CCAMPUS Ontario

Fostering a Shared Spirit of Innovation:

Impacts of the VLS on Ontario's Postsecondary Education Sector





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Executive Summary

Ontario's Virtual Learning Strategy (VLS) supported innovation, collaboration, and professional development across Ontario's postsecondary institutions. eCampusOntario is interested in learning about the continued impacts this investment had, and continues to have, on the digital transformation of Ontario's postsecondary education sector.

VLS project leads are at the center of this research. We conducted hour-long interviews with VLS project leads in order to understand the impacts of their projects and the associated outputs. In this report, we first explore the rationale and experience of project leads with the VLS: what inspired them to participate in the VLS and how the VLS supported their project creation. Next, we explore the direct and indirect impacts of VLS project outputs. Based on comments from VLS project leads, we examine the impacts of the project outputs, collaboration during and after the project's completion, the impacts of the project on digital teaching and learning, and finally on innovations that the project contributed to at the institution.

Thereafter, we examine the digital transformation of Ontario's postsecondary education sector by reviewing the six digital transformation pillars established by eCampusOntario and examining VLS projects vis-à-vis the pillars. VLS projects exemplify the digital transformation pillars and promoted digital transformation of Ontario's postsecondary education sector.

Finally, we examine barriers across the sector that project leads mentioned as impacting their ability to create, collaborate, and improve their project outputs. The most important of these are a lack of time and a lack of money, which the VLS provided. This informs the future work project leads are undertaking.

Ontario's Virtual Learning Strategy (VLS) was vital in supporting innovation, collaboration, and professional development across Ontario's postsecondary institutions.

Introduction

Ontario's Virtual Learning Strategy (VLS) supported innovation, collaboration, and professional development across Ontario's postsecondary institutions. The provincial government invested \$70 million over three years (2021-2024) via the VLS to enhance virtual learning and digital transformation in Ontario. Projects developed during the VLS by postsecondary institutions and their collaborating partners continue to be used to support learners, instructors, support staff, and the institution overall. Project outputs are being used at postsecondary institutions across Ontario, Canada, and the world at large. The VLS provided a catalyst for innovation and upskilling in Ontario's postsecondary sector by fostering a spirit of experimentation. Shared projects fostered collaboration within and between institutions that continues to flourish. Project outputs continue to be updated and revamped for the changing needs of Ontario's learners and workforce. As such, the VLS achieved its goals of developing skills in online teaching and learning, building new learning materials for virtual teaching and learning, and fostering a culture of excellence in higher education. In this report, we will illustrate some of the impacts of the VLS according to interviews with project leads and highlight how VLS projects have supported the digital transformation of Ontario's postsecondary education sector.

Context

The VLS was predicated on three key pillars. They were:

Pillars of the VLS



Being the Future

Providing sector supports to drive a continued co-existence with hybrid learning: Ensuring learners have high-quality education: anytime, from anywhere. This requires quality and innovation, better data, and digital access to enable lifelong learning and fuel Ontario's global competitiveness.



Being a Lifelong Learner

Enabling learners to meet the needs of the rapidly evolving labout market at any stage of their careers by providing digital supports and infrastructure for new short duration training.



Being a Global Leader

Strengthening Ontario's leadership domestically and globally, by expanding access for Ontario's institutions to the global marketplace for virtual learning. With this, we aim to position Ontario as a global leader for virtual innovation in teaching and leanring, including Ontario educational technology companies.

The first two years of the VLS funded projects that institutional teams proposed via expression of interests (EoI). Collaboration amongst institutions within proposals was promoted. Each Eol was scored independently by a two volunteer evaluator, who were assigned to proposals based on their self-reported expertise. After all scores were received, eCampusOntario normalized reviewer scores in order to ensure inter-rater reliability and account for effects of generous or harsh raters. Upon review with the Virtual Learning Advisory Committee (VLAC), high scoring projects that also illustrated having impact across the sector and users, that represented collaboration, and that were from a range of geographic regions and institution types were funded. Three hundred and ninety projects were funded in the first year (2021-2022) and sixty-four projects were funded in the second year (2022-2023). The amount of money allocated was higher in the first year of funding, accounting for the higher number of funded projects.

The third year of the VLS (2023-2024) focused on enhancing the Digital Transformation (Dx) of Ontario's postsecondary institutions. Dx is the use of digital technologies and pedagogies, informed by research and evidence, to support learners across

the entire learning lifecycle. Dx helps institutions meet the digital first needs of learners and to align supports for learners, instructors, institutions, and employers. There are six pillars that each represent a key function of Dx. They are as follows:

- Explore Digital Futures: co-design the future of education with Strategic Foresight
- Empower Digital Leaders: engage academic teams with professional development
- Investigate Digital Technologies: discover, pilot, review, and adopt EdTech
- Find Strategic Partners: build capacity with partners and access new networks
- Expand Open Education: adapt, adopt, and create Open Educational Resources
- Develop Tomorrow's Workforce: align new programs to labour market demands

The VLS projects funded through the EOI process all relate to at least one of these Dx pillars. To read more about each pillar of digital transformation, consult the Dx guides at https://digitalcampus.ca/.



Participation

When the VLS was announced, every publicly funded institution in Ontario was an applicant as a lead or collaborator on at least one EOI proposal, resulting in total participation across the sector.

eCampusOntario conducted interviews with project leads to understand their experiences with the VLS. Institutions applied to complete a project for three main reasons. The first reason was having extra funding and support to undertake a project. One project lead noted that "regardless we would have made] the modules. Our team would definitely do it, but the VLS made us do it fast[er], sooner, better." Another project lead noted that "when funding became available, we had a whole list of projects that we thought could work." The timing of the VLS helped to foster collaboration amongst institutions, allowing them to pursue bigger and more impactful projects. The second reason was having aspirations or dreams that would have an impact at their institution that the VLS helped to realize. One project lead indicated that "we applied on... a hope and a prayer that it would happen, never thinking we would actually get funded." The third reason is having the support of an internal champion. The backing of senior leadership provided supportive partnerships for the establishment, development, and completion of VLS projects.

The VLS helped to produce outputs that are now important for institutions by promoting innovation and collaboration across the sector. Foremost amongst those impacts was the funding to make their projects a reality. The funds were essential to hiring and working with vendors, service providers, and new staff, including project management and subject matter experts. Some institutions worked on projects that have become part of the institutional identity that provide "value for students and the

entire [institutional] community," while others are used as pieces of the institutional reputation for student recruitment. The VLS also was instrumental as a motivator for the sector, pushing institutions into creating materials to support learners, instructors, Ontario, and Canada. One project lead stated that "I'm really proud of what we have done. [...] at the end of the day, the aim is that it will improve [the] Canadian workforce towards a more innovative workforce." In fact, the importance of the VLS for funding innovative projects is so paramount that projects leads describe their sadness that it has ended. One project lead stated that "if there's any opportunity to ever bring something like this back, [we should] do it because it was a wonderful catalyst for innovation."

In the years since the VLS ended, eCampusOntario has continued to monitor its impacts on Ontario's postsecondary sector. Our curiosity about the cumulative impact of this massive investment has seen eCampusOntario's Research and Foresight team utilize various methods-such as interviews, surveys, and focus groups-to talk directly to and learn from participants in all VLS programs. This report highlights the importance of the VLS as a space that allowed for innovation, experimentation, and professional learning for instructors and learners in the virtual learning space. First, we will describe what we learned from interviews with project leads of EOI-funded projects. These results present a snippet of the impacts of VLS-funded projects across Ontario's postsecondary sector. After that, we will highlight six particular projects and how they each align with a unique Dx pillar (although projects may align with multiple Dx pillars). Then, we will present barriers that arose from our research to further adoption, collaboration, or upskilling regarding online learning during the VLS. Finally, we will present the future of VLS project outputs according to project leads. Overall, the VLS supported important continued innovation and collaboration across the sector.

Methodology

eCampusOntario's Research and Foresight team conducted in-depth interviews with project leads in February 2025. Project leads who were contacted and participated in interviews were those who had indicated interest in being contacted further through earlier research instruments or emails about the impacts of the VLS. All interviews were conducted with the project lead(s), the Senior Manager, Research and Foresight, and an Associate, Research and Foresight.

Each interview lasted for approximately an hour. Interviews were conducted over Microsoft Teams, wherein they were recorded and transcribed. A member of the research team also took independent notes. Questions asked covered several areas:

- Information about project lead's role at institution
- Information about the VLS project
- Reception to the VLS project
- Collaborators, past and present, on the VLS project
- Current use of the VLS project outputs
- · Impact of the project on the institution and the individual project lead

Barriers and future work to further adoption, promotion, collaboration, and/or upskilling came up throughout interviews. Questions were modified, skipped, moved, or added based on the discussion and flow of the interview.



Impacts

VLS project outputs had an impact in a myriad of ways. Projects are being used to support learners, instructors, support staff, and institutions. Their impact goes beyond the classroom by supporting lifelong learning and recruitment efforts. Institutional collaborations from the VLS continue and expand, while new collaborations have formed as a result of the project output. Instructors have greater confidence and skills for online teaching and learning, including their familiarity with digital tools. Further technology-enabled changes have occurred in teaching and learning and institutional innovations. We will delve into these impacts in greater detail.

Use of VLS Resources

4467 new OER materials were created as a result of the VLS and reside in eCampusOntario's Open Library, with every one of those being licensed for use in Ontario by instructors. VLS project leads reported outputs being used in a variety of contexts by a variety of groups.

Instructors, learners, and support staff are foremost amongst the users of project outputs, using OER as part of their course content. Some learners who have since graduated also told their instructors that they continue to use the course materials that were developed as part of the VLS. Beyond the immediate institution and its partners, interviewees also reported that project outputs are behind used externally. High schoolers are able to use some materials to support and better understand their journey into postsecondary education. The created materials have also been used to train members of the workforce in private businesses. Finally, one project lead reported they had been contacted by a private citizen who was using their VLS output to teach himself.

Project outputs have been reported as being used interprovincially and internationally. Places that interviewees reported hearing about their output being adopted include British Columbia, Nova Scotia, Africa, Australia, and Europe. One interviewee, recognizing the impact of their work across Canada,

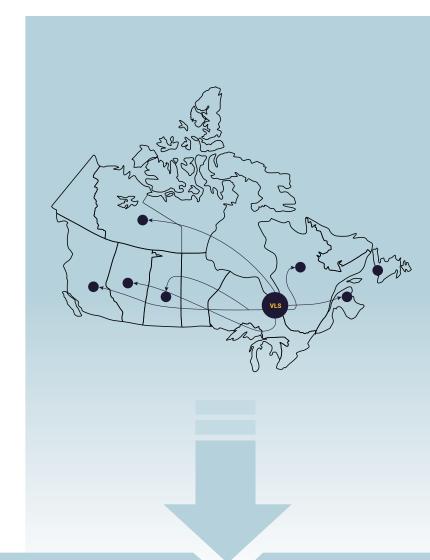
opined that "that's what's so amazing about [open education], are our successes too, because we get to implement the stuff and... that's really cool. We're working with somebody in [British Columbia] right now, it's not just an Ontario thing."

Project outputs are being used in a variety of ways. Many outputs are being used at the lead and collaborating institutions in the courses they were designed for. Importantly, these creations receive positive feedback from the learners who are using them. Projects outputs are likewise being used by graduates. One project lead reported that "I've had students come back after graduating saying 'I still use [the] OER [or] still link to it'."

Beyond the developing institutions, VLS project outputs are being adopted and adapted at other institutions. Institutions reach out to projects leads about using the outputs and are adopting and customizing them to the needs of their specific institution. Some of these adoptions have told the

project leads that they are "going to make further adaptations for their [later] offerings to the modules and the content." VLS project outputs are thus providing skills that support postsecondary education across institutions in Ontario.

Finally, VLS project outputs, in some cases, have had impacts on what the institution as a whole is able to do. One project supported student and faculty collaboration. The project lead described it as a type of investment "that the university wanted to make" and that once the project was funded, it "got a lot of attention and continues to [garner attention]. So the university uses the... program as a piece in its reputational litter." The project was so successful that is received institutional funding following the conclusion of the VLS. Another project output that is key at an institution started as "a very slow moving proof of concept showing the savings to the [institution, calculating] the how many of millions we're saving students a year to really build that case... To say we have to do this and to the [institution] say we can't live now without the service for our students. And for our faculty." Clearly, the VLS provided a testbed for the development of innovative projects that were supported by and continue to support institutions and learners globally.





Collaboration Building

One of the key pillars of the VLS was collaboration of institutions across Ontario's postsecondary sector. Our interviews with project leads revealed that this collaboration was definitely supported by the VLS.

Many projects were designed with collaborators from other institutions. We only spoke to project leads from the lead institution, but we would be remiss to not incorporate feedback project leads received from their collaborators. Collaborating institutions have modified project outputs to adapt to their own course context. Moreover, lead institutions directly provide their files to collaborators. Individual collaborators are still working together in adapting their project outputs for institutional contexts. Even if a collaborative project didn't work out, the ability to work with other institutions on joint projects fostered bonds and explorations of shared services, platforms, and technologies between institutions. Some projects were developed within a consortium where many institutions participate with similar needs: the ability to collaborate in this space ensured those needs were met. Consortium connectivity and value also increased as a result of this collaboration.

Another such collaboration that interviewees noted was networking. Instructors network with one another and promote their project outputs in a

myriad of ways, such as using a newsletter, having a booth at different events, knowing and getting to know other people to support and promote your outputs, and running, participating in, and supporting communities of practice. Project leads also promote internally at their own institution, collecting information about the use and expectations of the project outputs, designing with and thinking about how to include others, and providing information on project development and student savings as part of promotion.

All in all, the VLS fostered a culture of collaboration across Ontario's postsecondary institutions. During and after the VLS, individuals are trying to be more collaborative in the beginning of projects and reach out to new people. They want to share the work they have done, including with anyone who wants to adopt their project outputs. One project lead extolled that "we try to do everything together, [so] as soon as I create something that's of value to everybody else, we share it. And they do the same thing... [A]t the end of the day, open [education] is collaborative." Another project lead credits the VLS with facilitating "these types of collaborations and pushing us together."



After the end of the VLS funding in 2024, collaboration facilitated by the VLS continued, and some new collaborations blossomed. Some projects continued with an expanded repertoire of participating institutions, allowing for greater synergy. Other institutions established joint meetings to share academic initiatives from conjoined programs, resources, tips, strategies, and just generally discuss things. In one case, a project from the first round of funding for the VLS was adapted as a project in the second round of funding, with the original project lead providing support. Projects leads also share resources by leveraging technology and the lack of barriers to facilitate resource sharing with institutions across the province.

Support since the conclusion of the VLS has come from a variety of places. Some project leads have found support for their project and further collaboration from their colleagues in shared consortiums and communities of practice. Those who lead projects also offer their expertise to others. Some project leads mention volunteering their experience to support people who reach out about

their outputs. Finally, intra-institutional collaboration has expanded. One project lead mentioned that they have been "invited to go into classrooms... by faculty to talk about we're using an open textbook and what that means." Being a friendly and knowledgeable personality helped to "make more impact and get more people on board because they felt comfortable talking to me about their course and the potential and what they could do."

Collaboration has also continued via consortiums and shared agreements and centres, including licence agreements for electronic content and services and. Shared infrastructure such as this is leveraged to support all institutions, especially with the shared analytics that comes with it. A key part is, in the words of one project lead, the sharing of "experience in building those resource sharing protocols [other institutions] have" and how "that collective knowledge, that collective sharing, that capacity building has continued from the very beginning."



Teaching and Learning

The VLS had an impact on the teaching and learning across the province in the years it was funded and beyond. It ingrained new roles, new skills, comfort in online teaching and learning for instructors, and fostered a culture of excellent in virtual teaching and learning.

As a result of the VLS, new roles were created at institutions. These roles included instructional designers, e-learning developers, project managers, secondments for support staff, technologists, and student co-op opportunities. One project employed a project management office to coordinate their project. Many of the roles or jobs funded by the VLS still exist at institutions today, supported by institutional funding. Moreover, some project leads had their original roles changed as a result of the VLS and continue to hold those roles today where they support the use and expansion of their project output.

Instructors also developed new skills and comfort in online teaching and learning. Indeed, project leads indicate that they learned project managerial skills in supporting their project's development. Moreover, they also highlight the skills they learned in creating online materials, including using Pressbooks for the first time to build toolkits and resources. One project lead mentioned that their project "had such a massive impact in terms of the adoption of new technologies, the changing in assessments that we wanted to see." The support at institutions for e-learning and online content creation resulted in greater confidence and familiarity with new technologies and open education. To sum up, in the words of one project lead, the VLS "really just solidified our ability to create and deliver programming in an online format."

For one institution, a VLS project had a key impact on its bottom line. As a result of the proof of concept developed thanks to VLS funding, the project lead

was able to show the monetary savings to their institution. The project team analyzed the costs and expenditures from every program at the institution, on a program to program basis, and sent it to program coordinators and full-time faculty to show their spending and how the VLS output supported reducing costs and areas where it could further help to reduce spending.

Finally, the VLS helped to foster a culture of excellence in teaching and learning. By providing instructors and staff with improved skills, online learning for learners became a more viable and reliable option. OER from the VLS are seen as reliable, vetted materials for instructors to use. The funding provided to projects was used to developed important and needed resources to support learners throughout their learning journey by upgrading technological and student supports. One project lead mentioned that "if we're doing something that [instructors are] not doing or we're helping them do something more efficiently, then those limited resources that they have can be put to better use for students." This illustrates the impact of the resources and funding from the VLS. The culture of excellence in virtual teaching and learning spread to a point that "there's a lot more engagement with blended technologies [at one institution]," according to the project lead, "but... there's a whole cadre of academics now who just want to teach online." The skills and opportunities afforded by the VLS let some instructors become so comfortable teaching online that they want to mainly teach online or in blended/hybrid modalities.

Innovation

By providing funding to a variety of project types, the VLS provided a catalyst for innovation in Ontario's postsecondary sector.

One project lead stated that they have "learned so much from those [projects], even if they didn't come through in the exact ways that we wanted... ultimately it's had a positive impact on the notion of spirit of innovation." Another project lead noted the importance of having people—instructors and learners—see themselves as confident innovators. Indeed, the VLS fostered cooperation, collaboration, and "innovative ideas that were coming out... like people ha[d] been thinking about this stuff for a while and it just hadn't come across an opportunity to get something supported in this way." By using funding to support projects of all stripes across the sector, the Ontario government tapped into a spirit of innovation to explore new ideas.

As part of this spirit and culture of innovation, the VLS gave institutions a chance to test new ideas and develop proof of concepts. Due to being able to provide a proof of concept and receive feedback on them, several project outputs have been further iterated on and are now supported by the institution. The outputs of these projects has, in some cases in turn, fostered further innovation. One project lead echoed this sentiment by saying, "Why not try? And if we fail, we fail." The VLS supported innovation in Ontario's postsecondary sector by giving institutions and instructors a safe place to experiment.



Digital Transformation

As part of the VLS, eCampusOntario identified six pillars of digital transformation. Each pillar represents a key function of digital transformation.

- **Explore Digital Futures:** co-design the future of education with Strategic Foresight. Strategic Foresight supports institutions in navigating digital transformation by building awareness of factors that might result in significant impact or disruption. Strategic Foresight helps address immediate and short-term challenges while articulating long-term visions for systems-level evolution and resiliency.
- **Empower Digital Leaders:** engage academic teams with professional development. Digital transformation requires agile and flexible leaders at all levels of the organization. Supporting digital leaders increases the quality, equity, accessibility, and engagement of digital learning experiences. Ensure your digital leaders can foster a culture of innovation and inspire action.
- Investigate Digital Technologies: discover, pilot, review, and adopt EdTech. From the exponential development of immersive technologies to advancements in artificial intelligence and machine learning, higher education institutions are integrating new tools and technologies into their curriculum and services, and redefining interactions across physical, digital, and hybrid spaces.
- Find Strategic Partners: build capacity with partners and access new networks. Collaboration with higher education institutions helps business efficiently achieve its strategic goals. With strained supply chains, global conflict, and pressing inflation, business is focused on expanding current lines of business or exploring new areas for growth. The labour market will continue to shift, and Ontario's higher education system is expert at adapting to meet future demand, ensuring learners are job ready.

- **Expand Open Education:** adapt, adopt, and create Open Educational Resources. Higher education becomes more affordable as Open Education Resources (OER) are integrated throughout the learner experience. The core rationale for open education has always been the mission of making education accessible to all - a possibility greatly expanded by and intertwined with technological advancements. By removing barriers, learners can access and use OER from the start, improving early engagement with the educational content and increasing their likelihood of continuing their studies through to completion.
- **Develop Tomorrow's Workforce:** align new programs to labour market demands. Alternative credentials allow Ontario's higher education institutions to adapt quickly to changing labour market needs, preparing learners for future skills-based hiring. A micro-credential is a certification of assessed learning associated with a specific skill or competency. They enable rapid retraining and augment traditional education through pathways into regular postsecondary programming. Micro-credentials are designed to give learners added flexibility to balance busy work and family lives and include work relevant experiences and assessments. Micro-credentials are designed to give learners added flexibility to balance work and family lives and include work relevant experiences and assessments.

Learn more about each pillar at https://vls.ecampusontario.ca/dx/.

VLS projects support the Dx pillars and the digital transformation of their institutions. Below, we have identified projects that exemplify one or more Dx pillars to examine how the VLS supported institutional digital transformation.



Explore Digital Futures

All of the projects we interviewed fit into the explore digital futures Dx pillar. While none of the projects explicitly engaged in Strategic Foresight methodologies, they all utilized the funding for their projects to further their institution's digital transformation via innovative projects. They established new online offerings and institutional frameworks to sustain digital transformation. The project outputs contributed to supporting the goals of the VLS and developing long-term visions for their institutions.

Empower Digital Leaders

While many projects supported increasing the skills and methodologies used by instructors in their teaching, one project in particular that we spoke to focused on increasing the digital skills of all who are involved in a course-instructors and learners-to support the institution's Dx journey. This project from Carleton University employed students as partners to bring faculty and students together co-design courses as a pedagogical innovation. The project lead reports that it has been a positive experience that continues due to the impact on the adoption of new technologies, the changing in assessments, and the fostering of relationships between learners and instructors.

As a result of this program, both instructors and learners are receiving professional development and fostering a spirit of innovation and collaboration. That collaboration also improves classroom environments. Carleton University continues to fund the program, sponsoring 600 projects since its inception during the VLS. It has fostered pride at Carleton University that enhances the quality, equity, accessibility, and engagement of digital learning experiences for learners and instructors alike. You can read more about program here:

https://carleton.ca/tls/future-learning-lab/sapp/.

Investigate Digital Technologies

New technologies were created and adopted throughout the VLS, improving the digital architecture of Ontario's postsecondary education sector. One project we interviewed supported the access to a high-quality library service platform across Ontario's colleges. This project included 20 of Ontario's colleges. The tools and technologies embedded in the new system have placed all institutions at and equivalent level of library infrastructure. Moreover, the shared system encourages resource sharing and continued discussion and collaboration between librarians and support staff at and between these institutions. The importance of this project and the



current financial climate in Ontario's postsecondary education sector provides an opportunity to become stronger together collectively.

As a result of the improvement of library infrastructure, the project leads have also developed an AI Toolkit and are considering ways to implement AI more closely in the library platform. These new tools are changing how learners and instructors interact with library asks, needs, and wants. The pioneering of these technologies is reshaping Ontario's colleges and supporting sector wide digital transformation. You can view the consortium's website here: https://www.ocls.ca/.

Find Strategic Partners

The VLS promoted collaboration between institutions, industry partners, instructors, and learners to break silos and promote the sharing of resources and ideas. This digital transformation pillar emphasizes the reaching to new markets.

One of the projects we talked to works to expand learning and support learners in their transition from high school to postsecondary education. They created a course that a high school student can take when they are enrolling in postsecondary education. This program is often launched at the start of a semester for incoming learners and kept open

throughout the year. Faculty and staff love the program, according to the project lead, because it lets them save time—the initial work for onboarding new learners has already been done—making it easier to implement and support students. This program is often used by accessibility services and adapted for the specific needs of students or adapted an institution's specific circumstances. You can read more about this support here:

https://www.queensu.ca/rarc/eyes-on-pse.

The collaboration of institutions to utilize and adapt this content and the ability to reach a new market of incoming learners—Ontario's future workforce—is paramount for postsecondary education's partnerships and meeting the demands of the future.

Expand Open Education

The development of OER was one of the key tenets of the VLS, with digital-by-design materials developed throughout the VLS being uploaded to and hosted on eCampusOntario's Open Library. Thanks to the funding from the VLS and the hard work of participants, many new materials in a variety of subjects and disciplines are available for download to be adapted, adopted, and used in courses at any Ontario institution, or even institutions outside of Ontario depending on licensing.

In Ontario, one of the most popular programs at institutions is health science, with most institutions having some form of nursing or health sciences program. One project lead we interviewed supported 13 of the colleges in Ontario to develop materials that could be used in their nursing and health sciences programs. By standardizing the materials, colleges of all sizes are able to better run their own programs, without a partnership with a university. These resources provide support for health sciences learners in how to conduct research and cite materials. Because these are frequent concepts a learner will use, the resource is being used frequently to provide reliable and authoritative information. These digital materials are supporting the learner journey at institutions across Ontario, made possible by technological advancements and funding.

Another project we spoke to developed an oncampus support studio for the creation, adoption, and adaption of OER. After the conclusion of funding from the VLS, the institution continued to support this program to the point that it has become embedded. As a result of this, the culture of open education at the institution has changed. Instructors come to the studio to ask for support on adopting or creating an OER for their courses. The funding for this program and its continued development of digital by design materials has resulted in a culture change and has brought about more accessible education and student savings in programs across the institution. You can learn more about the OER Design Studio here: https://www.fanshawelibrary. com/oerdesignstudio/.

Develop Tomorrow's Workforce

Non-traditional learners (those not aged 18-22 coming into postsecondary education right out of high school) are an emerging demographic that institutions are trying to capture. As such, institutions must provide learning opportunities that are conducive to the schedules of these learners. One project that we talked to developed resources to support learners' understanding of innovation in the workplace. This project took an existing course at their institution and transitioned it online, creating OER for it as well. The instructor notes that many of their learners are working learners who are upskilling and are able to bring the ideas they learn about innovation in the workplace back to their occupations, even as the course is ongoing. This course now supports the upskilling and meets the scheduling needs of working learners. Online learning is able to support the rapid training and upskilling of the workforce and provide flexibility to allow for working learners to balance their schooling with their busy work and family lives. You can view the created OER here: https://openlibrary. ecampusontario.ca/item-details/#/552b5b64-879f-44be-addc-0bf49c3a9b6f.





Barriers To Furthering the Impact of the VLS

Despite its success across Ontario's postsecondary sector, there are barriers that preclude the furthering of the VLS's impacts. With the conclusion of the pandemic's social distancing restrictions, learners and instructors have returned in many ways to in-person classrooms. Technical skills gained by instructors and learners during the pandemic in online learning, if not exercised, can atrophy. Instructors, even after the VLS, can struggle to implement OER in the learning management systems (LMS) of their own and other institutions. Instructors may also be unfamiliar with and not know how to use or implement new and emerging technologies, such as artificial intelligence. In some cases, OER are new to instructors, and so support is required for adoption, adaption, and creation. Similar support is needed regarding intellectual property and licensing. The online creations were licensed under various licenses through Creative Commons and Ontario Commons License. Project leads, and other instructors, still have questions about licensing, including how to act when there is overlap of Indigenous knowledges and the licensing and copyright systems.

With the end of VLS, we have also seen some return to the siloed nature of postsecondary education institutions. The artificial walls between institutions have been re-erected in the name of competition. As one project lead describes it, "we're acting like

sovereign nations again, and that's in part because we're returning to face-to-face." Within an institution, disparate departments don't always work together. Even library and centers for teaching and learning, central places for instructors to come together, have cultures different than individual departments. The siloing of departments hampers the development of a culture of collaboration and excellence in online teaching and learning and may even duplicate efforts within an institution.

The biggest barrier, ultimately, and on that still remains for furthering the VLS, was a lack of resources. The VLS provided instructors with the funding and time to complete projects and innovate. With the conclusion of the VLS, the funding for much of the innovation in virtual learning at institutions declined. This is especially true as Ontario's postsecondary institutions face financial deficits and are looking accordingly to cut costs. As instructors balance their portfolios, time to find and adapt or create new material is rare. Similarly, there is little to no institutional funding available to incentivize developments and innovations. There needs to be an interest and push to get people engaged. The VLS was an opportunity to have institutional staff engaged and collaborating. A continuing lack of awareness and understanding of open education, online learning materials, and opportunities still presents a barrier. One project lead credits the VLS with "help[ing] us overcome some of those boundaries that we had create up as our official boundaries, and then it demystified the way in which those sorts of technology can help us and that's what has had a long-lasti[ing] impact, which is fabulous." Funding for initiatives like the VLS help to support and raise awareness of and skill in using OER and online teaching modalities.

Future Project Work

Project teams continue to update their project outputs even after the completion of the VLS. They are improving the material to include things such as material upgrades, new portals, analytics, and automation. They also seek to develop more programming to support new learner groups and adapt materials to better support Indigenous learners. Finally, institutions hope to expand their projects by getting more institutions involved as collaborators using the materials.

For larger goals, project leads we spoke to indicated they will continue to promote the usage of their project outputs. They want to expand how many institutions and instructors are using their materials. Moreover, they also would like to create a sense of "working together, learning together, learning from one another" to continue to promote saving resources, time, and money to create materials that support learners. One project lead said that their "big, pie in the sky goal would be to have every postsecondary institution using and adopting the program [they developed]."

eCampusOntario continues to conduct research into the impacts of the VLS. If you are interested in other reports about the impacts of the VLS, please see the reports on our website here:

https://vls.ecampusontario.ca/reports/.



Conclusion

According to those we spoke to as part of this research, the VLS was an overwhelming success. It successfully provided a catalyst for innovation and upskilling in Ontario's postsecondary sector by fostering a spirit of innovation. Projects we spoke to highlighted the importance of the VLS in allowing them to try new things and develop new materials that continue to provide value to learners, instructors, and the institution at large. The innovations as a result of the funding of the VLS continue to be used at postsecondary institutions in Ontario and beyond. The VLS drove the development of skills in online teaching and learning, fostered the creation of new materials and online courses, and developed a culture of excellence in teaching and learning. It did all this by promoting collaboration between institutions and industry, being learnerdriven in what it supported, and having a focus on digital-by-design solutions.

The projects of the VLS all matched one or more of the digital transformation pillars identified by eCampusOntario. In this way, the VLS was responsible for furthering the digital transformation of Ontario's postsecondary education sector.

Institutions were able to explore digital futures and innovate, empower digital leaders who could be both faculty and learners, investigate and implement new technologies, find and work with new strategic partners, expand open education via the creation and uploading of new materials to eCampusOntario's Open Library, and develop tomorrow's workforce through upskilling and the development of short duration learning opportunities that can reach more than traditional learners.

All in all, the VLS was an exciting way to promote the very pillars it was built on, providing a catalyst for innovation with funding at all institutions to work on projects they otherwise wouldn't have been able undertake and drive excellence in virtual teaching and learning. It came at an important time to promote instructor upskilling on teaching in digital spaces. Project leads we spoke to often said they wished the funding could continue. While the VLS funding has ended, the impacts of the projects and training it funded continue to reverberate across institutions in Ontario and abroad.

