

Research and Teaching Interdependence Working Group
Draft Plan – Supporting, Valuing, and Celebrating Research and Teaching
Integration: Embedding the experience of research and scholarship in all academic
endeavors
July 2021

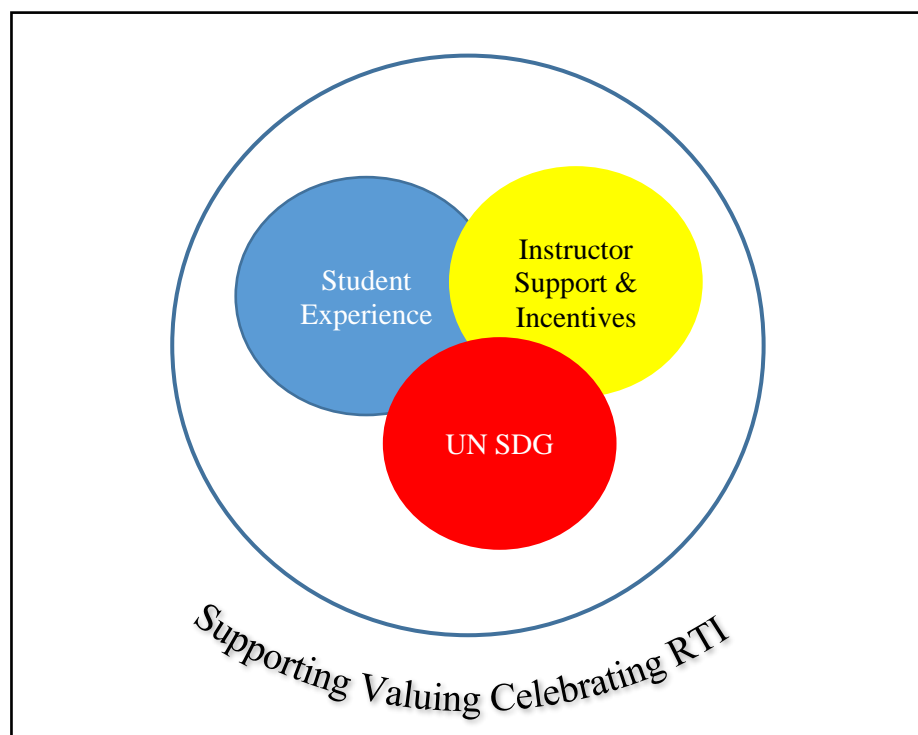
Strategic Goal #3:

“Enhancing the interdependence of research and teaching, with emphasis on [1] greater integration of research in the undergraduate experience, [2] an increase in the ratio of graduate to undergraduate students, and [3] a program to attract, support, and more effectively integrate postdoctoral fellows.”

Preamble

The goal of the [working groups](#) is to articulate high impact ideas. This can be accomplished by providing actual initiatives or laying the groundwork for such initiatives.

Working Group #3 recognized that successful initiatives for research and teaching interdependence would occur when i) the student experience was prioritized; ii) instructors were supported and incentivized; and iii) the research context was viewed as impactful and purposeful as illustrated by its connection to an overarching theme, such as that provided by the United Nations Sustainable Development Goals ([UN SDGs](#)). The required groundwork for this goal recognizes the overlap of these three foundational elements within an institutional culture that values and celebrates the interdependence of research and teaching.



The groundwork ensures that:

- Students experience research as a foundational and embedded part of their academic program, have opportunity for additional research enrichment outside the classroom, and are able to recognize and articulate the skills fostered through their research experiences.
- Faculty, postdocs and teaching fellows recognize the importance of research and teaching integration, receive support to build capacity for this integration, and are celebrated for outstanding achievements in this area.
- The research integrated into the student experience is viewed as impactful, relevant, and meaningful. It contributes to improvements in our community both locally and globally in our quest to achieve the UN Sustainable Development Goals (UN SDGs). We have articulated our vision of the intersection of research and teaching, and see this work closely aligned with two other working groups (Group #1 Research Impact and Group #2 Student Learning).

Summary of principles, goals, and action items

We propose that at Queen's University, research and teaching integration (RTI) be a hallmark of the experience of undergraduate and graduate students, and postdoctoral fellows (PDFs) while building capacity for instructors to enable and facilitate RTI.

Principles

- 1.** Create an ethos and culture to normalize RTI (Research and Teaching Integration) across the University. Emphasize a positive nexus between research and teaching, presented as mutually inclusive, and promote the scholarship of teaching and learning.
- 2.** Make RTI a signature of the Queen's educational experience by the development of research-oriented curricula. We describe inquiry as a dynamic, iterative, and developmental process whereby students engage in asking and researching questions of interest as they build and strengthen their inquiry skills and work towards disseminating their work. Students are partners in knowledge-creating practices.
- 3.** Frame research questions around the [17 UN SDGs](#) to "unite us in a common purpose" in education for sustainable development.
- 4.** Ensure that principles of Equity, Diversity, Inclusion and Indigeneity (EDII) guide review and development of policies and programming as they relate to integrating research and teaching.
- 5.** In an effort to decolonize curricula at Queen's, include Indigenous perspectives on the nexus between research and teaching. These efforts need to be Indigenous-led and informed by meaningful consultation and partnership with Indigenous communities.

Goals

- 1. Undergraduate:** All students have curricular research experiences during their degree programs.
- 2. Graduate and PDFs:** Every doctoral student and PDFs has a teaching opportunity, with appropriate mentorship, funding, and, for graduate students, a one-term extension to the funding window.
- 3. Faculty:** All faculty have the support, resources, and skills they need to embed research experiences in their courses, and to involve undergraduate students in their research.
- 4. Cross-University:** Raise the profile of and support for RTI activities, programs, and opportunities.

Action items

- 1.** Require that every undergraduate course include a component of research, with an emphasis on building the research experience from first to fourth year. We adopt the goal, as articulated by Jenkins and Healey (2009) “to move more curricula in the direction of developing students as participants in research and inquiry.” Identify where research and information skills are introduced and reinforced throughout a program, including the learning sessions provided by librarians and archivists. Examples of research experiences include lectures on a major research question relevant for the course; guest presentations by graduate students working in a related area; an inquiry-based assignment or activity; a report on a major publication in the field, and other opportunities. Whenever possible, students should have the opportunity to present or disseminate their work in a public forum to be part of the community of researchers.
- 2.** Review, categorize, and enumerate all research-inclusive, research-focused undergraduate courses and tag in calendar. Address barriers that prevent students from enrolling in research-oriented courses.
- 3.** Increase the number of undergraduate research fellowships/positions, ensuring that they pay a living wage. Ensure equitable access for all faculty members by not requiring matching funds. Create new undergraduate research fellowships/positions that do NOT require matching funding.
- 4.** Create teaching fellowships for doctoral students and PDFs in all disciplines. Provide mentorship, training, and a one-term extension of the funding window for doctoral students.
- 5.** Review terms of reference for all PDFs, prizes in teaching and research university-wide, and competitions for prestigious faculty positions (QNS, CRC), etc., to ensure that RTI is represented in affirmative language.

7. The Principal, Vice-Provost (Teaching and Learning), Centre for Teaching and Learning and the Office of the Vice-Principal Research collaborate on creating an annual Queen's-wide event featuring the theory and practice of RTI that would engage undergraduate and graduate students, postdoctoral fellows, faculty, University Counsellors, Trustees, and members of the larger Queen's community.
8. Embed RTI reporting within the Cyclical Program Review, and where possible, other academic processes.
9. Undertake a university-wide outreach campaign to articulate the benefits of RTI.
10. Promote the scholarship of teaching and learning.

Notes

- **Supporting RTI for undergraduate students**

We suggest that Queen's University promote and support undergraduate research and inquiry as has been described by Childs et al. (2007), that is "student engagement [should be] from induction to graduation, individually and in groups, in research and inquiry into disciplinary, professional and community-based problems and issues, including involvement in knowledge exchange activities". Jenkins and Healey (2009) note that definition is inclusive, and explicitly links research and inquiry and knowledge exchange.

- **Helping students to make sense of their research experiences**

While many students will be excited by our recommendations, we recognize that not all undergraduate students will appreciate the opportunity to and the benefits of engaging in research. We note that in a study of 28 university-level courses, students reported benefits of targeted development of research skills, including that they are transferable to employment, aid in developing critical thinking, are transferable to society and sparked further interest in research (Willison, 2012). Further, we encourage the use of available tools and platforms such as the Queen's Skills Cards, developed by Student Affairs, and ePortfolios via onQ to assist students make sense of their experience. Finally, providing an array of opportunities for dissemination of research, through departmental, university-wide (I@Q Conference and Journal), and national (venues to come from the early stages of the Canada-Wide Conversation on Undergraduate Research) and international (CUR, The Global Undergraduate Awards), completes the cycle of research as is recommended by Spronken-Smith et al. (2013).



References

Childs, P., Healey, M., Lynch, K., McEwen, L., Mason O'Connor, K., Roberts, C. and Short, C. (2007) Leading, promoting and supporting undergraduate research in the new university sector. National Teaching Fellowship Project

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Willison, J.W. 2012. When academics integrate research skill development in the Curriculum. Higher Education Research & Development Vol. 31, No. 6, December 2012, 905–919