Learning & Education Advancement Fund (LEAF): Assessment Guidelines

Contents

Overview of Assessment for LEAF	. 1
Establishing LEAF Project Goals	
Measuring LEAF Project Goals	
Guiding Questions	
LEAF and Research	.3
Student Involvement in Assessment	. 3
Assessment Data Sources	. 5
Connecting Assessment Approaches to Project Goals	. 7
Example 1: Develop Several eModules in Quercus to Facilitate Student Learning (Seed Grant, Digital Learning)	. 7
Example 2: Create a new Experiential Learning Opportunity where students co-design a research project with Community Partners (Seed Grant, Experiential Learning)	. 8
Example 3: Create a guide and support system for students and faculty about critical software in our program (Impact Grant, Curriculum Development)	.9

Overview of Assessment for LEAF

A key component of a strong LEAF proposal (and project) is a clear assessment plan. Effective assessment helps both the project team and the LEAF adjudication committee understand the intended goals of the project and how the project team will evaluate whether the project goals have been achieved. The assessment plan should demonstrate a well-defined relationship between project goals, activities and assessment methods. It should also outline specific, measurable indicators of success and detail the tools and approaches used to gather and analyze the data.

Establishing LEAF Project Goals

LEAF proposals will be asked to clearly identify project goals. While these goals will be project specific, LEAF aims to provide students with greater exposure to impactful teaching practices. In defining LEAF project goals, applicants might consider addressing the following:

 Support and enhance the transfer of knowledge through active learning opportunities, both within and beyond traditional educational settings.

- Provide students with a robust and clear understanding of their learning progress, particularly through the enhancement of assessment practices and transparency regarding learning outcomes.
- Equip students with the skills necessary to become successful independent learners.
- Support the University's global mission to enhance the learning experience for all undergraduate students.
- Encourage collaborations among instructors and staff across academic disciplines, units and divisions with the purpose of creating exceptional learning experiences for undergraduate students.
- Support the creation or renewal of academic program curriculum.

Measuring LEAF Project Goals

At the proposal stage, the committee evaluates whether the project includes an assessment plan that will be able to provide evidence and insights about the degree to which project goals are realized. When defining project goals and assessment methods, LEAF applicants are encouraged to develop assessment plans that are:

- Manageable: Assessment plans should be feasible and achievable within the timeframe of the grant, as well as appropriately scaled for the nature of the project and its goals. For example, we would expect a more comprehensive assessment plan for a large-scale Impact grant than a smaller-scale Seed grant. Before asking students to provide additional data, consider whether assignments, quizzes, or other assessments that students complete as part of the course already provide evidence that is relevant to the project's goals. Using data that is already part of your course assessment plan is much more manageable than an assessment strategy that requires original data collection.
- Measurable: Assessment plans should be focused on activities that allow you to observe or measure change, which has an impact both on setting measurable goals and developing a measurable assessment plan. For example, measuring the career paths of students is not feasible but measuring a change in their perception about a particular career might be achievable. Measurable assessment plans require the establishment of a baseline / starting point to measure against.
- Meaningful: Assessment plans should help share insight into project goals, project impact and lessons learned. Assessment activities should help you understand whether project goals have been achieved, and potential future pathways for project revisions and expansion.

Guiding Questions

In developing an assessment plan, consider the most meaningful ways to collect feedback, information and data that can be used to inform future project pathways while also being measurable and manageable. Here are some guiding questions for your consideration:

- What is the problem the LEAF project is trying to address? Use this as a baseline for the assessment strategy you are planning.
- What are the learning goals of the LEAF project? What is the intended impact of the LEAF project within its specific context (e.g., course, academic unit, division)?
- What evidence would be required to understand whether the LEAF project is achieving its intended goals?
- What data or information would inform approaches to the project as it moves forward (e.g., consider the phases of the LEAF project and how data collected in the initial year might inform project adjustments in later years)?
- What data is already available that can demonstrate the impact of the LEAF project (e.g., QUERCUS data, etc.)?
- What is an appropriate level of assessment given available resources, the size of the grant and / or access to data?
- What resources are needed to implement the planned assessment strategy? Might it be important to incorporate some additional time into the project plan to account for unexpected hurdles?

LEAF and Research

LEAF is a grant for curricular and teaching innovation; it is not a research grant. While a research component to a project may be appropriate, the sole purpose of a proposal should not be the production and dissemination of new research. LEAF is intended for *creating* something innovative that enhances the student learning experience and teaching capabilities of the University.

Research Ethics Board: if you think you may present or publish on your LEAF project, or if your assessment plan includes gathering information on or from students beyond normal course requirements, we recommend that you seek approval through the REB early in the project. Learn more information.

Student Involvement in Assessment

If engaging students in LEAF assessment, consider framing it as an opportunity for students to learn more about their instructor's teaching, research and pedagogy and provide valuable feedback that may contribute to innovations in teaching practice. You might introduce the project and pedagogical approaches to the classroom. You might also allow for a short discussion period before the assessment so that you can elaborate on or clarify any points for students. A few other considerations:

 Before asking students to provide additional data, consider whether assignments, quizzes, or other assessments that students are doing as part of the course already provide evidence that is relevant to the project's goals.

- If it is necessary to collect additional data from students (beyond the assignments, quizzes, or other assessments that are already part of a course), be sure that they know that the purpose of the data collection is to assess the intervention, not to assess them. Examples of additional data collection are surveys or focus groups about students' perceptions of the learning intervention.
- Be sure students understand that providing additional data is voluntary and that whether or not they respond, the content of their responses will not affect their grades in your
- Consider how distance might be created between the faculty member and the LEAF assessment: hire a project coordinator / research assistant to undertake the work of recruitment and facilitating student surveys and focus groups.
- Following the assessment, you may want to review with students the design of the intervention and what you are hoping to learn from the initiative and the assessment. This review will help students to better understand approaches to teaching and learning as well as the research process.
- The Higher Education Quality Council of Ontario (HEQCO) has published a guide to help support the recruitment of students for research projects.

Assessment Data Sources

Depending on the LEAF project goals, it may be appropriate to use more than one assessment tool / source. The following table highlights the strengths and considerations for some of the common assessment sources. The table also includes links to resources (e.g., examples, guidance, etc.) about the sources.

In reviewing these forms of assessment, consider which of these sources are likely to be an embedded or core component of the project (e.g., course assignments, Quercus and related platform data, course evaluations, etc.). Leveraging data or tools that are readily available will help your assessment plan be more manageable.

Assessment Source	Strengths	Considerations	Resources
Focus Groups	 Collect meaningful insight into students' perceptions, attitudes and experiences Allows students to build on the responses of other students Can be important when a project aims to support equity deserving communities 	 Will you provide gift cards, TBucks or another form of renumeration to students who participate in focus groups? When scheduling focus groups, ensure you're giving time for students to ask clarifying questions and collect their thoughts Get comfortable with silence! Sometimes students will need a few moments to collect their thoughts 	 Use of Student Participation Pools in Research, Office of the Vice-President, Research & Innovation Jessica Bourne and Naomi Winstone, "Empowering students' voices: the use of activity-oriented focus groups in higher education research," International Journal of Research & Method in Education, 44, no. 4 (2021): 352-365.
Rubrics and Formative Assessment (Embedded Course Assessments)	 Many pre-existing models Helpful for assessment of complex competencies Students and instructors can both complete. Detail expectations and standards for success. Provide numeric and qualitative feedback 	 What are the appropriate criteria and 'levels' for the rubric? How, who, and when will the rubric be completed? 'Training' students, TA's or other faculty on how to use 	 Check out the <u>Centre for Teaching Support & Innovation events calendar</u> for workshops on rubrics and assessment <u>"Assess" Listserv</u>: hosted by Association for Assessment of Learning in Higher Education (AALHE) <u>National Institute for Learning Outcomes Assessment (NILOA)</u>

Student Characteristics and Participation Data	 You may already have access to some of this information through program registration and / or Quercus Opportunity to learn more about student profiles within your course, program or learning activities Identify subsequent courses and student participation 	 What are realistic targets? What characteristics are meaningful? How to collect data that we do not already get from Quercus? Is your sample representative of your program, department, division? Do I have access to all the demographic features that I would like? 	<u>UofT Data Catalogue:</u> learn more about key data assets at U of T
Survey Data	 Great for large numbers of students, data is collected within the tools These tools likely already capture participation data (e.g., number of clicks) Many courses and programs structure their content on virtual platforms, plus high student uptake Tool to collect information on student perceptions 	 Where to find or how to develop a survey that measures your outcome of interest Can survey data be integrated into the course or activity? Will students respond / answer? Survey fatigue When and how will the survey be delivered? It's important to establish a baseline to measure the outcomes of your initiative against. Construct validity 	Guideline on Surveying U of T Students, Faculty, Librarians, Staff and Alumni
Quercus and Other Platform Data	 Great for large numbers of students, data is collected within the tools These tools likely already capture participation data (e.g., number of clicks) Many courses and programs structure their content on virtual platforms, plus high student uptake 	 Learning analytics is a nascent field, so there are uncertainties around inferring meaning from these data Ability to extract data from the learning management tools, especially if using non-U of T-supported tools Data cleaning and preparation Definitions and meaning of student success 	 Quercus Support Resources: documentation and resources related to Quercus and the Academic Toolbox EdTech Catalogue – Quercus Supported Tools Quercus "How-To" Build Your Course: CTSI supports on how to set up and run course content in Quercus

Connecting Assessment Approaches to Project Goals

As noted in the introduction, one of the hallmarks of a strong assessment plan is its alignment of your project goals and activities. The following examples demonstrate how assessment approaches are connected to the project goals, which in turn are connected to the overall work of the project. We encourage you to consider using a similar table as you begin to map out the assessment plan for your LEAF project.

Example 1: Develop Several Online Modules in Quercus to Facilitate Student Learning (Seed Grant, Digital Learning)

In this project, the proponents developed a series of online modules to enhance subject knowledge, related skills and engagement. Modules included embedded assessments and were comprised of short videos, audio excerpts and narrated visuals that guided students through key concepts required to meet course learning outcomes. Modules were available to students via Quercus, included links to discussion boards and end-of-module quizzes.

Desired Learning Goal or Outcome	Assessment Tools or Strategies	Timing / Data Collection
Increase student engagement/interactions	Use Quercus Analytics to determine if 80% of students viewed at least 5 eModules or set targets.	
	Use Quercus Analytics to monitor viewing frequency, engagement time, number of clicks, number of unique views. Compare to pilot results if possible.	
Students demonstrate greater command of subject material	Grade comparison / distribution to previous years results.	
	Integrate multiple choice questions into the eModules. or Integrate a pre-post quiz design into the modules	

Example 2: Create a new Experiential Learning Opportunity where students co-design a research project with Community Partners (Seed Grant, Experiential Learning)

In this community-engaged learning project, students partnered with an organization that could benefit from access to experimental qualitative and quantitative data facilitated by our students via our teaching laboratories and analytical facilities. Organizational partners and students codeveloped analytical solutions (in the form of a proposal) that address the partner's questions and / or needs. Top proposal(s) are then used as projects in a supervised research course the following semester, where either the original proponents or new students will implement.

Desired Learning Goal or Outcome	Assessment Tools or Strategies	Timing / Data Collection
Provide students the opportunity to integrate the theoretical and practical aspects of their disciplinary skill and knowledge in a community setting.	Instructor reviews final project using Integrative Learning Value Rubric.	
Enable students to learn new knowledge and skills while learning about community organizations' needs through a context of reciprocity and partnership.	Have students self-assess and / or reflect on the knowledge they learned from the community organization in journal or similar format.	
Create meaningful, new partnerships between U of T and community partners.	Create relationships with >10 new community partners	
	Survey community partners to gather their perspectives on the project. Success = 75% want to be a partner again and 75% or more of partners can articulate 1 benefit of working with a student.	

Example 3: Create a guide and support system for students and faculty about critical software in our program (Impact Grant, Curriculum Development)

In this project the proponents developed a guiding document/manual to augment students' experience learning to use a software package. It was intended to improve the ways in which quantitative skills were taught to undergraduates and help students to build and scaffold a skillset as they advance through their program. In addition to providing support for students, the manual also supports faculty to create new or revise existing assignments using the software.

Desired Learning Goal or Outcome	Assessment Tools or Strategies	Timing / Data Collection
Improve students' quantitative skills using the	Compare grades of students in courses before	
software package.	and after software guide / supports are	
	introduced.	
	and / or	
	Compare course performance by students	
	who did and did not engage with the new	
	support systems.	
	Compare cancel, withdrawal, late withdrawal	
	or failure rates in courses.	
50% of faculty create new or revise existing	Survey faculty members on to what degree	
quantitative skills assignments using the	the guide has had an impact on their course	
software.	design and teaching.	
	Analysis of syllabi from previous and revised	
	courses.	
Increase student utilization of support	Create relationships with >10 new community	
documents	partners	
	Count number of times (and which sections)	
	of support guide utilized most.	