include [Quality Matters](), [Online Learning Consortium](), or Institutionally-developed Frameworks, such as [Seneca College's Quality Framework for Designing and Delivering Online Courses]() and [The University of Waterloo Quality Guidelines]().

Despite the various frameworks available, they all share the common goal of organizing elements of high-quality online education to support designers, instructors, and academic leaders in their design and development of online courses based upon and measure quality standards. While different frameworks offer specific ways of organizing and presenting criteria, they often integrate the essential considerations highlighted throughout this unit, such as active teaching and learning; accessibility and Universal Design; equity, diversity, and inclusion considerations; and elements of learner persistence.

Reflection

- What characteristics will shape your program's definitions of high-quality online education?
- How will you measure and guarantee the quality of your online courses?
- Which frameworks or tools will your group engage?

Teaching and Learning-Driven Technologies

What is evident through the various quality frameworks is that the learning environment and students' engagement in learning or assessment activities are different than that of in-person contexts. Everything in an online course is mediated through digital technologies – from the internet to the Learning Management System (LMS), to educational technology tools that allow for creative engagement.

Online educators often seek to leverage various online tools and technologies in a purposeful way. It's important that teaching and learning drive technology use, not the other way around. In other words, educational technologies should serve the identified goals/needs of learning and student engagement, rather than selecting the technology first and allowing its parameters or limitations to dictate learning.

The Instructional Designers and Multimedia Specialists on your team can support conversations that expand ideas for teaching, learning, and assessment in ways that are not only aligned with the intended outcomes of the course but creatively and meaningfully engage digital technologies. Tools such as the

eLearning Toolkit and Rubric for eLearning Tool Evaluation can also help you choose and assess tools that align with your program vision and outcomes.

Reflection

- What tools and technologies have already been identified for the program and course development?
- What recommendations do your team members have to make about the tools and technologies the program and its courses should use?
- How might students be encouraged to participate in active learning through the use of technology and eLearning tools?
- Do assessment technologies or digital assignments support authentic assessment of knowledge and skills?
- How do your measures of Quality aid you in accounting for technologies that are driven by teaching and learning needs rather than the other way around?

Learner Persistence

Online learning can place learners in an unfamiliar space where new ways of engaging and learning are demanded of them. They often must unlearn or adjust longstanding learning habits and develop new approaches (Abdous, 2019). Oftentimes, online programs wish to recognize that their students are adult learners attracted to online studies for the flexibility it will grant. How do we motivate online learners to persist with their learning? What scaffolded supports and curricular structure will encourage self-directed, goal-oriented approaches, where appropriate? Learner persistence is understood as a multi-faceted phenomenon that leads to the completion of an online program of study (Hart, 2012).

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=61#h5p-2

Reflection

- How will your courses support students to persist with their learning?
- How will you leverage the facilitators and reduce the barriers to persistence?

Accessible and Universally Designed

Online and digital technologies afford entirely new ways of teaching and learning that were once inconceivable. Though, the way we use technology matters. It is not automatically more accessible than other modalities; it must be intentionally designed as such. This consideration focuses on both accessibility requirements (such as AODA) as well principles of universal design where the learning environment can be accessed, understood, and used to the greatest extent possible by all people.

In addition to AODA requirements, designers often turn to Universal Design for Learning (UDL). UDL is a "framework to improve and optimize teaching and learning for all people based on scientific insights into how humans learn" (CAST, n.d.). Guidelines are organized around three elements: Engagement (the why of learning), Representation (the what of learning), and Action & Expression (the how of learning). UDL 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. The UDL framework is often employed by course designers to apply these concrete suggestions directly into course design. By focusing on UDL, many aspects of accessibility for students with disabilities are inherently addressed. It is important to consistently address accommodations, as those who experience barriers due to disability, reduced capacity, or extenuating circumstances face unintended barriers to learning.
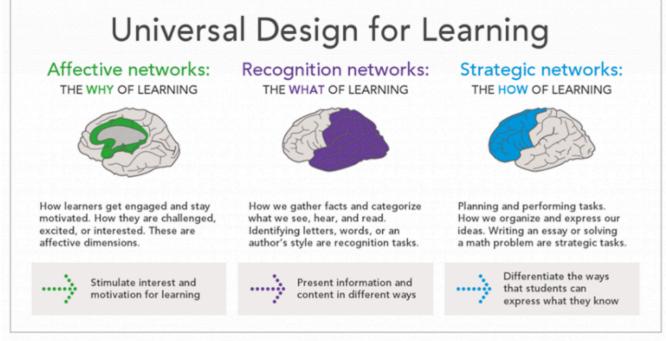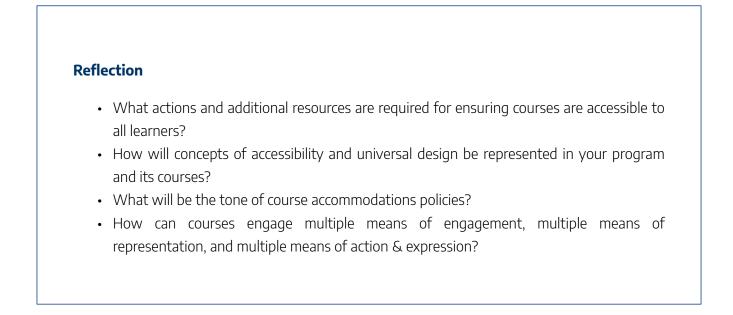
Figure 2: UDL Guidelines graphic organizer (CAST, 2018)

Reflection

- What actions and additional resources are required for ensuring courses are accessible to all learners?
- How will concepts of accessibility and universal design be represented in your program and its courses?
- What will be the tone of course accommodations policies?
- How can courses engage multiple means of engagement, multiple means of representation, and multiple means of action & expression?

Academic Integrity

Instructors are often concerned that online courses create conditions that allow students to cheat on their

assignments more easily. Online environments do pose challenges but these challenges can be overcome with purposeful design of instructional activities and assessments. Many of the best practices that encourage students' academic integrity in face-to-face contexts equally apply to online courses.

One example resource offering strategies for promoting academic integrity in online contexts is [The University of Waterloo's Centre for Teaching Excellence](#) (n.d).

Reflection

- What are the academic integrity practices at your institution?
- Do you have policies or guidelines for academic integrity specifically for online courses?
- What practices will set students up for success in understanding and engaging with academic integrity?

Decolonization, Reconciliation, & Indigenous Empowerment

Education for Reconciliation – this is the title of the TRC Calls to Action section that calls upon post-secondary institutions (with support from governments and in collaboration with Survivors, Aboriginal peoples, and educators) to integrate Indigenous Knowledges and teaching methods into classrooms. Integrating Indigenous Knowledges and methods into the online classroom is one part of the broader activity of decolonizing curriculum, education, teaching, and learning.

Consider this text from Fuentes et al., (2021, p. 75):

> "Decolonization, or anti-colonialism, can be defined as resisting, transforming, and eradicating the oppressive hegemonic power structures that influence our ways of acquiring and transmitting knowledge (Stein & de Oliveira Andreotti, 2016). Additionally, it involves critical consciousness and awareness, accountability, and reclaiming power that has been usurped from marginalized communities (Dei, 2006). It is also important to note the roots and origins of the construct of decolonization and credit these efforts to Indigenous communities (Dei, 2006) and Black enslavement liberation efforts (Stein & de Oliveira Andreotti, 2016)." (Fuentes et al., 2021, p. 75).

A list of strategies, recommendations, or approaches to decolonizing your program, courses, or teaching is purposefully not provided here. No such list could adequately convey the specific considerations for this work as situated within your context. What can be suggested is that academic leaders seek out and listen to a wide variety of voices:

- Reviewing and meaningfully incorporating Institutional materials developed to guide the college or university on decolonization and Indigenization, for example, Indigenous Learning Outcomes expressed by your college or university
- The literature arising within your disciplinary context as to the engagement in decolonization and Indigenization within the field
- Collaborating with Indigenous scholars and/or Indigenous Educational Developers
- Connecting with campus-based Offices/Centres of Indigenous initiatives, culture, or studies
- Connecting with Elders and Indigenous community members

The Pulling Together Learning Series are six texts for audiences such as Teachers and Instructors, Leaders and Administrators, and Curriculum Developers in Indigenizing Post-Secondary Institutions. These materials are a recommended next step in considering what decolonization and Indigenization look like within your program and courses.

Finally, as has been prompted in other sections, consider how decolonization is both a lens for designing and building courses as well as a lens for informing the content of what is taught. How are students called upon and educated to deconstruct the colonial ideologies of superiority and privilege that Western thought/approaches have shaped?

Reflection

- What are your next steps in considering decolonization and Indigenization in your program and course design?
- Who can you collaborate with?
- What does reciprocal and meaningful collaboration look like to you?
- How will you facilitate comfort amongst the team (e.g., instructors, subject matter experts) regarding such inclusion?

Equity, Diversity, and Inclusion

How do instructors and academic learners of the program work toward ensuring fair and equitable treatment, access, and opportunity for all learners? How does learning reflect various identities and differences? How do we create online learning environments that foster students' sense of inclusion, where they are respected and valued?

In the guide, [Equity, Diversity and Inclusion in Online Teaching: Where to Begin?](), the authors write: "Paradoxically, without an EDI lens, online learning, which is often assumed to make learning more accessible, can exacerbate pre-existing inequities. Similar to in-person learning environments, online learning involves widely varying levels of access to technology and resources as well as different student accessibility needs" (University of British Columbia, n.d.).

Like accessibility, EDI might also be a lens through which to review the curriculum/content of the program itself. How are the program and its courses teaching students to know, value, or engage with concepts of equity, diversity, and inclusion within the professional, vocational, or academic setting of study?

Reflection

- How will you work toward ensuring fair and equitable treatment, access, and opportunity for all learners?
- How will learning in your course and the program reflect various identities and differences?
- What will you specifically do to create online learning environments that foster students' sense of inclusion, where they are respected and valued?

Unit Reflection and Resources

This unit has prompted your consideration of seven interconnected essential considerations:

- Quality
- Leveraging Technology
- Learner Persistence
- Accessible and Universal Design
- Academic Integrity
- Decolonization and Indigenization
- Equity Diversity, and Inclusion

As you reflect on the unit as a whole, consider the intersectionalities between these considerations. How do you see them connecting and weaving together to inform program and course design?

This unit has focused on how essential considerations inform course design, while inevitably pointing to

the wider program design as a place where these considerations may also be addressed. As an academic leader, try identifying where the onus lies – is it up to individual instructors and courses to reflect these considerations? Or does responsibility also extend to the program as a whole? How can the program design offer overall guidance and structure such that these considerations can be effectively exercised at the course level?

Actionable Tasks

This unit opened with a nod to the knowledge and expertise related to these considerations that frequently come from within your team. Your team and those you consult with throughout course design each bring their own wealth of knowledge related to the essential considerations presented here. Their work serves to navigate, incorporate, and focus on these pieces throughout the course design process.

What actions will you take next to prioritize these relationships in centring the considerations presented in this unit within program and course design?

Unit Resources

This unit purposefully stops short of elaborating on the next steps of building, planning, and teaching online courses. There are many excellent open educational resources that pick up where we've stopped. We point to a sample of those rather recreate what many before us have done, and done so well

Online Course Design

Creating Online Learning Experiences: A Brief Guide to Online Courses, from Small and

Private to Massive and Open by Matt Crosslin et al.

The process of designing online courses often focuses on the methodology of taking certain steps to produce a product (the course). We feel that learning should be an experience more than a place run by a person constrained by specific designs. The goal of this book is to provide an updated look at many of the issues that comprise the online learning experience creation process.

Online Course Design for Humans by Trent Online.

This workbook guides instructors' course planning in a way that keeps the humans front and centre. The guide supports course designers to consider guiding assumptions and principles informing course design, how to sketch out a map for a course, and how to turn that plan into reality.

Teaching Online

Fit for Online Learning by the University of Lethbridge Teaching Centre.

Fit for Online Learning (FitFOL) is designed to support Higher Education professionals with little or no previous online teaching experience in their transition to alternative modes of course delivery. We understand the challenges the current situation presents to both professors and students, but we believe that with the right knowledge and strategies, many of the hurdles of teaching online can be overcome and its possibilities will unfold.

Learning to Learn Online: Student Learning Supports

Learning to Learn Online at Fanshawe by Fanshawe College

Learning to Learn Online prepares you for success in your online journey by introducing you to the unique features of the online learning environment, and providing tools for understanding yourself and your role as a self-directed learner. The first part of the book focuses on three key questions: Who am I as an online learner? Who am I on my online learning journey with? Who are my instructors? What is their role? The second part of the book introduces you to effective strategies and tools for online learning: time management strategies, professional communication, analyzing online assignments, and strategic reading.

CONCLUSION AND REFERENCES

Lauren Anstey

Module 3 has presented many elements of online course design and implementation, particularly when that course design is being planned in creating a new online program. Unit 1 started this work by focusing on collaboration as a guiding principle of the design process. Online course design and development necessitates a team of people who bring a range of skillsets to the process. The unit invited you to consider who's on your team and who's available for consultation. Unit 2 then shifted attention to turning a program vision into a curriculum vision, such that overall values for teaching and learning within the program can continually infuse course design. Unit 3 expanded on the next steps, encouraging a curriculum mapping process that can turn these overall curriculum plans into specific courses with identified course learning outcomes, and major forms of activities and assessments planned in alignment with program goals, outcomes, and intentions, while Unit 4 dived deeper into the particulars of curriculum mapping by exploring it through three Case Studies. Finally, Unit 5 introduced seven essential considerations for online course design. These seven considerations spanned questions of quality, teaching and learning-driven technologies, learner persistence, accessible and universal design, academic integrity, decolonization and Indigenization, and equity, diversity, and inclusion (EDI).

Taken together, these five units offer program leaders and academic administrators a high-level overview of the course design process. It is now up to your team, under your leadership and guidance, to take ideas and perspectives from these units and apply them to your course design and development activities.

References

Antoine, A., Mason, R., Mason, R., Palahicky, S. & Rodriguez de France, C. (2018). *Pulling Together: A Guide for Curriculum Developers*. Victoria, BC: BCcampus. Retrieved from https://opentextbc.ca/indigenizationcurriculumdevelopers/

Baldwin, S. J. & Ching, Y. H. (2019). *An online course design checklist: Development and users' perceptions*. Journal of Computing in Higher Education, 31(1), 156-172. https://dx.doi.org/10.1007/s12528-018-9199-8

Fink, L.D. (2003). *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses*. San Francisco: Jossey-Bass.

Fuentes, M., Zelaya, D. G., & Madsen, J. W. (2021). *Rethinking the course syllabus: Considerations for promoting equity, diversity, and inclusion.* Teaching of Psychology, 48(1), 69-79. https://doi.org/10.1177/0098628320959979

Grimard, J. (2021). *Cultivating access: Teaching accessibility & inclusion in graphic design advanced diploma programs*. OCAD University Open Research Repository. http://openresearch.ocadu.ca/id/eprint/3416

Hart, C. (2012). *Factors associated with student persistence in an online program of study: A review of the literature*. Journal of Interactive Online Learning, 11(1), 19-42.

Seneca College (2021). *Seneca's Quality Framework for Designing and Delivering Online Courses*. https://employees.senecacollege.ca/spaces/39/the-teaching-learning-centre/files/9231/seneca-s-quality-framework-for-designing-delivering-online-courses-pdf

Thomson, G. (2019, September). *Accessible online learning. Ontarians with Disabilities Act*. https://www.aoda.ca/accessible-online-learning/

University of British Columbia (n.d.). *Equity, Diversity, and Inclusion in Online Teaching: Where to Begin? Centre for Teaching, Learning, and Technology*. https://ctlt-inclusiveteaching.sites.olt.ubc.ca/files/2020/04/Equity-Diversity-Inclusion-Online-Teaching.pdf

University of Waterloo (n.d.) *Encouraging academic integrity in remote, online, and in-person learning contexts. Centre for Teaching Excellence*. https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/encouraging-academic-integrity-remote-online-and-person

University of Waterloo (n.d.) *Quality guidelines. Centre for Extended Learning*. https://uwaterloo.ca/extended-learning/teach-online/creating-online-course/quality-guidelines

MODULE 4: BUILDING SUSTAINABLE ONLINE PROGRAMS

What will your online program ecosystem need to ensure the program's sustainability?

When designing new online programs, the initial work is on the vision, development, and implementation stages; however, from the perspective of an educational leader, there must also be a focus on program sustainability. In this module, we unpack the idea of sustainability in relation to meeting existing community needs effectively through the development of online programs and their long-term success. We highlight different approaches to ensuring sustainability and focus on creating a sustainability plan for your program.

Learning Outcomes

By the end of *Unit 1: Sustainability and Online Programs*, you will be able to:

- Recognize the importance of embedding sustainability in the program design process
- Apply a sustainability lens to the process of designing and implementing your program

You will take away:

- Knowledge of areas within your own institution that currently promote sustainable program development and where sustainability efforts need to be developed

---

By the end of *Unit 2: Preparing for Sustainability Planning*, you will be able to:

- Recognize the importance of using a systems approach to embed sustainability in the program design process
- Determine institutional and/or departmental readiness to create a sustainability plan

You will take away:

- Awareness of whether your institution and/or department is ready to develop a sustainability plan for your program

---

By the end of *Unit 3: Creating A Sustainability Plan*, you will be able to:

- Revisit your online program vision with a sustainability lens
- Create or review a sustainability plan for your institution

You will take away:

- A sustainability plan that is both actionable and renewable

---

Throughout this module, you will be prompted to reflect on key ideas and complete activities that will enable you to lead conversations and plan future action. You can keep track of your work by downloading and recording it in the **Program Design and Implementation Workbook.**

SUSTAINABILITY AND ONLINE PROGRAMS

Denise Stockley

In this unit, we return to the ideas from [Module 1, Collaborating to Create the Online Student Life Cycle and its Ecosystem](#) and view them through a sustainability lens. While we have positioned this module on program sustainability as our final module to collectively highlight practices and tools that can assist you in this vital part of program design, we want to emphasize the importance of thinking about sustainability from the very beginning of your program development work.

Sustainability planning must be a forethought instead of an afterthought, which requires proactive planning prior to launching any program. While you may understandably be focused on getting your program "up and running," there are important processes that you can embed in the design and implementation phases of your program that will help you know if you have met your vision and goals for the program and where you will need to dedicate resources for continuous improvement to ensure the long-term success of your program and its students.
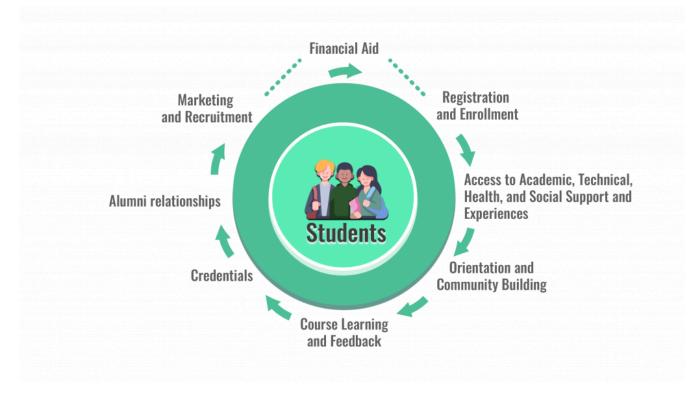
Learning Outcomes

By the end of this Unit, you will be able to:

- Recognize the importance of embedding sustainability in the program design process
- Apply a sustainability lens to the process of designing and implementing your program
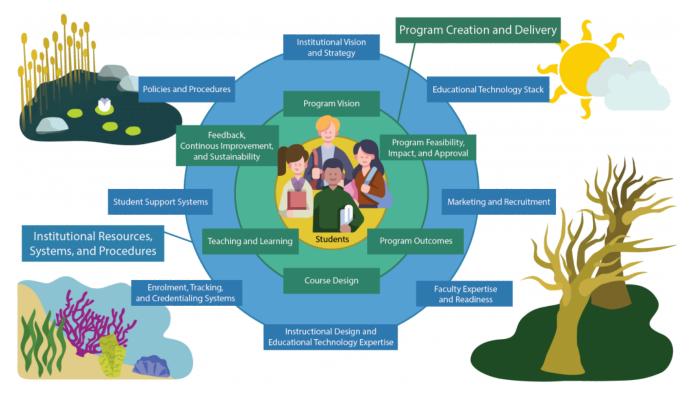
You will take away:

- Knowledge of areas within your own institution that currently promote sustainable program development and where sustainability efforts need to be developed

This unit revisits the entire online student life cycle through a sustainability lens.

This unit revisits the entire online program ecosystem through a sustainability lens.

Sustainability Defined and In Action

Sustainability is defined simply as being, "able to last or continue for a long time" (Merriam-Webster, n.d.). This definition sounds straightforward, but it doesn't necessarily speak to the quality or health of your program. It may be more helpful to think of sustainability as the result of a well-functioning ecosystem, where every part of the visioning, development, and implementation of an online program interconnects to support the student life cycle and ensure program longevity and currency. As with all ecosystems, the health and functioning of one element and how it interconnects with the others can affect how sustainable the environment is and who thrives within it.

Once your program is up and running, how will you know that the program is meeting the vision that you set for it? How will you know if the online ecosystem around it is effectively supporting your students as they move through the online life cycle? How will you know that it is meeting the needs of the department, institution, or other community stakeholders who helped shape the purpose and vision of the program? As time passes, how will you assess what elements need to be changed, refined, or remain the same to ensure program effectiveness and longevity? And what resources do you have available to respond to any of this work after the program launches?

Sustainability planning helps leaders meet the future challenges and opportunities related to the program, and it should be part of online program design and implementation work. It's critical for program leaders to be aware of how sustainability planning can be incorporated at each stage in the process. This means not solely relying on external cyclical review processes to set the timeline and requirements to determine sustainability, but rather creating a program sustainability plan. Each of the areas in the online program ecosystem and their effects on the online student life cycle should be planned out with a vision of at least 5 years into the future, rather than focusing just on the program launch.

The following video provides an overview of sustainability and the importance of planning within online programs from one leader's perspective.

> *One or more interactive elements has been excluded from this version of the text. You can view them online here:* https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=64#oembed-1

In the video, Patrick prioritizes program sustainability in their context around long-term planning for updating course content and methods of teaching. Certainly, this is an important area of sustainability planning that will likely be consistent around any online program because of the nature of online course design and improving technology. You may also identify that there are other important areas that your program will

need to consider for sustainability, for example, if one of your visions for the program is incremental enrolment of 15% over 4 years, will you be able to meet increased demand for academic counselling or the application interview process? If you want your program to be accessible to equity-deserving students who have previously faced barriers to institutional access, will the collaborative units that support this initiative still be able to contribute their expertise and resources past the program launch date? Do you want to incorporate state-of-the-art technology into a set of courses that will require extra resources from the institutional Information Technology Unit? These are just a few examples of where long-term planning for sustainability reaches out across the online ecosystem. Revisiting your Program Vision can help you determine your sustainability planning and prioritization. Let's turn our attention to how you can use your program context to start visioning where your sustainability plan might take you.

Visioning Sustainable Online Programs

Before we go further in thinking about online program sustainability, it is worth pausing to note that "sustainability" in relation to *any* post-secondary program has historically been framed by the concept of "Quality Assurance." Since 2002, under the Colleges of Applied Arts and Technology Act, Ontario colleges have been mandated to develop a process that focused on quality within their programs. This Act resulted in the creation of an institutional and provincial quality assurance process that is self-regulated by the colleges through an arm's length oversight and governance body: the Ontario College Quality Assurance Service (OCQAS). Within the guiding principles for the OCQAS, the final principle focuses on sustainability, stating that programs must be "be sustainable and affordable for the system as a whole and for the individual colleges in the system." In the university sector, quality assurance processes came into effect in 2010 with the creation of the Ontario Universities Council on Quality Assurance. Similar to the college sector, this organization is at arm's length and it is intended to assure quality and sustainability in both new and existing programs.

By keeping these two quality assurance frameworks (College and University) in mind, institutions and their leaders can take an active role to ensure the creation and implementation of high-quality sustainable *online* programs. But it can be challenging to know where to start or how to navigate the quality assurance system as a leader given that online programs require a combination of both traditional and new areas expertise, resources, roles, and administrative planning. It's our hope that the information presented here and in the remainder of this module will enable you to consider the entire online ecosystem when thinking about sustainability regardless of any quality assurance reporting so that, when it comes time to engage in institutional quality assurance processes, your sustainability plan will serve as a guide to completing the part of that process rather than the quality assurance process being the sole reason you consider sustainability. Having conversations about sustainability at the end of the program design and implementation process rather than fully integrating them throughout leaves your program vulnerable to both inside and outside forces that may undermine its success.

Building sustainability into the conversation from Day 1 of planning and at each step afterward is essential. In Module 2, Creating an Aligning Program Vision, you were challenged to respond to these questions:

- Why is this program important?
- What are the unique advantages of the program—what makes it distinctive?
- How does the program contribute to the needs of the university or college community and the broader local, provincial, and global community?
- How do we define success in this program, and how will we know that the program has been successful (what metrics will you use)?
- Why online? What is your rationale for developing an online program specifically?

As you will notice, there are no questions relating to failure or lack of success. We build a vision around possibility, and as our colleagues Anstey and Haque (n.d.) suggest, you want our vision to SOAR by reflecting the **S**trengths, **O**pportunities, and **A**spirations identified by your collaborators and stakeholders to get the **R**esults you hope for.

STRENGTHS   OPPORTUNITIES   ASPIRATIONS   RESULTS

However, building an online program on vision alone would not move beyond the feasibility and approval stage without demonstrating that the program is sustainable and useful in a way that meets the institutional approval process, because institutions have limited and competing resources. Building sustainability, like program and course design, should follow a collaborative process, ensuring that key stakeholders and units that inform and create the online ecosystem (such as those described in Module 1) are engaged and contribute to the success of the program. Taking a systems approach ensures that the big picture isn't lost as we plan for the future.

To promote sustainability, we need to think about the big picture or vision as to why we are developing the online program. The following image includes six prompting questions to aid you in your reflection, which encompasses various areas to consider when planning your programs.

What needs are the proposed program addressing?

What is the plan beyond implementation?

Who are the champions or key stakeholders?

How does the program "fit" with other programs at the institution?

What quality improvement measures are already, or should be adopted?

What are the resources required?

To promote "big picture" thinking about program sustainability, consider what need(s) the program addresses and how it fits with other programs, who the program champions are, what happens once the program is

implemented and how you will assess
program quality and your long-term
resource requirements.

Activity 1: Respond to the six prompt questions above to start considering how your initial program vision can help you begin thinking about program sustainability. You can document your responses in the Program Development and Implementation Workbook.

Now that you've started thinking about where your program "journey" originally began and where your intended destination is, as well as the resources and collaborators along the way, let's go back to thinking about the elements of the online ecosystem that support your program. The goal here is for you to identify, in relation to your program vision and outcomes, those areas of the online ecosystem that you believe you will have to develop a long term (e.g., 5-year) plan for ongoing collaboration and/or resourcing to gather information about the effectiveness of your program and its ongoing improvement and sustainability.

Activity 2: Using the online ecosystem and student life cycle models, complete the table to reflect on program sustainability with the lens towards the future. Then, indicate where collaborators or resources are already in place to help with program sustainability or where this work still needs to be addressed. You can document your responses in the Program Development and Implementation Workbook.

Unit Reflection

In this unit, you have:

- Recognized the importance of embedding sustainability in the program design process
- Begun to apply a sustainability lens to the elements of the online program ecosystem in your program

Hopefully, this unit has highlighted what you already do with regard to creating sustainable programs and has got you thinking about what you can do to promote/improve the sustainability of your programs. The

next step is to start visioning what form your program sustainability plan will take, then assess how ready your institution and/or department is to create and implement it.

PREPARING FOR SUSTAINABILITY PLANNING

Denise Stockley

Embedding sustainability is critical in designing online programs as it sets the stage for longevity and currency. A sustainability plan is the "guidebook" your program will use to collect information, continue collaborations, and anticipate the resources that you'll need to ensure the longevity and health of your program. A good question to think about before getting into creating a sustainability plan is, "can I summarize the benefits of creating a sustainability plan?" If you're looking for ideas as to how to answer this question, consider looking at the "Sustainability and Online Programs" unit before getting started on this one. If you are already convinced of the importance of creating an online program sustainability plan and want to assess whether you are ready to begin creating your plan, read on.

Learning Outcomes

By the end of this unit, you will be able to:

- Recognize the importance of using a systems approach as a blueprint to embed sustainability in the program design process
- Determine institutional readiness to create a sustainability plan

You will take away:

- An awareness of whether your institution is ready for a sustainability plan

A Systems Approach to Online Program Sustainability

In this book, we encourage a thoughtful, aligned approach to online program design that lays the foundation to build a sustainable program. As we discussed in "Turning Program Vision Into Curriculum," blueprints are a useful tool when designing courses that align with the program vision. In the context of sustainability, this same analogy holds true, and the 'blueprint' is the creation of a sustainability plan that reflects the vision and purpose of your program with an eye towards the future.
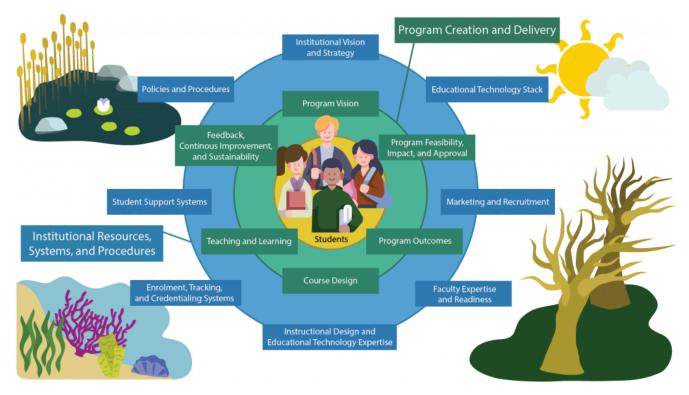
The following video highlights various considerations when planning a new program with sustainability embedded in the process.

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/creatingsustainableonlineprograms/?p=65#oembed-1

The "systems" approach discussed in the video aligns with the blueprint analogy in that both take into account all the variables and drivers as part of the design process. With these drivers, there are certain things that we can predict and plan for, and others–like COVID-19–are unpredictable and unprecedented. However, even with unpredictable influences, a well-crafted sustainability plan can make the difference between the ability to pivot quickly or having your online programs negatively impacted. The sustainability planning approach in this unit emphasizes the interconnections among the elements on an online program and their impacts on each other and individuals, rather than identifying each discrete area in isolation. A systems approach that looks not just at structures, policies, and resources, but also makes space for the real-life experiences and needs of the students, faculty, and staff that navigate and support the online student life cycle and ecosystem is essential when considering the development of a sustainability plan. It's the effective and thoughtful development and implementation of the various elements of the program that ensures the success and health of the learners while meeting the needs of the department, institution, and other community stakeholders.

When taking a systems approach to developing your program sustainability plan, consider all of the elements of the online ecosystem that support the online student life cycle. And remember, each of these elements is not just a structure, policy, or resource–they also represent individuals whose needs and experiences should be considered when thinking about program quality and sustainability.

Workbook Activity: Reflecting on a Systems Approach to Sustainability Planning

Revisit the "Sustainability and Online Programs" unit in this module, where you documented what actions you might need to take in the long term (minimum 5 years) related to program sustainability for each of the online ecosystem elements and consider the following:

- How do/will these key components interact and impact each other?
- How do/will you assess the effectiveness of your programs and identify areas for improvement related to this element? In other words, who do you reach out to and what data do you collect.? For example, internal (faculty, staff, admin, HR, facilities etc.) external (industry – grads), users (students).

You can document your responses in the Program Development and Implementation Workbook.

Institutional or Program Readiness

We've chosen the systems approach for our foundation for sustainability planning. However, readiness is another essential element for sustainability planning that is important to consider, as readiness determines the willingness of an institution or department to create planning documents and make change happen in a timely fashion. Sustainability planning should not be an afterthought; it should be integrated right at the visioning stage. This is easier said than done if an institution or department is not ready or does not have the prerequisites to ensure readiness. Hopefully, resources such as the "Sustainability and Online Programs" unit of this module can help "make the case" for why this type of planning is important.

The following areas of assessing institutional or program readiness to sustain the program is not an exhaustive list. It is simply meant to highlight six key areas and associated actions that you can consider addressing to promote institutional readiness for creating and adopting a sustainability plan. In some cases, you may have begun or completed this work as part of your Program Feasibility and Approval planning and simply need to continue this work as you project into the future. Other areas may be new to your approach to thinking about program sustainability.

When you are ready, you can use the Program Design and Implementation Workbook activity to check off which of the items in each of the areas you have completed to date. Don't worry if you are unable to check them all off–this is simply a self-assessment tool to help you better understand your readiness in relation to the next step in this process: Creating Your Program Sustainability Plan.

If you are looking for an even more comprehensive tool than the one below to assess where your program sits in relation to its readiness to create and implement a sustainability plan, you can use Washington University's publicly available Program Sustainability Assessment Tool or Clinical Sustainability Assessment Tool. These two tools are, however, discussed in more detail in the next unit.

Preparation and Commitment

Preparation for and commitment to developing a sustainability plan ensures all the elements of the online program are accounted for on the path to institutional readiness and that the plan will be used to guide the program once it's created.

- Purposefully make the initial decision to develop a sustainability plan as a priority and commit to both creating and using the plan once developed
- Revisit the shared vision of the purpose/intent of the online program and ensure that your

sustainability plan aligns with this vision

- Ensure all stakeholders have a shared definition of what sustainability means in the context of your program
- Review existing policies, procedures, quality assurance processes, and collective agreement documentation as it relates to online programs and consider how your sustainability plan might align with, complement, or enhance them

Leadership

Effective leadership is essential to a successful sustainability plan.

- Identify both formal and informal leaders who will be the champions for sustainability and the sustainability planning and implementation process
- Promote opportunities for professional development related to online program sustainability to ensure all leaders have a similar knowledge base. This is especially critical as teams evolve over time and new voices are brought into the team

Collaboration

Collaboration occurs at multiple levels of program development, including initial planning, design, implementation, and of course sustainability planning.

- Create a team with key stakeholders to develop the sustainability plan. Faculty, Staff, Students and Administration should be included as appropriate in the team. It is important as part-time faculty and students' roles shift, that they are replaced on the team and that these individuals are equitably compensated for this time if it is not part of their regular work or study duties
- Identify other internal key stakeholders from across the institution who are directly impacted or impact the online program (e.g., librarians, information technologists, student affairs)
- Engage with external partners who have influence or can advise regarding the online program
- Create opportunities for collaborators to work together synergistically to promote sustainability

Communication

Communication is essential to ensure that all collaborators are aligned and working towards the same goal. It also ensures the efficient and effective use of resources by avoiding duplication of effort or the need to repeat tasks due to a misunderstanding. Communication can also be a challenge for large teams, especially those including internal and external partners, which are often required when developing a new program. This is why communication is an important factor to consider.

- Develop a communication strategy that considers and includes all key stakeholder groups
- Revisit and reflect on your communication strategy regularly. Update it as needed

Financial

Online programs include both indirect and direct costs that require both short-term (development stage) and long-term (implementation stage) planning.

- Work with the finance individuals at the departmental or unit level and the institutional level
- Review the current fiscal situation of the institution and how this program is situated
- Determine total or actual costs of running the program, with a lens to when the program is financially viable/sustainable
- Engage external partners who might partially or fully fund the program costs

Evaluation

Evaluation is necessary to determine the success of your new program as well as identify opportunities for improvement for both the program and your program design process (including your sustainability plan).

- Develop an evaluation plan that considers all the aspects of the online program system, including its sustainability
- Identify sustainability metrics and assessments that complement your institutional context. Ensure these evaluations are included in ongoing online program visioning and development

Unit Reflection and Resources

In this unit, you have:

- Recognized the importance of using a systems approach as a blueprint to embed sustainability in the program design process.
- Determined institutional or program readiness to create a sustainability plan.

After completing the Institutional or Program Readiness Checklist, you may have some questions, such as:

- When will I complete the remaining tasks?
- How will I complete the remaining tasks?
- Who will complete the remaining tasks?

We encourage you to reflect on all of the collaborators related to the online program ecosystem that you identified in the previous unit or even in Module 1. These collaborators, including other departments or individuals who have gone through the process of developing a sustainability plan, can be of great help. In the next unit, we'll share strategies, models, and templates for creating your plan. You may find it helpful to review that material, and then revisit your questions around "when, how, and who."

Unit Resources

- Module 4 Video Playlist
- Program Sustainability Assessment Tool
- Clinical Sustainability Assessment Tool

CREATING A SUSTAINABILITY PLAN

Denise Stockley

In the first two units of this module, you've explored the importance of creating a sustainability plan, approaching sustainability through the interconnected ecosystem of online programs by using a systems approach, and embedding sustainability planning from Day 1 of your program planning. You've also begun to identify elements and collaborators that will play an important role in developing your sustainability plan and reflect on how ready your institution or program is to begin the sustainability planning process. If you have completed this work, you're ready to develop your sustainability plan. This unit provides you with practical steps and tools to undertake that task.

Learning Outcomes

By the end of this unit, you will be able to:

- Revisit your online program vision with a sustainability lens
- Create or review a sustainability plan for your institution

You will take away:

- A sustainability plan that is both actionable and renewable

Creating a Sustainability Vision

As we explored in detail in [Unit 2 of this Module](#), taking a systems approach to sustainability and ensuring institutional readiness sets the foundation to create your sustainability plan. Like other institutional plans, a sustainability plan should be actionable and measurable – a living document rather than something filed away and brought out every few years.

It's important to recognize that each online program measures success differently because there are many

internal and external drivers that determine what it means to be sustainable. For example, your program's success may be based on not only achieving one or more of the following program or institutional goals, but also their ability to sustain and/or continuously improve them once they are achieved:

- Increased enrolment and successful graduation of students from equity-deserving groups, and the development of any associated new resources or policies that support this;
- Ability to attract faculty, external funding, etc.;
- New partnerships or collaborations with other institutions;
- Increased joint faculty-student research projects;
- Innovative curricula;
- Increased student engagement with and positive impact in their local communities
- The successful introduction and use of new eLearning tools
- More efficient enrolment process that reduces staff hours on this task
- Increased engagement in and reported student satisfaction with the quality of their online courses

These drivers could be limitless, but it is critical to identify the attributes that matter the most to the program, institution, and its stakeholders so that you can determine which metrics and data collection procedures will enable you to know whether the program achieved its goals and can sustain them. Unlike provincially mandated quality assurance processes used in course design, each institution should create its own sustainability plan that takes into account their institutional context (e.g., Strategic Mandate Agreements with the Ministry of Colleges and Universities, Strategic Plans, Program Vision and Goal). Each of these areas will make up a component of your blueprint for sustainability.

The good news is that a lot of this work happens when you assess your program development readiness, create and align your program vision (e.g., the "why" for your program"), assess your program feasibility and seek program approval, and then start visioning your program's curriculum. The step that you should introduce into all of these actions in relation to sustainability is to ask, "how will we sustain this work over the next 5 years and beyond?"

The Program Development and Implementation Workbook activity below prompts you to start reaching some consensus around what "success" and "sustainability" look like in your program before you begin the work of building a plan. If you completed Unit 1 and Unit 2 in this module, you will have already begun identifying how each element of the online ecosystem interacts with your vision and goals for the program and what might be required to sustain them, as well as possible collaborators and what data you might collect. This next step will help you find "common ground" in prioritizing a vision for sustainability in your program and identifying where your priorities for sustainability lie.

Workbook Activity: Create a Sustainability Vision

Complete the following Sustainability Visioning table in the Workbook to create a shared vision of sustainability.

	Response
Sustainable programs in our institution/department share the following qualities:	
Essential elements of online programs at my institution/department include . . .	
Essential elements of our program that need to be sustainable are. . .	

Develop Your Sustainability Plan

Revisiting Institutional and Program Readiness for Sustainability

In Unit 2 of this module, we asked you to consider your institutional or program readiness. Before moving on to developing your plan, we recommend that you complete this work. Why? Because even the best sustainability plans can fail if the will or resources to implement them are not present. For that reason, we're diving a bit deeper into assessing institutional or program readiness by highlighting a useful assessment tool.

Colleagues at Washington University, St Louis MO have created two freely available tools that assess capacity for sustainability depending on whether you have an academic or clinical program: The *Program Sustainability Assessment Tool* (PSAT) and *Clinical Sustainability Assessment Tool* (CSAT). As you can see in Figure 1, each tool focuses on several key areas or "organizational or contextual domains" necessary to support implementing a sustainability plan. You can read more about each area by visiting Understand Program Sustainability and Understand Clinical Sustainability.

Program Sustainability Assessment Tool (PSAT)

Clinical Sustainability Assessment Tool (CSAT)

Workbook Activity:

Select one of the two sustainability frameworks outlined above that is most appropriate for your context. Complete the sustainability assessment tool for the associated framework:

PSAT:https://sustaintool.org/wp-content/uploads/2016/12/Sustainability-ToolV2_w-scoring_12.11.13.pdf

CSAT:https://sustaintool.org/wp-content/uploads/2020/01/CSAT-tool-and-scoring_1.14.20.pdf

Developing the Sustainability Plan

The final step in sustainability planning is to develop your plan. We're turning again to our colleagues at Washington University for inspiration and tools. They have helpfully shared example completed sustainability plans in both the program and clinical areas of focus as well as their templates for developing them.

Using the Program Sustainability Template plan as an example, we can see how the work you've undertaken so far across this module ties into creating the plan itself. The plan begins with documenting the following information in to guide the plan:

Program Vision Statement: [Describe the final long-term goal or vision of your program or initiative.]

Background: [Briefly summarize the history and current state of the program you wish to sustain.]

Current Funding Sources: [List the current funding sources for this program along with their expiration dates.]

Sustainability Results: [Summarize your program's strengths and areas for improvement identified in your results from the Program Sustainability Assessment Tool.]

Program Elements to be Sustained: [List the program elements that your team has decided to sustain. Refer to your evaluation data to see which program elements are most effective and essential.]

Partners: [List partners involved in the sustainability assessment and/or creation and implementation of the sustainability plan.]

Time Frame: [Enter the period over which the sustainability activities listed below will be implemented.]

The tool then moves on to having you create and plan, measure, and decided which resources will be necessary to sustain the program in relation to these questions in the key areas you identified using the Program Sustainability Assessment Tool above.

Here is an example sustainability plan created using the template.

Workbook Activity:

Use Washington University's Sustainability Action Planning Template to create your program sustainability plan. We've included the Program Planning Template in the Program Development and Implementation Workbook for your convenience, but you can also access it and example plans at https://www.sustaintool.org/psat/plan-for-sustainability/#develop-an-action-plan. The template has a Creative Commons BY-NC-SA license, so you can share and modify it as needed for non-commercial purposes.

If you find the Clinical Sustainability approach more relevant to your program you can access

those planning tools here: https://www.sustaintool.org/csat/develop-your-plan/#develop-an-action-plan.

For either template:

1. Fill out the outline section first to capture the *Program Vision Statement*, *Background*, *Current Funding Sources*, *Sustainability Results*, *Program Elements to be Sustained*, *Partners,* and *Time Frame.*
2. Then, complete the tables that follow to develop your sustainability plan. These tables cover the areas for consideration outlined in the Program or Clinical Assessment Tools list above, respectively.

Unit Reflection and Resources

Now that you have completed your sustainability plan, it's essential that you put it into action: A plan isn't useful until it is put in motion. Reflect on any obstacles you can foresee to putting this plan into action. What steps can you take to proactively overcome these obstacles?

Unit Resources

- Module 4 Video Playlist
- Washington University's Sustainatool Website

  - Program Sustainability Assessment Tool (PSAT)

    - PSAT – Understand
    - PSAT – Assess
    - PSAT – Develop a Sustainability Action Plan

- Clinical Sustainability Assessment Tool (CSAT)

  - CSAT – Understand
  - CSAT – Assess
  - CSAT – Plan a Sustainability Action Plan

CONCLUSION AND REFERENCES

Denise Stockley

In this module, we defined and created a vision for sustainability within online program development, and we developed a sustainability plan that will ensure the longevity of these programs. Sustainability planning is informed by the program's ecosystem that we discovered in Module 1, through the strategic visioning in Module 2, and the course development cycle and planning in Module 3. These four modules together provide a comprehensive lens into how to design and develop effective online programs.

References

Anstey, L. Haque, A. (n.d.). *SOAR Retreat*. Centre for Teaching and Learning at Western University. https://teaching.uwo.ca/pdf/curriculum/Sample%20Retreat%20-%20SOAR%20Retreat.pdf

Bertalanffy, L. V. (1968). *General systems theory: foundations, development, applications*. New York (NY): George Braziller Inc.

Clinical Sustainability Assessment Tool (n.d.) Retrieved February 1, 2022, from https://sustaintool.org/csat/

Merriam-Webster. (n.d.). Sustainability. *In Merriam-Webster.com dictionary*. Retrieved February 1, 2022, from https://www.merriam-webster.com/dictionary/sustainability.

Program Sustainability Assessment Tool (n.d.) Retrieved February 1, 2022, from https://sustaintool.org/psat/

Stockley, D., Egan, R., Van Wylick, R., Hastings Truelove, A., McEwen, L., Dagnone, D., Walker, R., Flynn, L., & Reznick, R. (2020). *A systems approach for institutional CBME adoption at Queen's University*. Medical Teacher, 1-6.

Watson, M. E. (2011). *Systems approach workbook for health education and program planning*. Burlington (MA): Jones & Bartlett Learning.

CONCLUSION

The Path to Successful Online Programs

The four modules in this book, when combined, provide the foundational knowledge required to develop and sustain successful online programs.

In **Module 1,** we learned about the online student life cycle and we identified the ecosystem that exists around successful program development and implementation. Building and sustaining the ecosystem requires community engagement from across your institution and beyond as you consider which community stakeholders and other institutions might be engaged throughout the online program's lifetime. We are encouraged to identify current and potential collaborators and consider how collaborations can be a two-way street that provide benefits within and beyond the program. We also explored questions and frameworks you can use to assess if your institution or program is ready to create online programs and to identify areas where short-, mid-, and long-term planning can increase development readiness and sustainability. Finally, we examined three models for the distribution of online program expertise and resources.

Module 2: Program Vision, Feasibility, and Approval walked us through the process of setting your online program up for success through creating a strong program vision and assessing its feasibility in relation to guidelines set by your institutional context as part of the program approval process. It emphasized the role of collaboration in establishing program outcomes and planning wisely for the development of the program, including timelines and resourcing—particularly those that are specific to online programs.

In **Module 3: Course Design and Implementation,** we explored the process of visioning your program's curriculum, including choosing core competencies and/or teaching approaches and eLearning tools to create a consistent and effective student learner experience in your program. It provided examples and tools to help program designers map out learner pathways through the program and embed essential elements such as learner persistence, teaching and learner-driven technologies, and decolonization into courses.

Module 4: Building Sustainable Online Programs emphasized the importance of building sustainability into your online program development work from Day 1. It encouraged you to look beyond participation in mandated academic quality assurance processes to create your own "blueprint" for program sustainability and continuous improvement that accounts for *all* areas of the online program ecosystem. The module provided information and tools to help you assess your institutional or departmental readiness to develop and implement a sustainability plan as well as an editable sustainability plan template.

In conclusion, this book focused on the internal and external contexts and collaborations that can impact your online program's quality and sustainability. Programs that thrive over time are designed with specific attention to the many facets required for success, and this book provided a framework and series of activities

to help guide you through this process. We designed this book so that you could "dive in" to the parts of online program creation that are most applicable to you at this point in time or to read in its entirety if you are just starting out in this process and come away with concrete, documented ideas, information, and action plans. We encourage you to regularly revisit areas of the book as the need arises. We hope that you will use the conversation prompts, meeting facilitation plans, planning templates, etc. as needed and share and/or adapt any relevant information in this book with those responsible for the day-to-day development and implementation of your online program. Our hope is that this book helped you in your journey to create or improve one or more online programs, no matter which stage of the process you may be in.

GLOSSARY

Academic Integrity

Academic Integrity focuses on the values of honesty, trust, fairness, respect, responsibility, and courage as guiding academic work, exploring how online learning environments can be purposefully designed to reduce instances of student misconduct and instead foster their integrity.

Accessible and Universal Design

Accessibility requirements, such as the Accessibility for Ontarians with Disabilities Act (AODA) in Ontario, are one part of universal and accessible design. AODA legislation stipulates that "all public sector organizations and private or non-profit organizations with fifty or more workers must make their courses accessible to all learners". Universal design means creating course environments that are accessible to all people, regardless of ability, disability, age, or other factors. Accessibility means course environments are adaptable and functional for users of all abilities (Grimard, 2021).

Accreditation

HLC definition: "Accreditation protects the interests of students, their parents, the academic institutions themselves, and potential employers, by ensuring that the educational programs offered have attained a level that meets or exceeds standards that were developed by experts in the field." https://tinyurl.com/3z33p3ew

Backward design

Backward Design is an approach to design that starts with outcomes first, followed by a consideration of assessment: "What would the students have to do to convince me that they had achieved those learning goals?" Further followed by a question of learning: "What would the students need to do during the course to be able to do well on these assessment activities?" (Fink, 2013).

Collaboration

The action of working with others to produce or create something together.

Constructive alignment

Constructive alignment is an "outcomes-based approach to teaching in which the learning outcomes that students are intended to achieve are defined before teaching takes place. Teaching and assessment methods are then designed to best achieve those outcomes and to assess the standard at which they have been achieved" (Biggs, 2014, p. 5).

Core component

Core components or key characteristics of a program are the essential factors, traits, and qualities that consistently shape the program's curriculum

Course design

Course design is the process of planning the course-based curriculum that makes the program.

Curriculum mapping

"The process of associating course outcomes with program-level learning outcomes and aligning elements of courses (e.g., teaching and learning activities, assessment strategies) within a program, to ensure that it is structured in a strategic, thoughtful way that enhances student learning" (Dyjur et al., 2019, p. 4).

Decolonization and Indigenization

Decolonization and Indigenization are the terms selected for this unit in representing a commitment to Truth and Reconciliation, and the Truth and Reconciliation Commission Calls to Action that call upon educators to learn about and integrate Indigenous knowledge and teaching methods into classrooms. Here, the essential consideration is focused on decolonization as "the process of deconstructing colonial ideologies of the superiority and privilege of Western thought and approaches", and Indigenization as "a process of naturalizing Indigenous knowledge systems and making them evident to transform spaces, places, and hearts" (Antoine et al., 2018).

Degree level standards

The degree descriptions and the knowledge and skills identified in the Standards capture the most generic aspects of the respective degree levels.

Educational Technology Stack

These are the eLearning Tools and software that will enable students to learn online, for example, the Learning Management System and any plug-in tools—such as audience response systems, Web

Conferencing software, and Assessment software—as well as the hardware required for the stack to operate.

Equity Diversity, and Inclusion

Three distinct but interwoven concepts are introduced together in a common focus on EDI. Equity represents fair and equitable treatment, access, and opportunity through learning. Diversity focuses in on diverse representation of various identifies and differences. Inclusion represents efforts engaged to create learning environment where students feel included, welcomed, respected, and valued.

Evidence-informed decision making

The use of evidence that contributes to decision-making about particular problems or issues about best use of resources within institutions and across the healthcare system.

from Canadian Health Services Research Foundation (2006). *Weighing Up the Evidence. Making evidence-informed guidance accurate, achievable, and acceptable*. A summary of the workshop held on September 29, 2005.

Institution

Any post-secondary credentialing institution

Learner persistence

Drawing on adult learning theory, this consideration focuses on strategies that meaningfully engage, support, and motivate online learners to take self-directed, goal-oriented approaches to their learning so that they are more likely to persist and succeed through their online learning.

Learning Outcomes

Statements that specify what learners will know, be able to do, or value when they graduate.

Leveraging technology

A consideration of the technology-enabled teaching, learning, and assessment strategies best suited for online courses and programs. It also involves considering how technologies can be evaluated and selected for their appropriateness and best fit for teaching and learning.

Online Course Quality

Characteristics and measures that are commonly used to define high-quality online courses. Quality

indicators are frequently presented as rubrics or tools that can guide design, assessment, or continuous improvement of high-quality in online education.

Online Program

Any set of learning experiences and associated supports where learners receive a credential for demonstrating institutionally--approved learning outcomes. Learning Outcomes are taught and assessed primarily through digital tools and technologies and attendance in a physical location is not required to meet the program requirements.

Program standards

"Program standards apply to all similar programs of instruction offered by publicly-funded colleges across the province and include the following:
    -Vocational learning outcomes (the vocationally specific learning outcomes which apply to the program in question),
-Essential employability skills* (the essential employability skills learning outcomes which apply to all programs of instruction), and
-General education requirement (the requirement for general education in postsecondary programs of instruction)."
    from Published College Program Standards (Ontario Ministry of Colleges and Universities, n.d.)

Program vision

The high-level goal or "why" statement that forms the foundation of any program framework.

Signature Pedagogies

"The types of teaching that organize the fundamental ways in which future practitioners are educated for their new professions" (Schulman, 2005)

SOAR

Strengths, Opportunities, Aspirations, and Results exercise

Unit

An organized body within the institution, e.g., academic department, student association, governing body, academic or student support unit, standing committee.