



# Athabasca University's Imagine Learning Framework



Athabasca  
University



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## Why an Imagine Learning Framework?

At Athabasca University, we take pride in our achievements. Throughout our nearly 50-year history, the University has been guided by an incredible mission to remove barriers restricting access to and success in university-level study, and to increase the quality of educational opportunities for all learners. The passion for AU's mission is pervasive and permeates the spaces in which we all work.

We have used our recent strategic planning process as an opportunity to look further down the road and imagine the advantages that the next chapter of our history holds. That process resulted in *Imagine: Transforming Lives, Transforming Communities*. *Imagine* articulates a bold vision that aims to inspire, build and support a culture of innovation, and reimagine the learning experience at AU.

The Imagine Learning Framework provides overall strategic direction for faculty-level and unit-level decisions about how we design, deliver, support, assess, and continuously improve all aspects of the learning experience. We have called this our Imagine Learning Framework rather than a "Teaching and Learning Framework" because our intent has been to define the future learning experience at AU, then use this framework to guide the development and delivery of resources, instructional practices, courses, programs, and credential pathways that support this experience.



Beyond Open



Beyond Now



Beyond Norm



Beyond Place





AU's Imagine Learning Framework defines and measures learning in terms of its impacts—its capacity for transforming lives and transforming communities. Recognizing that human learning is a complex cognitive and social process, we have not attempted to define its essence. Rather, our Imagine Learning Framework focuses on transformative learning as a lifelong process in which past experiences shape our capacity to learn, adapt, and change in response to new challenges and unfamiliar situations.

To transform lives, our curriculum enhances learners' capacity to act, decide, and achieve desired outcomes in the future. This capacity, or self-efficacy, is the basis of lifelong learning. To support learners' self-efficacy, we design learning experiences that are immersive and engaging, and that allow learners to connect new ideas and concepts with what is meaningful to them in their own lives. Transformative learning also involves connection and collaboration with others, who may hold different perspectives than our own; the learning environment creates an ethical space, a space of reciprocity, exchange, and empathy.

We see the role of a post-secondary learning institution as designing immersive, engaging learning experiences that will support learners in understanding multiple perspectives, and in shaping their future actions and decisions to positively impact their own lives, as well as their communities, workplaces, families, and society as a whole—transforming communities. Accordingly, AU's Imagine Learning Framework recognizes four aspects of learning, in alignment with “four pillars” of learning articulated by UNESCO:

<sup>1</sup> (See: <http://www.unesco.org/new/en/education/networks/global-networks/aspnet/about-us/strategy/the-four-pillars-of-learning/>)



## Learning To Learn

Partnering with our learners to provide them with the tools and opportunities to thrive as lifelong learners; and

## Learning To Do

Providing our learners with opportunities to apply learning in ways that impact their own lives and communities; and

## Learning To Be And To Become

Supporting our learners so they can achieve their goals, adapt and thrive in a changing world, and develop to their fullest potential; and

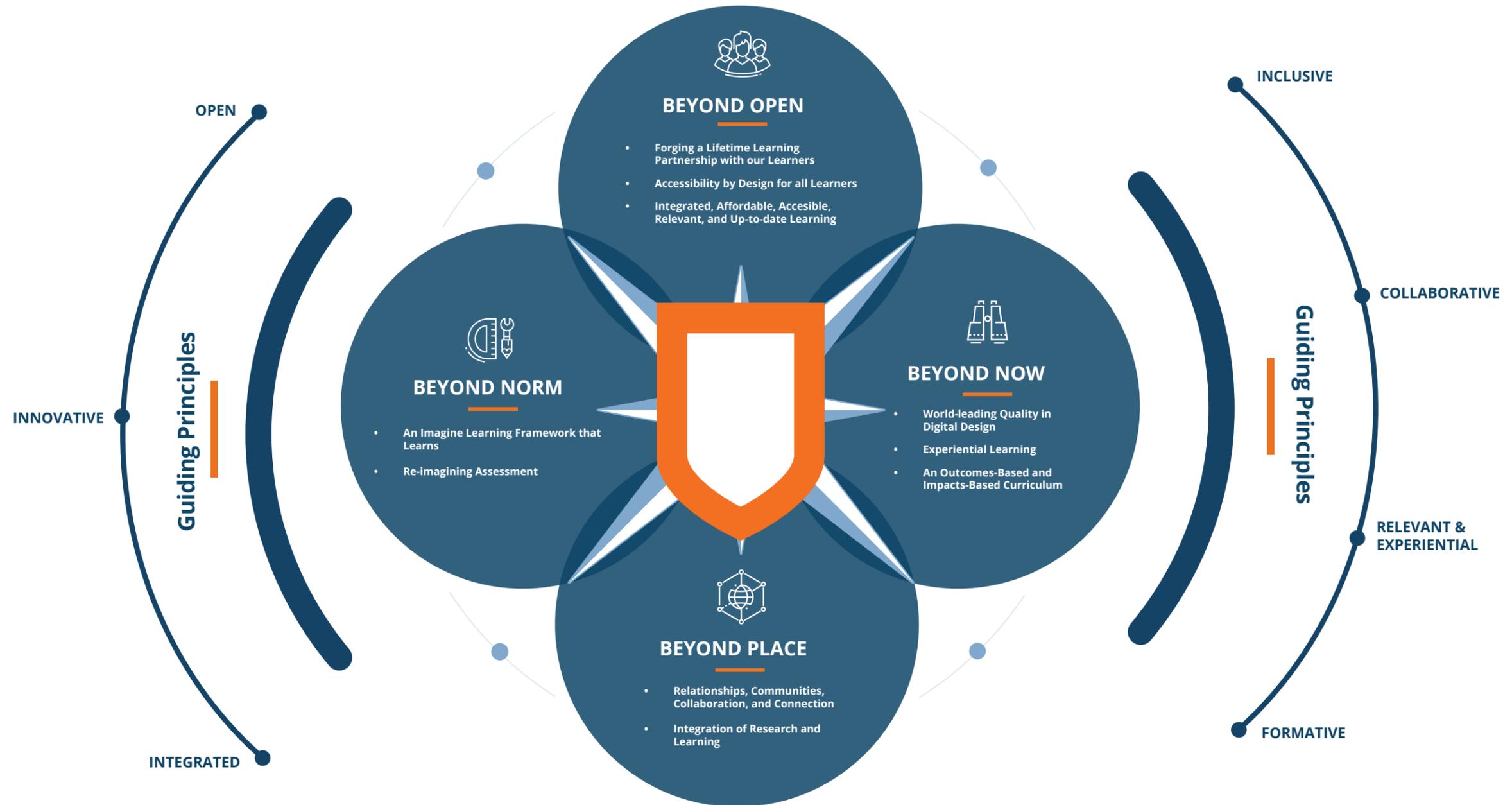
## Learning To Connect

Providing learners with the tools to contribute, collaborate, and develop an understanding of diverse points of view.



## Our Vision

AU provides a world-leading digital learning experience that enables learners to chart their own learning journeys to achieve their personal goals and to thrive in a rapidly changing world.





## Guiding Principles

The purpose of the guiding principles is to provide direction and guidance for transforming the learning environment and experience at AU.

**OPEN.** At AU, all learners are welcome. Processes to support learners are adaptable, premised on a data-informed and dynamic understanding of learner needs and progress, resulting in support and services that are aligned to lifelong personal and professional needs of our learners.

**INNOVATIVE.** AU is committed to setting the benchmark for world-leading digital learning experience, including continuous improvements in pedagogical design and the enabling technology. Innovation in learning has many sources: our faculty, our staff, and our learners all contribute to a culture of innovation at AU.

**INTEGRATED.** The design of learning experiences at AU is deeply integrative and tightly aligned with learning outcomes. Integrative design connects all aspects of learning—from curriculum development to authentic assessment to community engagement—into a holistic understanding of learning as a lifelong process.

**INCLUSIVE.** We welcome diversity in all its forms; learners with various learning preferences, abilities, and learning experiences. Through multiple means of presentation, expression, and engagement, we facilitate learning and academic achievement.



**COLLABORATIVE.** Learning is enhanced through relationships and interaction, including learner-to-learner, learner-to-instructor, learner-to-learning content, learner-to-community, and learner-to-industry community building, all of which deepen and extend the learning experience.

**RELEVANT AND EXPERIENTIAL.** AU provides applied and experiential learning opportunities so that learners have an advanced ability to transform ideas into outcomes. Learners engage with curricula informed by research and enriched by applied learning opportunities.

**FORMATIVE.** Assessment and feedback at AU are formative, timely, and designed to meet learners where they are, help them to progress, and complement learning by providing a window into their ongoing progress.

These guiding principles are embedded in the strategies expressed in the Strategic Directions of AU's Imagine Learning Framework.



## Strategic Directions



### Beyond Open

#### 1. Forging a Lifetime Learning Partnership with our Learners

Future AU learners will have the ability to track, monitor, and curate their learning journeys over a lifetime, from ages “14 to 99.” AU will partner with learners, providing them with a suite of learning opportunities to meet their changing needs, goals, and interests over a lifetime: from open learning experiences, to dual enrolment offerings for high school students, to expanded avenues for prior learning assessment, to university degree programs, to professional training opportunities, to lifelong learning opportunities. AU will partner with learners to provide them with the tools, guidance, and support to manage and connect these disparate learning experiences—and to create, plan, track, and share their unique learning pathways.

AU will lead the world in the seamless aggregation and accreditation of for credit and non-credit learning experiences, courses, and programs that adhere to quality standards. Across their lifetime learning partnership with AU, learners will have the ability to earn, and stitch together, a variety of credit and non-credit digital credentials, including, for example, MOOCs, online courses, one-credit courses or professional development seminars, workshops, conferences, and more. Some of these will be AU-branded experiences, some not, but in every case, what matters is not where the learning occurs, but whether learners can demonstrate what they know and can do—whether they can show mastery of AU learning outcomes.



AU-branded experiences will encompass an adaptable and data-informed strategic and sustainable credential, program, and course mix based on a curricular design of modularized and stackable learning outcomes in undergraduate and graduate environments, and grounded in the highest standards of academic quality and rigour.

Throughout their lifetime partnership with AU, learners will have the ability to curate and present a complete digital portfolio of their learning credentials in a format that showcases what they know and can do. These credentials will be more than a list of requirements fulfilled: they will embed meta-data that assures quality and validity, including the learning demonstration or assessment and the associated learning outcomes.

#### 2. Accessibility by Design for all Learners

In AU’s Imagine Learning Framework, learning content will start with the premise of optimized accessibility for all learners. The design and production of learning content and experiences at AU will use Universal Design for Learning (UDL) principles, and will align with industry technical accessibility standards, to ensure that this accessibility is built into all curricula from the outset.

As an integral component of its Imagine Learning Framework, AU commits to adopting shared accessibility standards. Every learning outcome represents a goal that can be approached through multiple means, and all learners will feel welcome in the sense that they have access to the mode of learning that best fits their needs, accommodating barriers of geography, culture, and language. Video, text, audio, and other interactive content will be embedded in the learning experience in purposeful fashion that allows for learners to design their own pathways to demonstrating mastery of learning outcomes.



### 3. Integrated, Affordable, Accessible, Relevant, and Up-to-date Learning Resources

As learners complete a module, a course, or a program, they will find all the digital resources they need embedded within the flow of the learning experience. Learning resources will be tightly integrated with the digital learning experience and aligned to learning outcomes. Digital learning content, including but not limited to open educational resources and open scholarship, will be carefully vetted to ensure quality standards, and will be aligned with learning outcomes and competencies.

AU's future learners will have the ability to curate and update the digital learning content they have found most useful in their learning journey. Access to learning content does not end when a course or program ends. Faculty, course designers, and all AU learners will have the ability to discover and curate existing digital learning content based on searches for subject areas, learning outcomes, and competencies.

Curation and continuous improvement of learning resources is an ongoing team effort. The collective inputs of instructional staff, faculty subject matter experts, instructional designers, librarians, and learners themselves will ensure learning resources remain timely, relevant, and effective. In support of these efforts, assessment data on the efficacy of learning environment and not simply after the fact, as through a course survey.





## Beyond Norm

### 4. An Imagine Learning Framework that Learns

AU's Imagine Learning Framework is not a set of timeless pedagogical principles or prescriptive best practices, but is designed—and enabled by technology—to continuously improve. It enables a “system that learns.” Data from learning environments, learning content, learning outcomes assessment, student support, and other components will be collected and analyzed to enable ongoing improvements and innovation.

AU will be world-leading in our capacity to test, evaluate and scale enterprise-wide innovations in open, digital, and distributed learning. Based on priorities set by the Imagine Learning Framework, AU will support experimentation with new pedagogies, ideas, technologies, and processes; those that support learning and research will be identified, tested, deployed, and retired in real time.

The principles, strategies, and outcomes of AU's Imagine Learning Framework will be continuously evaluated and enhanced in relation to evolving and emerging research-based practices; gaps in our current knowledge can serve to identify research questions and directions for further experimentation and innovation. AU's Imagine Learning Framework sets the strategic directions and provides numerous opportunities for improvements—and for developing solutions that can lead the way for other learning institutions.

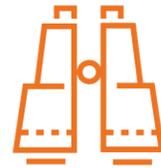


### 5. Re-imagining Assessment

AU's Imagine Learning Framework defines and measures learning in terms of its impacts—its capacity for transforming lives and transforming communities. AU's Imagine Learning Framework recognizes that learning happens anywhere, anytime—not just in university classrooms. Further, we recognize that assessment is not simply a tool for the university to verify learning: learners themselves are a primary audience for evidence of their ongoing progress. Accordingly, we commit ourselves to re-imagining assessment practices in order to expand access to learning opportunities and to enhance the learning experience.

This commitment means AU continuously improves our capacity to assess what learners know and can do, wherever those skills and abilities may have been acquired. The assessment of “prior” learning will expand to include diverse experiences before, during, and after formal classroom instruction—thus supporting a lifelong learning partnership with AU in which learners can link, and gain credit for, a diverse set of learning experiences. An expanded suite of assessment tools will allow for the demonstration of knowledge through application—for example, in a virtual lab—and through project-based assessments.

Assessment is not simply a tool for a university to verify learning: properly integrated, it becomes an aspect of learning. Rapid, timely feedback is essential for learner progress. Carefully designed and authentic assessment practices become an aspect of learning itself, as, for example, in experiential projects that provide multiple milestones and opportunities for feedback and self-reflection. Augmented intelligence and machine learning will further enhance opportunities for timely, formative feedback at every level—not replacing but supporting and enabling higher-order feedback from humans, both peers and academic mentors.



## Beyond Now

### 6. World-leading Quality in Digital Design

AU's digital learning environment will be second to none in providing a consistent, high-quality, personalized learning experience for all our learners. Learning resources and learning content, including assignments, support, and tools, will be tightly integrated into an unfolding learner journey.

AU's digital learning experience will provide a seamless interface that allows a focus on learning, and eliminates the "cognitive load" of unfamiliar navigational elements. We will insist on the highest standards for our learners' digital experience, benchmarking our course design and learning materials and continually raising the bar on existing designs. Our digital learning environment will be supported by a platform that enables real-time monitoring, decision making, and reporting.

AU's future lies in growing access to high-quality education for all learners. Already serving 40,000 learners, in the future AU will expand its reach to help many more access the resources, learning, and credentials they need to transform themselves and their communities. Yet being big should not mean feeling "big" to our learners. Data-enabled learner support will enhance the work of AU's staff and faculty, who strive for engagement and empathy in every interaction with our students, but need the tools to provide this level of support at scale.



Academic and other forms of learner support will be proactive, informed by data and targeted to those learners who want and need additional support. Rather than "a one-size-fits-all" approach, learners will be able to decide themselves the level of support they require. For those seeking support, the sources should be transparent: readily available and "just in time." AU's Imagine Learning Framework will embed support for students where they are—by design in the learning environment.

### 7. Experiential Learning

Underlying the learner experience will be evidence-based pedagogical approaches that shift away from didactic approaches to "first-person learning" that connects students to their lived experiences. Enabled by improving technologies for virtual simulation, but based fundamentally on sound curricular design, learning experiences will emphasize experiential learning, including engaging designs that are relevant to learners' lives, careers, and communities— and that are purposeful and meaningful to learners. The value of programs will be enhanced by opportunities for virtual internships—real-world experiences that enhance credentials. Learning environments (and even assessments) will be designed to enhance the joy of learning. As several of our design teams pointed out, this is not just a feel-good recommendation: research consistently points to the detrimental effects of fear and stress on our capacity to learn and remember, and, to think creatively.



### 8. An Outcomes-Based and Impacts-Based Curriculum

To thrive in a rapidly changing social, political, and economic environment, AU learners will need to master not simply specialized disciplinary knowledge, but also core skills and abilities that will serve them in multiple contexts, within changing industries, and across multiple career changes.

A key component of our future Imagine Learning Framework will be a set of institutional-level learning outcomes aligned with learning goals across all programs and courses, both credit and non-credit. To ensure we are continually improving in our ability to deliver and support learning, these institutional-level learning outcomes will be supported by an institution-wide approach to learning outcomes assessment. Learning outcomes assessment results and other data will inform an approach to quality assurance and continuous improvement across the university.

Learning experiences, resources, assignments, assessments, courses, and programs at AU will also be mapped to learning outcomes, and will be measured in terms of impacts on individuals and communities. Collaborative curricular design can combine inputs from academic experts as well as practitioners making positive impacts in their communities and workplaces and in a range of professional and societal fields.



## Beyond Place

### 9. Relationships, Communities, Collaboration, and Connection

AU's lifetime partnership with individual learners also includes a recognition that learning is extended through connection, community, collaboration and the ability to build and curate individual social networks. The benefits of academic learning and research are enhanced by connections; learner-to-learner, learner-to-instructor, learner-to-learning content, learner-to-community, learner-to-industry, and more.

AU's learning environment creates opportunities for dialogue, empathy, and reciprocal understanding. In this way, lifelong learning and research contribute to balance and harmony for individual learners as well as for their cultures and communities.

AU will enable curricula that can be adapted to a variety of learning settings: self-paced, cohort-based study online, face-to-face, and blended learning. In every case, learners will have the opportunity and the tools to organically create the learning communities they want and need, including communities of practice that extend opportunities for collaborating on experiential learning projects and research.

Through AU's own partnerships—with international partners, industry, and other organizations—we will provide learners further opportunities to add value to their existing networks and to contribute to their communities.

### 10. Integration of Research and Learning

AU learning experiences build in opportunities for learners to impact their community through participation in research and scholarship. Programs, curricula, assignments, and projects are designed around learning outcomes that require learners to stay connected to evidence, to critically test their ideas, and to be skeptical when data and anecdote differ. AU's growing achievements in the areas of open scholarship and data will support learners, regardless of geographical location, with the resources to participate in applied research that optimizes social, economic, and environmental impact on communities.





# Implementing AU's Imagine Learning Framework

## Implementing and Operationalizing the Imagine Learning Framework

At its heart, AU's Imagine Learning Framework is about transforming lives and transforming communities. The Imagine Learning Framework belongs to all of us at AU—learners, faculty, and staff. Implementation of the Imagine Learning Framework and associated priority outcomes will necessarily involve the entire university community. Implementation requires ongoing collaboration, consultation, and thoughtful allocation and reallocation of resources through AU's Integrated Resource Planning process.

### Ongoing Collaboration and Consultation

From the start, the design and development of AU's Imagine Learning Framework has been deeply collaborative, reflecting the contributions of AU students, staff, tutors, faculty, instructional designers, and other stakeholder groups. In the same spirit, the implementation and rollout of the Imagine Learning Framework will continue this practice of consultation and collaboration with each of our faculties.

In addition, the Imagine Learning Framework as a whole will be a "living document," a framework that learns, and will be updated on an annual basis to reflect changing circumstances, emerging opportunities, and lessons learned. An annual review of the framework as well as associated priority outcomes and initiatives will be reported to General Faculties Council.

### Instructional Practice and the Role of AU's Faculties

We recognize that a strong relationship between learners and their instructor is critical to learning. In this Imagine Learning Framework, we have not presumed to prescribe rules for instructional practice, but have instead focused on defining our vision of learning and the learning experience. The specific forms,



roles, and responsibilities of instruction and academic support in alignment with this desired learning experience are decisions best made at the level of our individual faculties and programs. The Provost will have overall responsibility for monitoring and overseeing the implementation, for leading some university-level activities, and for offering advice and support to the faculties.

### Resourcing the Imagine Learning Framework

The Imagine Learning Framework provides a blueprint for the continuing evolution of learning at AU. This includes articulating the strategies, principles, and outcomes that will drive resource allocations across the institution through AU's Integrated Resource Planning Framework. Along with AU's *Imagine Plan*, Research Strategic Plan, Student Services Strategic Plan, and five Faculty Foundational Plans, the Imagine Learning Framework will provide direction and priority outcomes to guide annual operational planning in support of academic priorities.



## Priority Outcomes Roadmap

The roadmap below identifies specific outcomes and milestones to guide planning and implementation of the Imagine Learning Framework. Listed below the academic priorities for each year are additional institutional-level outcomes that further support and enable the Imagine Learning Framework. Note that initiatives that begin in a particular year may continue and extend to subsequent years.

### 2019 - 2020

#### Priority outcomes for the Academy:

1. Develop an Institutional Learning Outcomes Assessment Plan, including institutional-level program learning outcomes aligned with Imagine Learning Framework strategies, mapped to program-level outcomes, tied to annual program-level improvement plans, and embedded in the design of digital learning experiences.
2. In support of an Imagine Learning Framework that Learns (Strategic Direction #4), complete an environmental scan of research and pedagogical best practices underlying Imagine Learning Framework principles, strategies, and priority outcomes. Identify key research questions to inform future assessment and innovation to enhance the Imagine Learning Framework.
3. Develop a Learning Resource Strategy, including a project timeline, to ensure integrated, affordable, accessible, up-to-date, and high-quality learning resources across all courses and programs.
4. In conjunction with the Learning Resource Strategy, adopt shared accessibility standards.
5. Develop a coordinated learning content design process that reflects Imagine Learning Framework principles and strategies, and that informs the development of an effective, efficient, responsive course development and revision process.



#### Institutional-wide priority outcomes supporting the Imagine Learning Framework:

1. Create an enhanced technological environment that supports the Imagine Learning Framework and emergent pedagogical needs in support of *Imagine*. (Learning Environment Evolution (LEE) Phase II.)
2. Improve delivery of services by implementing technologies that improve the accuracy and timeliness of responses to user queries, and establish standard data sets (people records) to inform service benchmarks and continuous improvement strategies. (Student Information and Services Point of Contact Model.)
3. Establish a Data Governance Framework that sets the standards for all data elements, including those related to student learning; defines ethics of data ownership; identifies data visualization and reporting needs; and assigns data stewards, including academic stewardship of learning data to ensure data quality (Data Governance Management).





## 2020 - 2021

### Priority outcomes for the Academy:

1. Establish a process, structure, and investment/support to identify, nurture, evaluate, and scale promising pedagogical innovation in the digital space. (Innovation, Design, Engineering and Architecture (IDEA) Lab Phase I.)
2. Develop a framework for Prior Learning Assessment and Recognition (PLAR), Course Challenge, and other opportunities for demonstrating learning obtained outside the AU classroom that maximizes the ability of learners to gain credit for what they know and can do.
3. Support learner-driven and learner-curated communities of practice that enable Imagine Learning Framework principles and strategies for lifelong learning partnerships, professional development and networking, and collaborative learning experiences.

### Institutional-wide priority outcomes supporting the Imagine Learning Framework:

1. Safeguards in place ensuring the quality and integrity of key data elements in alignment with the Data Governance Framework (Digital Preservation of Data).
2. Develop a scalable and sustainable model for open scholarship that optimizes social, economic, and environmental impact on communities developed in alignment with AU's Strategic Research Plan (Scalable and Sustainable Model for Open Scholarship).



## 2021 - 2022

1. Deploy future learner interface (integrated learning content, assignments, support and tools).
2. Complete implementation of learning resources strategy to support AU's credential, program, and course mix.
3. Deploy suite of learning opportunities and services aligned to learning outcomes to meet the changing needs, goals, and interests of learners over their lifetime.
4. Complete Innovation, Design, Engineering and Architecture (IDEA) Lab Phase II in place (Phase II: deploy process for vetting, testing, and scaling promising innovations in alignment with Imagine Learning Framework).

## Metrics/Measures of Success

Examples of potential qualitative and quantitative measures of the outcomes and impact of AU's Imagine Learning Framework include the following:

1. Learner perception of access.
2. Learner satisfaction with learning environment.
3. Learner perception of success in relation to personal learning goals.



4. Alumni perception of success in relation to personal learning goals.
5. Measure of interoperability (Interoperability with external open sites, e.g., social media, DropBox, Google Drive, interoperability between Learning Management Systems (LMSs), information and teaching/learning materials exchange (LTI, SCORM, etc.), Single sign-on (SSO) access control, etc.
6. Percentage Learners satisfied with educational experience.
7. Percentage Learners involved in community-driven or researcher-driven research projects, undergrad and grad (Institutional Health Report).
8. Learners' Engagement Score.
9. Percentage of credits given in experiential-learning activities, in relation to total number of credits.
10. Number of virtual internships (total and per year).
11. Number of IDEA ideas generated.
12. IDEA stage-gate pass rates.
13. Student satisfaction regarding learning materials, through student survey.
14. Student satisfaction regarding adequacy of the adopted pedagogical approaches to the learning objectives, through student survey.
15. Percentage Learners who would recommend AU.



16. Percentage of courses/examinations that make use of diverse forms of assessment quantitative and qualitative approaches, human-based and technology-based tools.
17. Percentage of curriculum changes resulting from an assessment of student learning, either formal or informal, within a fiscal year—a measure on increased flexibility within the curriculum development process to better respond to a rapidly changing world.



## Ella's Story

## Ella's Story

To help make AU's Imagine Learning Framework more tangible for others in the AU community, we offer "Ella's Story," the story of just one possible future AU learner. We know that no single learner can represent the diversity of AU learners, past, present or future. Indeed, a strength of AU has always been its access to learners whose path to education has been anything but traditional. "Ella's Story" is offered here in the hopes that it sparks the imagination of other possible scenarios of future AU learners.



Imagine a future learner—let's call her Ella. Ella is 36, has two children, ages 9 and 7, and lives in a small remote town with her significant other. Ella and her partner are both on to their second careers, and Ella has plans in the works for a third. Like her mother and two brothers, Ella has a lifetime learning partnership with AU—as she has since childhood. Growing up, Ella took advantage of a variety of AU learning opportunities—some free, just popping



up in online searches, some offered to her directly as a lifetime learning partner with AU—that eventually she was able to apply towards dual enrolment credit with her high school and with AU.

Ella lived at home during college, and completed her first few credentials while working full time. Over the years, the many hands-on and experiential learning opportunities Ella has completed at AU have helped populate a dynamic e-portfolio that she has used throughout her career to provide tangible demonstration of what she knows and what she has accomplished—a showcase of her competencies and creative work. AU's planning tools have allowed her to seamlessly translate those competencies into the skills employers in a variety of different industries are looking for, and the virtual internships (co-op) she has completed as part of her AU experience have added value to her formal credentials.

Along her journey, Ella has had the opportunity to collaborate and connect with other AU learners in her own community and around the world. The settings in which she has been able to study over the years range from self-paced to cohort-based study online, as well as opportunities for face-to-face and blended learning. Even when working in a self-paced format on projects unique to her interests, Ella has had access to collaboration tools that allowed her to work through key questions with other learners working on similar problems. As she segued into graduate-level study at AU, and had the opportunity to take part in more specialized cohort-based study experiences, Ella has been able to deepen her ever-growing community of practice.

For Ella, there has not always been a clear line between working, studying, or engaging in her community. At different times of her life, she has focused on one area or another, but always she has continued to add to the growing web of credentials in her AU Learner Profile, adding new “badges” (smaller bundles of learning) and certificates, often based on suggestions provided to her by AU



based on her shifting interests and goals. Some of these learning opportunities she has been able to ladder into further credentials, others she has taken because her employer had a partnership with AU and it contributed to her promotion—and others were taken simply for the joy of learning.

Ella has many ways to track and monitor her progress as a learner, and to demonstrate that learning to others. AU makes the process of learning visible in numerous ways, from small to large. Sometimes the learning content itself is interactive,



and provides her with instant feedback on her progress; other times, AU provides her with real-time updates on her progress through an activity, or a course, or a program.

AU lets her choose when, where, and how she demonstrates what she knows and can do. Ella can quickly share any part of her portfolio, generating a customized set of credentials. Employers and others are assured, through meta-data built into her credentials, attesting to the quality and validity of AU's assessments. She shakes her head when



her mother remembers the days when you had to order a paper document called a transcript, that sometimes took weeks to arrive, and never changed once you had graduated.

As a lifetime AU learner, Ella has ongoing access to rich, interactive learning—she never loses access because a learning experience, a course, or a program is “over.” The material is always available, and always an integral part of the course—gone are the days, which her mother still remembers, when you sometimes had to pay extra for a physical textbook, which might only be partially relevant to a course, and in any case would be quickly out of date. Learning content is available in multiple formats—video, text, audio—and all content is tagged to AU learning outcomes, so Ella can always choose which modality works best, knowing that she has many pathways to learning. Ella can listen to an audio book while taking a walk, adding verbal highlights and notes as she goes, then pick up later where she left off on the same book on her e-reader, comparing her notes to video commentary from an expert. Over the years, she has been able to choose the level of access she has needed to support: for some subjects, self-paced with help built into the learning environment is plenty; other times, she has chosen to add additional layers of support from academic experts.

As much as anything, it has been the joy of learning—and the added joy of learning with others—that has driven Ella and her family forward. During the year she and her partner relocated and had to homeschool their daughters, the whole family took an archeology course that included access to supplemental lessons suitable for learners of all abilities. Ella and her family had the opportunity to participate as citizen scientists contributing to the analysis of satellite data focused on the Peruvian Andes that revealed the traces of stonework, roads, and building sites of possible pre-Columbian origin. Subsequently, they learned that



their analysis of the data (along with hundreds of other citizen scientists) helped lead to the identification and excavation of a previously unknown Incan city—and Ella’s mother, who had by then become, in her words, “an armchair archaeologist,” participated in a virtual excavation. The funny thing is, thinks Ella, those experiential lessons on the use of big data in archeology sparked her passion—with little nudges along the way from AU—for data analytics, which has now laddered into her current pursuit of a graduate certificate in bioinformatics.

