

Expression of Interest – Industry Collaborative Projects and Programs

The Innovative Learning Centre (ILC)

Educators, K – 20, are challenged to find ways to enhance student engagement and meaningfully integrate appropriate technologies into their teaching and learning and to personalize learning. Technology companies grapple with ways to design technologies that are competitive and relevant to the education sector while being both economically sustainable and pedagogically viable. While both recognize the importance of 21st century skills and their importance in a knowledge economy, neither group has adequate examples of innovative teaching practice or access to creative learning environments where they can design, incubate and research technology enhanced teaching and learning.

The Innovative Learning Centre (ILC) will fill that gap by collaborating with industry partners such as those associated with Accelerate Okanagan, providing pedagogical expertise, research and design support, and access to educational partners and networks. For the past 10 months, researchers within the ILC have met with local software developers, exploring potential partnerships in response to the significant changes required in classrooms locally, provincially and nationally to maintain and elevate Canada's position in the knowledge economy. Schools are seeking ways to meaningfully engage learners, and rural and remote schools with declining populations are seeking innovative ways to retain students and provide relevant learning opportunities through the use of appropriate technologies to personalize learning. Postsecondary intuitions are not immune from these challenges either as they grapple with changes prompted by the "Flipped Classroom" and MOOCs, to name only the most recent and high profile. Educators, such as our regional school districts (e.g. Kelowna, Vernon, Penticton, etc.); campus colleagues (e.g. Drs. Lasserre, Desjardins, Bottorff); international partners (e.g. Aga Kahn University – Institute of Education Development, Da es Salaam campus) seek partnerships with ILC to incubate the use of innovative technology and design learning environments for challenging contexts, and to engage practicing teachers in the adoption of innovative pedagogy to meet the needs of learners in traditional and non-traditional settings.

The ILC will build an interactive, engaging space that reflects the energy and opportunity of the Okanagan Valley. It will be a place that fosters explorations, research, and innovations in pedagogical excellence. The ILC will be a developmental space at the intersection of research and practice, providing participatory and observatory experiences in both real and virtual environments. The ILC will empower industry, academics, teachers and students to participate fully in the process of imagining learning spaces to foster creativity, deep learning through play and tinkering, and mindful learning which will allow participants to think differently about how learning takes place.

The ILC will provide a locus from which BC and Canadian companies working in educational technology, academics, and educators can explore and address research questions emerging in education at this time of socio-cultural change, globalization and ubiquitous access to information. Emergent questions include:

- How is pedagogical excellence re/defined in technology enhanced, inclusive multicultural settings?
- In what ways can innovative technology better address the needs of diverse learners?
- In what ways will new media and participatory literacies shape educational practice?
- What types of learning environments are supported and fostered with ubiquitous media?
- In what ways will technology innovation shape educational practice?

- What are the effective pedagogical approaches that support specific software development and design?
- What types of software / “app” design fosters sustained student engagement and deep learning?
- What types of technology (devices, software, apps) helps to engage unmotivated students?
- To what degree does the choice of choice support / limit student engagement, understanding, personalization?
- How will teaching and learning be manifest in this type of innovative instructional space?
- What types of furnishings enable engaged, participatory learning in new learning environments?

The inclusive design of the ILC will encourage groups of companies in the technology sector to work more effectively with academic partners and imagine and create software, tools, and resources to keep British Columbia on the cutting edge of educational innovation. The ILC will adopt an iterative development model, staging investments of hardware and software in a phased way in order to leverage resources in a thoughtful and creative manner to match, foster, and enhance pedagogical endeavors. The ILC recognizes its development will require constant collaboration with emerging industry partners, critical friends, dreamers and idealists in order to foster research, engage in deep play, and incubate innovations that can be commercialized and add benefit to the education sector both locally and globally.

Description of industry / companies who have expressed interest in working with the ILC

Industry / Company Name	Partnership Potential	Actions to Date	Funds
<i>Magical Voice Productions</i> Janyse Jaud	<ul style="list-style-type: none"> • Self esteem through music, songs and stories • Potential collaboration with Dr. Ty Binfat • Potential for MITAC for more curriculum design 	<ul style="list-style-type: none"> • ILC support for storyboarding • ILC support for lesson plan development • Organized graduate students to develop lessons and map to BC Curriculum • Facilitated meeting with Dr. Binfat 	<ul style="list-style-type: none"> • \$300 to graduate student for lesson plan development
<i>FreshGrade</i> Steve Wandler Karine Veldhoen	<ul style="list-style-type: none"> • Development of personal planning tool for teachers – ultimately parents and students • Development of online personalized learning tool – beyond portfolio • Through Steve – strong connection with Accelerate Okanagan 	<ul style="list-style-type: none"> • ILC consulting with Karine • ILC design of usability testing • Preparation of MITAC application 	<ul style="list-style-type: none"> • ILC has donated its time – approximately 20 hours

Vericorder	<ul style="list-style-type: none"> Discussed plans to use First Video as content development environment Discussed plans to use First Video for qualitative research / data analysis tool 	<ul style="list-style-type: none"> Worked with Deb Carter to use First Video for doctoral studies Series of meetings but do to lack of time, no follow up on ILC side Susan Crichton purchased \$6000 of equipment / access from Vericorder to explore environment & support Deb's work 	<ul style="list-style-type: none">
Thinkable Ted Cape	<ul style="list-style-type: none"> Consultation / design for web based learning environment Consultation / design for content development & instructional design Content expertise Research & design consultation for products & pedagogical approach 	<ul style="list-style-type: none"> Consultation Contract development for research associate Facilitated networking with other developers / educators for digital math content Facilitated discussions with other companies within Accelerate Okanagan Networked Thinkable with an instructional designer & graphic artist 	<ul style="list-style-type: none"> ILC and Dean of Faculty of Education has donated its time – approximately 100 hours Donation – pending Agreement to support fund raising for ILC – pending

Mathtoons Kristin Garn Jay Pozo Jessica von Innerenber	<ul style="list-style-type: none"> • Consultation on pedagogical approach for Math apps • Consultation on workbook / notebook design • Collaboration on learning environment for ILC • Collaboration on graphic interface for digital learning environments 	<ul style="list-style-type: none"> • Initial consultation on pedagogical approach • Initial meeting with Dean – Faculty of Education concerning partnership • Initial meeting with Derek Gratz – Associate Director, University Industry Liaison Office (UILO) - concerning partnership • Facilitated meetings with Thinkable 	<ul style="list-style-type: none"> • ILC has donated approximately 20 hours of time to Mathtoons
Total Office Business Furnishings Kevin Cutting Carmen Sparg	<ul style="list-style-type: none"> • Demo / loan of innovative furnishings for ILC classroom and design studio • Research – impact of furnishings on physical learning environment 	<ul style="list-style-type: none"> • Initial meeting re furnishing options for ILC • Site visit to ILC & preparation of furnishing plan • Initial discussion about research potential for furnishing & new learning environments 	<ul style="list-style-type: none"> •

A five-year contribution from Western Economic Diversification (WD) is critical for the launch of the ILC. Capital expenditures funded by the WD will be matched by industry partners already at the table, by foundations, school boards and by federal and provincial partners. The combination of infrastructure and staff expertise will allow partners within the ILC to gain access to research in pedagogy that will contribute to the creation of innovative tools and software to empower companies and educators to design creative solutions for digital learning and teaching.

Please see Phased plan / budget for ILC ... not sure I totally understand how to flesh out the following revenue numbers. I have created an expense table that we can add or adopt ... I am still waiting for IT & furnishing quotes to determine total expenses (please see file Budget.docx).

Budget (5 years)

Revenue	
Meighen Foundation	\$130,000
School Board	\$250,000
Mitacs	\$150,000
Thinkable	\$205,000

Fresh Grade, Math tunes	\$50,000
Industry contracts	\$145,000
Canadian Foundation for Innovation	\$40,000
BC Knowledge Development Fund	\$40,000
Aga Khan Foundation	\$6,000
Faculty of Education	\$75,000
UBC IT	\$150,000
Western Diversification	\$1,515,000
Total Revenue	\$2,756,000

Expenses	
Research Associate (130K x 5 years)	\$650,000
Specialist (15K x 5 years)	\$65,000
Postdoctoral fellowship (70K x 5years)	\$350,000
Graduate students	\$200,000
Travel/Visiting Profs	\$200,000
Web infrastructure	\$191,000
Design lab	\$100,000
New tech infrastructure (100K x 5 years)	\$500,000
ILC renovation	\$300,000
IT infrastructure	\$200,000
Total Expenses	\$2,756,000