DEPARTMENT OF KNOWLEDGE INTEGRATION ANNUAL REPORT
MAY 1, 2017 TO APRIL 30, 2018
Faculty of Environment General Assembly, May 2018

We celebrated the convocation of the sixth group of Bachelor of Knowledge Integration students, held the eighth annual Ki Exhibition of our third-year design course, the seventh annual senior research project symposium, and operated the final Waterloo Unlimited enrichment experience.

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, with half of our first year students with high school averages in the 90s, and an increase in applications for Fall 2018. Despite these successful stories, figuring out how to target and market the program remains a challenge, and will be a focus for the next few years.

Our graduates also continue their successes. They went into post-secondary education or into the workforce in diverse fields including designers, consultants, researchers and strategists. We celebrated the fifth anniversary of the first graduating class of BKI, and our alumni continue to stay connected with and supportive of the Ki community.

The new Science, Technology & Society specialization was approved and is designed to cover a broad range of issues, including the nature and organization of knowledge and expertise, science policy, and public understanding of science.

The INTEG 230 Museum Course field trip went to Barcelona 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 explored 5 topics around the theme of the United Nations’ Sustainable Development Goals: how food banks can most effectively decrease food insecurity, public trust in news media, responsible consumer choices, creating sustainable social societies, and migrant workers in Canada’s Seasonal Agricultural Worker Program.

Nearly 700 visitors attended the exhibits at St. Jerome’s University during March Break including potential students, alumni, KW community members, and museum experts from Toronto and the KW area. Five of the museum experts acted as critics, giving the students valuable feedback. With support from the Faculty of Environment Office of Advancement, we offered a more extensive opening reception including remarks from Dean Andrey and President Hamdullahpur. During the reception, a new partnership between Ki and the City of Waterloo Museum was announced. Starting in 2019, selected student exhibits will be on display at the City of Waterloo Museum.

KI students were involved in many extracurricular projects. They hosted the Combining Two Cultures conference, a student-led conference celebrating undergraduate interdisciplinary education, in January 2018 with the theme of Knowledge Sharing. The Journal of Integrative Research & Reflection (JIRR), launched in January 2018, a cross-disciplinary undergraduate journal entirely edited, reviewed and administered by students from Ki.

Students in INTEG 452 Real-World Problem Solving worked with Thomson Reuters to develop new solutions to source content for one of their online products. This successful partnership will continue in the next round of the course with a new batch of students taking on a new project with Thomson Reuters.

Waterloo Unlimited offered its last trans-disciplinary enrichment program for outstanding high school students in May 2017 with the Grade 10 “Change” theme. After 39 programs over thirteen years, as of August 31, 2017, Waterloo Unlimited was 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.

The faculty had a great year with research funding and several exciting new projects.

Rob Gorbet’s collaboration with the SSHRC-funded Living Architecture Systems group produced and installed a massive sculptural AI testbed, *Amatria, in the new Luddy Hall engineering building at Indiana University*, and are preparing for a June to October show at the ROM.

Katie Plaisance continued to work on a collaborative project with John McLevey entitled, “Increasing the Impact of Philosophy of Science in Scientific Domains,” which was funded by a SSHRC Insight Development Grant. They recently published their first paper from this project, based on a large citation analysis of philosophical work, and are completing two additional manuscripts reporting the results of a survey and a set of in-depth interviews of philosophers of science. In addition, Katie started a new collaboration with a group of psychologists at Michigan State University, funded by a Templeton Foundation grant, that applies philosophical insights to psychology to design, carry out, and analyze the first-ever experimental study in human behavioral genetics and its implications for the future of the discipline.

John McLevey and his collaborators have a new book on natural resources, economic development, and tourism in North Atlantic coastal communities accepted at Palgrave Macmillan, and a series of new articles forthcoming. He will be hosting a SSHRC-funded workshop on Climate Change and Energy Futures at Memorial University this fall, in collaboration with Mark Stoddart and Vanessa Schweizer. It builds on a previous workshop at the Balsillie School in 2016, supported in part by the Faculty of Environment. With Rob Gorbet, Allyson Stokes, and Janice Aurini, Dr. McLevey published a report for the Ministry of Education based on a large multi-method study of the effectiveness of classroom-integrated robotics on teaching 21st century competencies.

With her students and a colleague, Vanessa Schweizer has a chapter on scenarios and how they can be used for organizational reflexivity in the book *Organising (for) the Future: How Organizations Manage Things to Come*, forthcoming with Palgrave Macmillan. In April, Vanessa published an invited editorial in *Nature Climate Change* on the role of the Shared Socio-economic Pathways in decision support. This spring, Vanessa is hosting a Visiting Scholar from the Delft University of Technology, as well as a NSERC USRA with a KI student.

KI welcomed Dr. Allyson Stokes as a one-year definite term faculty member, during which time she taught several courses for ENV and KI. As she leaves us for a tenure-track position at Memorial University, we thank her for her contribution to KI and wish her well.

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.

Submitted by: Rob Gorbet, May 1, 2018

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