

Two-Year Progress Report Knowledge Integration (BKI) June 2018

Background:

The Knowledge Integration (KI) program, housed in the Faculty of Environment (ENV), admitted its first students in Fall 2008. The first and most recent seven-year program review of the Knowledge Integration program was completed in November of 2015, with the on-campus visit taking place November 12 and 13. The associated Final Assessment Report was accepted by Senate at its September 2016 meeting.

Overall the external reviewers were impressed with the KI program and considered it to be well conceived, executed and supported by a very dedicated, supportive faculty. Reviewers found that students and alumni were complimentary about the program, the faculty and the University, and the current resources available support the current program needs. The reviewers viewed the KI program as an innovative approach to the concept of a more traditional 'liberal arts undergraduate degree program' and saw it as being entirely consistent with the external perception of the innovative solutions and programs provided at the University of Waterloo.

The reviewers identified a number of issues, which were analysed and articulated in the implementation plan included in the Final Assessment Report. The purpose of this two-year progress report is to provide an update on activities with respect to the implementation plan.

Recommendations:

- 1. Consider a rebranding exercise for the program.
- 2. Consider adjustments to the marketing and advertising strategies for the KI program.

Status: in progress

Details:

The Department considered several options for brand renewal of the program, including the possibility of changing the name of the program and/or degree. Other universities' "arts and science" programs provide one possible model, but KI is both broader and more design-focused than most of these programs. Going forward, we are committed to being vigilant about the KI name and brand. Our recruitment numbers are up slightly

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since the program review, and so our path forward at this point is to test different marketing language and platforms for the KI program.

For example, one of our senior thesis students carried out a review in 2017-18 of our communication language and brand promise under co-supervision of the Chair, Rob Gorbet, and Tina Roberts, Director of MUR. The student surveyed key stakeholders on campus to identify KI's distinctive program attributes, then tested these with applicants to determine which program attributes were most attractive, as well as testing language to effectively convey these attributes to our target audience. The report was delivered in May 2018 and follow up is being organized with representatives from MUR, ENV, and KI. We anticipate, as a first stage, preparing scripts for use by staff and student volunteers at open-house events where they are in contact with prospective students and their parents. In a second stage, the results will be reviewed to inform possible changes to our print and online material.

In Fall 2017 we piloted a program in which we hired one of our undergraduate students to act as a social media strategist for the Department. The student, supervised by Kim Boucher, KI Outreach and Administrative Manager, managed the departmental Twitter and Instagram accounts. In addition to regular posts, she created and led several social media interventions (e.g., Instagram takeovers and a "#myKI" video marketing campaign showcasing both current students and alumni), and also produced reports showing followership and engagement. Thanks to her work, our social media followership saw a steady increase in both numbers and engagement over the Fall and Winter terms. We consider this to be an effective investment and will continue the practice going forward.

In Fall 2017, we also did a KI promotional mailing to almost 1,000 outstanding high school students from across Canada who participated in the SHAD enrichment program in 2017 at 13 university campuses, and this resulted in an increase in applicants to KI from SHAD alumni as well as awareness raising of KI in this segment of our target population.

3. Consider revisions to the curriculum to: reconsider the name, aim and scope of the Museum Course; increase opportunities for KI students to engage in more effective academic career mapping; create clearer links with ENV without making the connection too explicit.

Status: in progress

Details:

KI has been moving forward with significant curriculum changes, which help us move in this general direction. We do believe the Museum Course is a key component of the

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program, that it is working well, is a significant part of the program's identity. We therefore are unlikely to change the scope of it in the near future. We have, however, been revising the course to more clearly emphasize the professional skills development present in the course and to align the exhibit topics with the UN Sustainable
Development Goals, helping to create clearer links with ENV. In addition, we have created an elective course (INTEG375: Hands-on Sustainability, F2018) which approaches observation, analysis, design, and applied problem-solving, from a sustainability perspective. For more on curriculum changes, please see the Implementation Plan below.

4. Find ways to broaden campus-wide understanding of KI and its aspirations, thereby increasing the resources available to support the program.

Status: ongoing

Details:

The reviewers recommended exploring adjunct and joint positions for faculty from other units, into KI, as well as broad advertising of the Friday KI Seminar and events showcasing student work (e.g., the annual KIX museum exhibition and the fourth-year thesis symposium).

We continue to advertise all of the events mentioned, as we have always done, through email, social media, the Daily Bulletin, campus TV monitors, and the other channels that we're aware of. We regularly review this strategy, as well as the potential for new opportunities or communication channels.

The creation of adjunct positions at Waterloo does not bring increased resources to a program, though it might be a way of recognizing those faculty from other units who consistently supervise KI senior thesis projects. This is something we will explore further. The negotiation of joint appointments would depend on the availability of resources, appropriate candidates, and the strategic direction of the Faculty and institution. This will be considered moving forward, should the enrolment continue to improve.

While not directly responding to this reviewer recommendation, the Fall 2018 launch of INTEG210 Making Collaboration Work as a campus-wide course on effective interdisciplinary collaboration will contribute to increased exposure to KI across campus.

Encourage increased Scholarship of Teaching and Learning (SoTL) scholarship on the KI program itself and cognitive development among KI students. Encourage the University

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to codify the 'cross-appointment letter' [Memoranda of Understanding] which is made available to KI faculty.

Status: **N/A** Details:

While these are not really program-level recommendations, KI faculty do have an interest in SoTL research and in particular Dr. Kathryn Plaisance is currently engaged in such research in her classrooms. For example, in Fall 2018 she will be running a study on the impact of her new course *INTEG210*: *Making Collaboration Work*. This course is intended to host students from across campus and teach them some of the fundamentals of group work and interdisciplinary collaboration from several of the KI core courses.

As we wrote in our response in the Final Assessment Report with respect to the KI faculty MOUs, we have encouraged the University to create policy and language clarifying the processes of annual merit assessment and tenure and promotion for faculty with interdisciplinary appointments, and have offered to consult on such efforts.

6. In the category of Other: increase money available for large entrance scholarships; develop more partnerships to help place students' museum exhibits in the community post-exhibition; expand design thinking and problem solving courses to other constituents.

Status: ongoing

Details:

We continue to monitor student input on program choice and don't believe that the lack of large scholarships plays a significant role in attracting students. Of course, we continue to work with ENV advancement staff to steward current donors and seek future donors.

In 2018 we announced a three-year partnership with the City of Waterloo museum to host up to three of the student-designed exhibits each year from March to June. In addition, the museum will make available its archives and staff to contribute to student learning and engagement. We continue to work with staff at other local museums, THEMUSEUM and the Waterloo Regional Museum, and beyond (Design Exchange, Ontario Science Centre) with whom we have strong relationships. They act as expert critics for the students' museum exhibit, and have hired our students as interns.

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We continue to expand our involvement in design on campus. In Winter 2019 we will be offering an additional section of INTEG121: Collaboration, Design Thinking and Problem-Solving as a core course in the International Development program. More informally, we continue to work with Tania Del Matto and Brendan Wylie-Toal of GreenHouse at St. Paul's, to coordinate efforts and support each other in the design thinking space. The Department Chair is also involved in ongoing discussions with crosscampus constituents about a more formal design movement on campus. We would welcome the opportunity to work with other constituencies on campus as well.

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The table below includes the 18 original items that were either recommended by reviewers or cited by program staff/faculty as being important. Status has been updated.

	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
1.	Complete a branding exercise for the program.	After a review of available resources and expertise, this was launched as a senior thesis project with co-supervision by Tina Roberts, Director of Marketing and Undergraduate Recruitment (MUR). The report was completed in April and is currently being reviewed by MUR/ENV/KI for action.	ENV/MUR	In progress. Staged actions include: development of recruitment scripts for volunteers interacting with potential students & parents (Fall 2018), review of print and online material (Fall 2019).
2.	Review and revise marketing and communication strategy and materials.	A social media strategist position has been created, for which we interview and hire an undergraduate student each term (starting Fall 2017). This has proven to be quite successful, increasing both social media followership, engagement, and quality of engagement, and providing a platform to showcase the KI program, students, staff, faculty and alumni. Beyond social media, this work overlaps with the branding work identified in #1 above, which is more closely being managed by ENV/MUR staff with support from KI staff and Chair.	Chair (social media strategist) ENV/MUR (print, online, communication materials)	In progress/ongoing.
3.	Complete review of the Waterloo Unlimited structure and implementation	The Waterloo Unlimited program was shut down in 2017.	Director of Waterloo Unlimited	N/A.

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	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
4.	Implement work- integrated learning more formally (but still optionally) in the program.	The work-integrated learning internship, KI Works, ran a successful pilot in Spring 2016 with 3 students and had 5 students complete internships in 2017. We have had very positive feedback from employers on the quality of our students, who consistently rate Outstanding or Excellent. As we continue to operate KI Works, we are also closely monitoring the changing co-op/WIL/internship ecosystem (e.g., Coop 2.0, EDGE, CAFCE's switch to CEWIL, the GBDA program's internships) and are in discussions with CECA about how they might support a model of optional internships for KI students going forward.	Chair	Completed: creation of a work-integrated learning program Ongoing: consideration of CECA's involvement
5.	Increase the presence of entrepreneurship and social entrepreneurship within the curriculum. Review opportunities to better connect curriculum and student projects indirectly with Environment.	This work is ongoing, as individual instructors integrate themes of entrepreneurship, social entrepreneurship, environment and sustainability into their courses as appropriate. For example, KI students tackled the theme of the UN SDGs in their museum exhibit design projects for 2018. We received positive feedback on this from all stakeholders, and we will continue this thematic association for the near future.	KI faculty	Ongoing.
6.	Implement pending curriculum changes.	The past two years have seen significant curricular change in the program, in part as a result of the program review and in part	Associate Chair Undergrad	Complete. These changes have been initiated. Several have passed Senate, while others will come to Senate in Fall

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	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
		motivated by reflection on 10 years of operation. Several special topics courses have been formalized and will be offered more consistently; we will launch our first online course in Winter 2020; we have developed additional course offerings aimed at students from outside KI; we have reviewed and adjusted our breadth electives (lowering the number of science electives from 3 to 2 in favour of adding a conflict management course); we introduced a Science, Technology and Society (STS) specialization.		2018, effective Fall 2019.
7.	Increase the structure of the curriculum.	Some of the changes already made contribute to more appropriate program structure (e.g., introducing a conflict management course into the breadth requirements). Now that these changes have been completed, attention will turn to further structural changes such as providing opportunities for course planning, and encouraging students to declare a specialization (traditional or self-designed) by the end of 2B.	Associate Chair Undergrad	In progress: these will be undertaken in an upcoming calendar cycle.
8.	Develop new course offerings designed for a campus-wide audience.	While the majority of KI's courses are open to students from across campus, INTEG210 Making Collaboration Work (first offering Fall 2018) is specifically designed for students outside of KI.	Associate Chair Undergrad	Complete. Course to be offered in Fall 2018.

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	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
9.	Review the aims, title, and	A review of the four-course sequence suggests	Museum Course	Complete. The majority of the
	scope of the Museum	that the Museum Course is a key component of	instructor (who is also	organizational changes will be effective
	Course.	the program, is working well, and is a significant	the current	Fall 2019.
	Consider placing the product of the Museum	part of the program's identity; we are unlikely to change the scope of it in the near future. We	Department Chair)	
	Course beyond the	have, however, made several changes as a result		
	University.	of this review: removal of INTEG231 from the		
		core and integration of salient parts into		
		INTEG320; an increasing of 0.25 credit weight		
		for museum sequence of courses; greater		
		emphasis on the professional skills development		
		present in the course; alignment of the exhibit		
		topics with the UN Sustainable Development		
		Goals, helping to create clearer links with ENV.		
		We have developed and nurtured informal		
		relationships with several museum		
		design/science communication professionals		
		(from, e.g., The Ontario Science Centre, the		
		Design Exchange, THEMUSEUM, the Waterloo		
		Regional Museum), who contribute their		
		expertise to the course and provide feedback to		
		students. We have also formalized a partnership		
		with the City of Waterloo Museum, to showcase		
		student work for the months of March-Jun each		
		year, after the campus exhibition is done.		

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	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
10.	Enhance connections between KI and faculty across campus, as a way of increasing course offerings and understanding of the KI program.	Reviewers raise some interesting and novel suggestions for building community and connecting with faculty outside of KI. Some suggestions include "special designations," and possible adjunct/cross-appointed status. We have also been considering some initiatives aimed at building community and connections both on campus as well as with the broader community, including a KI Teaching Fellow residency and creating a KI advisory board of UW faculty and other community partners.	Schweizer	Fall 2019 strike a working group to consider benefits and models Spring 2020 produce a recommendation report
11.	Consider offering Collaborative Design courses to new audiences, e.g., transition courses for students entering Waterloo, incoming graduate students.	The reviewers' recommendation raises the possibility of repackaging many of the transferrable, professional skills education from the KI core into block courses or workshops for various audiences. If opportunities are identified and additional teaching resources can be secured, this is something KI could build.	Associate Chair Undergrad and KI ENV Graduate Studies Council representative	Fall 2019 Produce a report outlining opportunities, benefits, and costs
12.	Encourage greater scholarship on the pedagogical impacts of "KI-thinking" and cognitive development among students.	There is great opportunity to study the impact of the KI education on the cognitive skills of our students, especially relative to their peers in the same courses that they take as electives. Gorbet and Plaisance are interested in taking this on as a SOTL research project. Plaisance is also studying the impact of INTEG210 on her students, which will provide a model for carrying	Various KI Faculty	Ongoing.

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	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
		out SoTL work in our classrooms. Schweizer has also expressed interest in carrying out SoTL research in her classes		
13.	Investigate appropriate external metrics of program performance. Develop internal metrics of program performance and assess how these compare with institutional metrics.	A department committee will be struck to consider what is important to measure internally, and how best to capture those measures in the KI context. In addition, they will also survey external interdisciplinary rankings we should consider targeting (e.g., whether there are appropriate QS rankings).	Chair	2018/2019: This has been delayed but will be appropriate given the upcoming strategic planning being undertaken at the Faculty and University level.
14.	Ensure that all cross- appointed faculty members are listed as such on the web pages of their departments of cross- appointment.	We will investigate this and, to the extent possible, arrange for appropriate representation on departments' web sites.	Individual faculty members. Program Coordinator to follow up.	Complete.
15.	Activity-based budgeting as a decision-making model should be limited to the Faculty level.	None. This recommendation is not ours to lead. We have conveyed the recommendation to the Dean.	Chair	Complete.
16.	Consider developing a more effective and transparent financial modelling system for the MAD facilities. Extend the capabilities of	The Chair will communicate this support, along with the reviewers' recommendations, to the Director of MAD.	Chair	Complete.

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	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
	the workshop towards a			
	full-fledged "maker space".			
17.	The University should	The Chair will share this recommendation at the	Chair	Complete.
	codify KI's model of	University level.		
	expectations and support			
	frameworks for			
	interdisciplinary cross-			
	appointments.			
	Consider ways to provide	We continue to seek more scholarships, and	Environment Director	ongoing
18.	very high level	steward relationships with our donors.	of Advancement	
	scholarships for KI			
	students as a competitive			
	recruitment tool.			

The Department Chair/Director, in consultation with the Dean of the Faculty shall be responsible for monitoring the Implementation Plan.

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Date of next program review:	20.	22-2023
Signatures of Approval: Chair/Director		Ju 26, 20
N/A.		
AFIW Administrative Dean/Head (Fo	r AFIW programs only)	Date
Jea ardy		June 36/18
Faculty Dean		Date
Your Conglis		August 22, 2018
Associate Vice-President, Academic		Date
(For undergraduate and augmented	programs)	
Associate Vice-President, Graduate S		Affairs Date
(For graduate and augmented progra	dilisj	