DEPARTMENT OF KNOWLEDGE INTEGRATION ANNUAL REPORT  
MAY 1, 2016 TO APRIL 30, 2017  
Faculty of Environment General Assembly, May 2017

We celebrated the convocation of the fifth group of Bachelor of Knowledge Integration students, held the seventh annual KI Exhibition of our third year design course, and the sixth annual senior research project symposium, and operated a full slate of Waterloo Unlimited enrichment experiences.

The Bachelor of Knowledge Integration (BKI) students are doing well, with strong academic performance and involvement in a wide range of collaborative projects. We had another strong group of first year students entering KI in September. Almost half of our first year students had high school averages in the 90s. Our graduates also continue their successes, with several going into Law—including at UC Berkeley—and our first student accepted into medical school, at McMaster. Others went into other post-secondary education, or into the workforce as designers, consultants, researchers, and marketers. Despite these successful stories, figuring out how to target and market the program remains a challenge in getting our applicant numbers up, and will be a focus for the next few years.

The INTEG 230 Museum Course field trip went to Copenhagen in the spring, where KI students immersed themselves in museums and culture, honing their observational skills in a new environment. The March KI Exhibition that grew out of their INTEG 320 and 321 design projects was outstanding, exploring 6 topics: cognitive traps & casino games, cultural influence on love & commitment, how we assign value to objects, the subjective nature of utopia, class differences in Canada, and fear itself. Over 650 visitors attended the Exhibit at St. Jerome’s University during March Break including potential students, KW community members, and museum experts from Toronto and the KW area.

A third year KI student presented at the Feminist Epistemologies, Methodology, Metaphysics, and Science Studies 2016 conference at the University of Notre Dame in Indiana. She presented her research on gender diverse people in social epistemology, research which originated in a paper that she wrote for the KI core course INTEG 221: The Social Nature of Knowledge.

Another third-year KI student participated in the Arctic Youth Ambassador Caucus in Iqaluit, Nunavut to learn more about Nunavut and to engage in round-tables with Northern youth on issues they face every day (e.g., food security, health care, climate change, access to education).

In summer 2016, we piloted KI Works, an optional work-integrated learning program for KI students with relevant summer jobs, encouraging them to explicitly connect their work to their academics. Although it is not an accredited co-op program, KI Works shares most of the same requirements and will thus be evidence of the same kind of experience and learning that employers have become used to in Waterloo graduates. We hope this program will help to address the lack of formal co-op in KI, which some applicants may see as a detractor. The pilot was a success, and we are expanding it for the summer of 2017.

Students complete two reflections to connect their personal, academic, and professional experience and growth, and receive mid-term and final employer evaluations. On graduation, each student participating in KI Works will receive a letter from the Chair describing KI, the KI Works program, and listing their employers and evaluations.

The department completed its first seven-year cyclic program review and the final assessment report was approved by Senate in September 2016. In response to the report, we will be working on:

- reaffirming the vision and brand of KI, and updating our marketing materials
• reviewing curriculum and program requirements to include greater connection to Environment and environmental issues, conflict resolution, and more structure around students’ specializations, while maintaining the breadth and flexibility in the program
• and developing new large-enrolment courses to help bring KI to the broader campus.

KI welcomed Dr. Allyson Stokes as a one-year definite term faculty member, to help cover for several leaves and sabbaticals. The faculty had a great year with research funding and the launch of several exciting new projects.

Assistant Professor Vanessa Schweizer has been awarded a Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery grant for her work on "Uncovering 'perfect storms' among possible events affecting complex systems". In Spring 2016 she was visiting professor at the Helmholtz Alliance ENERGY-TRANS.

Assistant Professor John McLevey received the Early Researcher Award (ERA), for his work using new computational methods to better understand the development of free/libre open source (FLOSS) software in massive inter-organizational collaboration networks. He has also been awarded a Social Sciences and Humanities Research Council (SSHRC) Insight Development Grant for his work on "Remaking the Boundaries of Open and Proprietary Science: A Longitudinal Study of Biomedical Research and Development Networks in Canada".

Associate Professor Katie Plaisance, in collaboration with John McLevey, has been awarded a SSHRC Insight Development Grant for their work on "Increasing the Impact of Philosophy of Science in Scientific Domains".

Associate Professor Rob Gorbet and the Living Architecture Systems Group have been awarded a SSHRC Partnership Grant for their "Living architecture systems". Rob’s involvement includes the development and implementation of engineering systems to promote intelligent and empathic interactions with the architectural space, and inter-disciplinary working methods: studying and facilitating within the partnership itself, and developing related curriculum for grade school classrooms.

On behalf of the Department of Knowledge Integration I’d like to thank the faculty, staff, and students of the Faculty of Environment for their collegiality and support as we continue to build this innovative approach to undergraduate education.

Waterloo Unlimited continued to offer a unique, trans-disciplinary enrichment program for outstanding high school students. In 2016-17, we hosted students in the following programs:

• May 2016 Grade 10 “Change” theme (44 students, 41 in residence)
• November 2016 Grade 12 “Roadmap To Research” theme (50 students, 43 in hotel accommodation)
• March 2017 Grade 11 “Design” theme (61 students, 53 in hotel accommodation)

We thank the more than 120 UW faculty, staff, & students (grad and undergrad) that taught and presented at our Unlimited programs this past year.

Thirteen years and 39 programs later, our Change theme program for Grade 10 students in May 2017 will be our final program. As of August 31, 2017, Waterloo Unlimited will shut down.

We would like to take this opportunity to thank our university-wide campus partners, faculty, staff, and student contributors and the community of teacher champions for the support we’ve received over the years. Special thanks to Ed Jernigan for founding Waterloo Unlimited at the request of the Provost, and the KI staff who helped to create this experience.