

Digital Strategy

Shared Vision and Roadmap

Digital Strategy: A way forward

Our day-to-day activities are becoming increasingly digital. Technology has changed the way we work, the way we share thoughts, ideas and memories. The digital transformation affecting higher education is rapid and widespread. It creates many unique opportunities and has the potential to improve our ability to teach for tomorrow, double our research, collaborate and grow smartly. As a community, let us take charge and seize every opportunity, and forge the new digital landscape of higher education. Together we can transform to become a reference as a next-generation university.

We need to aim high, to be bold and transformative. We need to optimize and leverage what we have. We need to strengthen everyone's digital capabilities. We need to focus on how technology can help people and human interactions. People before technology and not the other way around.

Our vision for Concordia's digital strategy is comprised of a list of 11 projects falling into five categories that address some of the key findings resulting from our environmental scan and consultation activities of the preceding year. The 5 project categories are:

- PEOPLE: Digital Skills & Capabilities
- IMPROVING PROCESSES AND SERVICES: Users at the Centre
- TEACHING & LEARNING
- COLLABORATION CAPACITY
- DATA: Use and Access

Thank you for taking the time to read our draft proposal and provide us with your feedback. Engage in the future, get involved, and help build the roadmap by submitting your comments.

PEOPLE: Digital Skills & Capabilities

1. Digital Capabilities and Credentials

While all members of our community have varying degrees of confidence when it comes to their current digital capabilities, all of them recognize the need to continually develop these skills in a meaningful and focused way and would like Concordia to support them in this activity.

The digital capabilities and credentials project will provide students, faculty, and staff at Concordia with an opportunity to adopt a practice of continual digital skills and capabilities development throughout their academic and professional careers. We propose to achieve this by developing a common framework to help map out the various types of capabilities that are necessary in order to maintain a useful level of digital skills for academic, administrative, and professional roles. We will then provide an online self-assessment tool so that every member of the community can accurately gauge their current level of proficiency and be directed towards resources to improve in the areas where they need it most. An open and secure credential tracking system will also allow users to track their progress and will allow for additional incentives through gamification, achievement recognition, peer mentoring, and skill endorsements on professional social networks.

2. Digital Onboarding

One of the main challenges identified by our community is the absence of formal onboarding processes. New students, faculty, and staff are often called on to figure out how to navigate Concordia's digital environment on their own while simultaneously adjusting to their new roles and responsibilities.

The digital onboarding project will develop a series of short courses and interactive tutorials with content customized to orient newcomers to Concordia's environment in line with the responsibilities of their new role. Members of the community will be guided through these over a finite period of time in order to ensure that the necessary skills are acquired in a useful and timely manner.

IMPROVING PROCESSES AND SERVICES: Users at the Centre

3. Major Process Review and Redesign

Overall our community does not feel like Concordia offers a seamless and integrated experience across our platforms. Many of our digital services look and feel completely different from one another. This is challenging for students, especially new ones, as they have a narrow window of time to learn how to navigate our digital environment and their usefulness is short lived. Furthermore, the community feels there is still a need for one-on-one in-person interactions when it comes to complex issues. Faculty and staff also view the reliance on paper processes as time-consuming and an unnecessary restriction on mobility.

The major process review and redesign project will focus on our processes to better answer our users' needs. This transformation of our processes and services will take maximum advantage of the digital, while answering users' needs for human interactions. We will use the opportunity to review some of our core processes ranging from how purchasing decisions are evaluated for user-experience, ensuring security and privacy, how we provide training and support, to the inclusion of accessibility requirements. A

cross-functional team of respected members of our community will be trained in user-focused methodologies (User Centered Design (UCD) / User Experience (UX)) and will subsequently work closely with members of the community who are responsible for or are the intended users of these processes and services.

This will have the net effect of gradually changing the service and process design culture at Concordia towards an integrated and seamless user-focused approach.

TEACHING & LEARNING

4. Teaching and Learning Innovation Lab

In the Digital Strategy consultation, we heard from students that they want their academic programs to prepare them with the digital skills they need to succeed in their careers, and they expect that the digital technologies deployed in their courses will be used effectively. What are the best ways to integrate digital skill development and ensure effective pedagogical uses of new digital technologies in our courses?

A teaching and learning innovation lab will help answer these questions. The lab will be a think-and-do tank with a mandate around teaching and learning innovation, with a particular focus on digital skill-building and digitally-enhanced pedagogy. Innovation projects will be undertaken by faculty fellows who might join the lab for a defined term to undertake a proposed project or work with a group of colleagues on a specific problematic or technology. The aim is for Concordia to become known widely as a place where faculty engage in cutting-edge pedagogical practice and produce valuable knowledge about the art and science of learning in a digital age.

5. Open Educational Resources

Open Educational Resources (OER) are teaching, learning, and research digital resources that are created by educators and made available to others for use and re-purposing. OER are multiple in formats and forms. They include texts, modules, videos, and all other kinds of course materials, up to and including full textbooks. Taking advantage of modularity, multimedia, and interactive elements, the digital format of OER also contributes to innovation in higher education teaching and learning. OER increase the array of instructional resources in the students' learning experiences, while lowering the financial barriers to accessing course materials specifically, and knowledge and education generally.

This project will allow Concordia to use and contribute to OER repositories as well as develop expertise in content creation, intellectual property, discoverability and publishing of open teaching and learning materials. Services such as how to identify and curate existing OER from other universities, as well as support for the use of authoring tools, accessibility guidelines, licensing guidelines, templates, etc. will be developed. A funding

model will be proposed to encourage and resource both adoption and creation by faculty members of OER and open textbooks.

6. Course Recordings

During our consultation, students were very clear that the one concrete technological improvement we can bring about is to have lectures recorded and made available online. This will be an invaluable resource for students with disabilities or when they cannot attend a lecture as a tool to review course content later. At the same time, access to course recordings can have the added benefit of alleviating the need to take notes during class, something some students struggle with, allowing them to participate more fully during class.

The course recordings project will put forward an institutional response to our student's request that also addresses the concerns from all stakeholders in a clear and concise manner. Faculty members will have an understanding of how they can easily meet this demand and be confident about retaining control and authorship over the content they can make available. Our objective is to streamline making course recordings available to students to encourage and increase its adoption at Concordia.

7. Virtual Reality and Simulations

Students can now experience, practice and learn by being immersed in virtual reality (VR) and augmented reality (AR), together referred to as extended reality (XR), and other immersive, high-fidelity simulation technologies. Digital internships, virtual labs and new approaches to collaborative and experiential learning are made possible by recent advances in these technologies. Immersive XR environments can help students visualize difficult concepts, explore environments that are challenging to access or dangerous, augmenting a student's ability to practice skills and experience. Especially promising is the combination of XR with artificial intelligence (AI) and other related machine learning technologies, which allows for intelligent extended reality learning environments. This project will explore the conditions of establishing intelligent AR, VR and simulations program to support learning outcomes.

Leveraging the power of technology-enhanced experiential learning, this project will explore the applications of intelligent AR, VR and simulations to create (1) digital internships to give students practice with technical skills as well as communication skills and professional ethical decision-making in immersive and realistic environments, (2) virtual labs in which students experience realistic interfaces to practice hands-on lab skills and obtain naturalistic results from their experiments, and (3) other promising applications to meet the needs and aspirations of Concordia students and faculty.

8. Review of Learning Management Systems

Learning management systems (LMS) like Moodle were created to support a learning model that is being transformed by new kinds of pedagogy and learning experiences.

There is increased discussion around and experimentation with what are called "next-generation digital learning environments" that still include LMSs but integrate them within a larger confederation of IT systems and applications that support learning. According to

an [EDUCAUSE explainer](#), “next-generation environments must address five dimensions: interoperability and integration, to allow parts to be connected and share data; personalization, so that learning environments and activities can be tailored to individual users and academic departments; analytics, advising, and learning assessment, encompassing course-level learning analytics, as well as planning and advising systems that focus on overall student success; collaboration, because the ability to easily work across conventional boundaries is fundamental to effective learning; and accessibility and universal design, making the opportunities of the NGDLE available to all students and all instructors.”

As part of the development of a digital strategy, Concordia will consider the place of its LMS within a federation of systems and tools that support learning.

COLLABORATION CAPACITY

9. Collaboration Platform

As citizens of the digital world we are all often called on to collaborate not only within our organization but also with an ever-increasing number of people outside of it.

Unfortunately, while students may have an easier time doing this with their peers many faculty and staff members are left in doubt about what tools are appropriate and how to properly navigate concerns around information ownership, privacy, and security.

The collaboration platform project will help reduce the barriers that impede our ability to collaborate with each other and people outside our organization. We will identify platforms where we can meet each other both inside and outside our organizational silo while offering easy to follow guidelines pertaining to information management and communications. We will give all members of our community the confidence they need to make use of as many available platforms as possible so that they can collaborate effectively and safely together.

10. Enabling Peer Networks

During the consultation process we heard from many participants that they often rely on informal networks to not only learn how to navigate our digital environment but also how to find solutions and workarounds to some of the most common problems. Many of the focus group sessions and creative workshops ended with two or more participants exchanging tips or contact information in an effort to learn what works and expand their informal networks.

The enabling peer networks project will provide one or more open-access digital collaborative spaces for creating, hosting, and sharing a repository of online learning modules (including videos) for faculty, staff and students on any questions, tips, or topics to share and learn from. The platforms will make it easier to locate experts in specific areas and recognize their contribution to the community. We will make it easy for our

community to share their knowledge with each other and develop their peer networks in a way that preserves and highlights their contributions.

DATA: Use and Access

11. Data Governance, Standards, and Analytics Capacity

The widespread use of digital tools in university teaching and administration increases opportunities to use data for improving both learning and university administration. While other universities are today fully leveraging their data, Concordia has yet to do so, because of a lack of data standards, siloed data governance and a dated environment and toolset.

The true potential of data tools and analytics can only be realized when we implement human-centered systems that facilitate the analysis process—from data capture to visualization and recommendation—offering better (i.e., more timely, precise, and actionable) feedback to educators, students, instructional designers, and the other stakeholders who constitute and underpin the whole learning system.

The data governance, standards, and analytics capacity project will enhance discoverability and data integrity across Concordia's data domains through the adoption of data standards and a transparent data governance program for effective data stewardship and, better learning outcomes and university administration, by implementing and piloting a new environment with modern self-service tools for all stakeholders.