

Justice Institute of British Columbia
715 McBride Boulevard
New Westminster, B.C.
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Justice Institute of British Columbia
Office of Applied Research & Graduate Studies

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TABLE OF CONTENTS

Dean’s Message.....	2
Centre for Applied Research (CAR)	3
Who We Are	3
What We do	3
CAR Success in 2014.....	5
Measuring Success in 2014.....	6
Opportunities for the Upcoming Year	7
Centre for Graduate Studies & Academic Planning (CGSAP).....	8
Who We Are	8
What We do	8
CGAPS Success in 2014.....	8
Opportunities for the Upcoming Year	10
Centre for Teaching, Learning, & Innovation (CTLI).....	11
Who We Are	11
What We Do	11
CLTI Success in 2014.....	12
Opportunities for the Upcoming Year	14

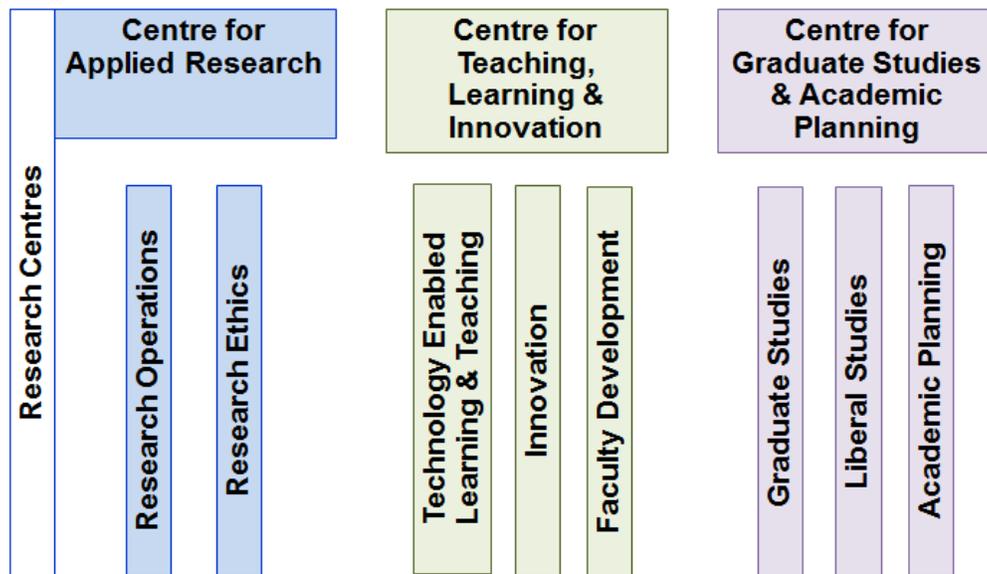
Dean's Message

In 2012, JIBC consolidated several academic support units into one office to enhance pan-institutional support and leadership in the areas of applied research, technology-enabled learning and teaching, innovation, academic planning, and graduate and liberal studies. The restructuring aligned these units into three Centres under a single Dean to enhance collaboration, efficiencies, and institution-wide decision making while building on their synergies to provide JIBC clients with exceptional pan-institutional service.

As the Dean, Office of Applied Research and Graduate Studies, I am committed to working with the three Associate Deans, JIBC and its communities to develop a vision and future direction for applied research, the integration of learning technologies into the classroom, distributed and mobile learning, development and commercialization of innovative products, academic planning, provision of breadth courses in Liberal Studies, and policy governance at JIBC that supports learning excellence, development of curriculum content, and ensuring the success of the practitioners we place into service to practice their professions in the real world.

This document captures the activities in each of the three Centres over the 2014 calendar year and highlights some of the success the Centres had in moving forward the JIBC Strategic and Academic plans.

Sincerely,
Greg Anderson, PhD
Dean, Office of Applied Research & Graduate Studies



Centre for Applied Research

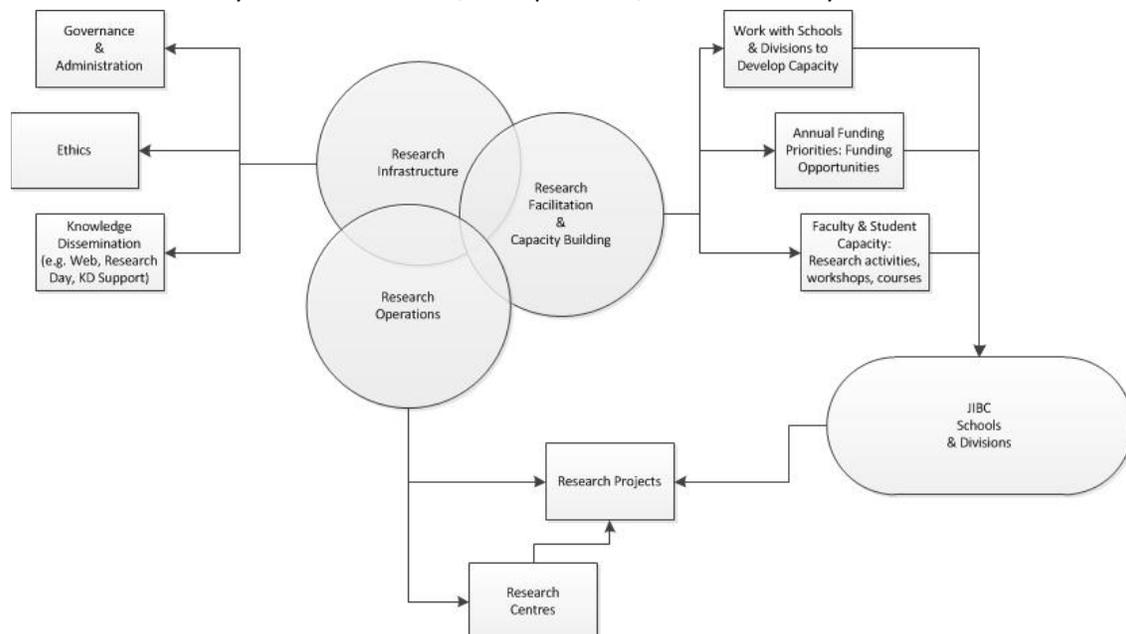
WHO WE ARE

Applied research involves the systematic application of scientific principles to solve practical, real-world problems to improve the human condition or aid in the development and commercialization of products. Applied research uses the research community's accumulated knowledge, theories, methods of inquiry and research practices for client or partner driven purpose, and engages stakeholders in the process. The Centre for Applied Research (CAR) has a vision of establishing the Justice Institute of British Columbia as a lead justice and public safety research institution in Canada, helping keep communities and practitioners safe through an active applied research agenda engaging first responders, first receivers, policy makers, stakeholders and services users.

WHAT WE DO

The Centre for Applied Research is dedicated to advancing justice and public safety through the scholarship of discovery, application, integration, teaching and service. We support scholarship and applied research at the JIBC through three core functions:

- **Research services:** by performing contract research upon request
- **Infrastructure services:** by supporting JIBC Schools through capacity building, administration and infrastructure development
- **Research facilitation:** by bringing together JIBC Schools' strategic research interests and the research needs of their industry partners and community stakeholders to establish strategic priorities, identify appropriate funding, and develop research capacity
- **Research operations:** by establishing processes, structures and capacity to participate in applied research activity with JIBC Schools, their partners, and community stakeholders

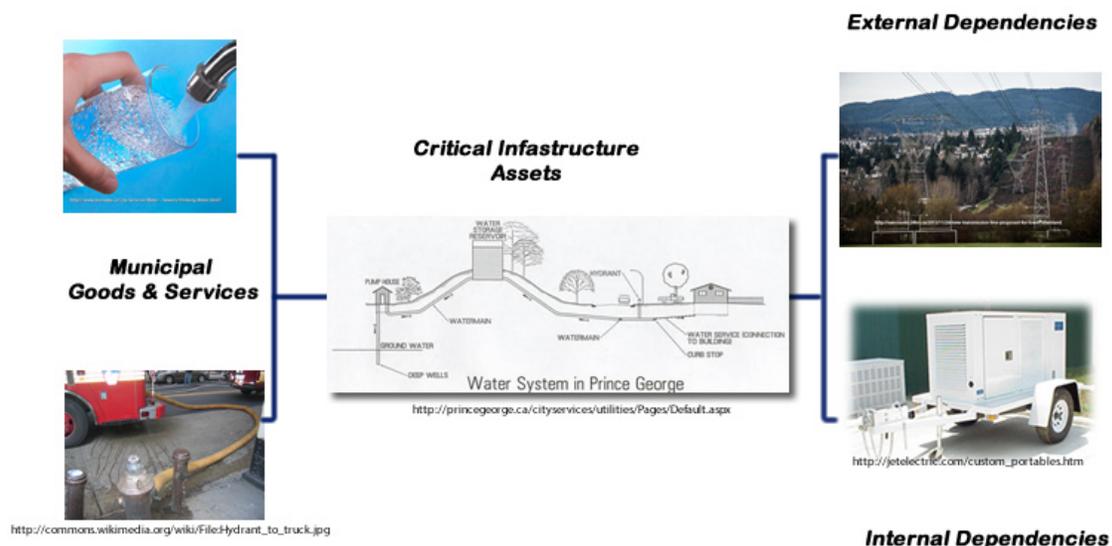


Case Study: The Critical Infrastructure Assessment for Local Authorities Project

The Critical Infrastructure Assessment for Local Authorities project was funded through the Canadian Safety & Security Program in partnership with Emergency Management BC. Faculty from the JIBC's Emergency Management Division and Centre for Applied Research refined a prototype of the process and developed educational material to support local facilitators and community personnel. The process assists local authorities, such as municipalities and regional districts, to analyze their critical infrastructure (CI). What was unique about this project was its focus on having communities critically examine their "critical infrastructure" – the assets they own and the services they provide – then identify and assess the internal and external dependencies of those assets.

Communities often engage in internal business continuity planning or threat assessment planning to identify critical community assets. The CI assessment tool and process developed in this project allows communities to better understand the relationships between their assets, the goods and services they provide that are dependent on those assets, and the external services required to support them. For example, most communities have extensive water main and pumping assets which provide water to homeowners and business, as well as the community's fire services. If the pumping system goes down, these services are in jeopardy. The pumps themselves are dependent on power systems, either electrical systems (usually owned by an external utility) or, in a disaster, on the community's back-up generators. Those generators, in turn, are dependent on road networks (municipal or provincial) and fuel distribution networks (commercial systems external to the community's control).

The project has had direct impact on the three communities who participated in the pilot projects, all of whom have continued with the CI assessment process. In addition, Darren Blackburn, of the JIBC's Emergency Management Division, has provided training on the CI process to staff at Emergency Management BC and the Integrated Partnership for Regional Emergency Management, as well as the BC Provincial Critical Infrastructure Steering Committee, composed of CI owners, operators, and provincial employees responsible for managing critical infrastructure in the province.



CENTRE FOR APPLIED RESEARCH SUCCESS IN 2014

The Centre for Applied Research (CAR) develops an annual set of objectives that cascade from the JIBC's strategic and academic plans. In the 2014 calendar year, CAR completed the following activities in support of these cascading objectives:

Enhance Stakeholder Relationships

- Foster and actively participate in local, national, and international research networks and consortia.
- CAR members participated in a number of local, provincial, national, and international activities including taking a leadership role within the BC Applied Research and Innovation Network, organizing the Second International Conference on Physical Employment Standards, organizing the International Conference on Information Communication Technologies in Education, participating as a founding and Steering Committee member of the Canadian EMS Research Network, serving as President of the Society of Prehospital Educators in Canada, leading and housing a national study to renew the National Occupational Profile for Paramedics in Canada, and as part of a multinational World Health Organization Collaborative on Mass Gathering and High Impact Events. In addition, CAR faculty are members of the national Canadian Safety & Security Program Communities of Practice for both Police and Paramedicine.

Promote interoperability and inter-professional education

- In 2014, CAR sought to foster interdisciplinary research and scholarly activity, particularly through multi-school/division proposals (e.g. CSSP Open Call). We submitted 14 research proposals, with participation from six divisions representing all three of the JIBC's schools.

Increase Degree Path Graduates

- CAR led an institutional initiative to develop and implement a Student Research Framework, providing guidance and resources to course developers and program staff in developing student research activities and assignments. These resources included a comprehensive model for embedding student research activities at various academic levels (e.g. certificate, diploma, and degree), along with suggested evaluation rubrics and language. The JIBC Student Research Framework is currently being looked at by other BC Colleges and Institutes.
- CAR continues to directly support course delivery in both the Bachelors of Public Safety degree and Diploma in Health Sciences by providing faculty for the BPSA 430: Information Technology and PPC 200 Diploma in Health Sciences Capstone courses.
- CAR faculty provided graduate supervision for students engaged in public safety graduate programs.

Increase Revenue

- CAR had a successful year in terms of obtaining both competitive and contract research projects. CAR submitted 14 proposals, of which 9 were funded, generating over \$400,000 of "new" revenue. These projects ranged from Emergency Management (Critical Infrastructure Assessment, Aboriginal Disaster Resilience Planning, and Emergency Communications), driving (Grey fleet, current issues in road safety), and studies supporting the development of a new national competency profile for Paramedics in Canada. In addition, the four-year SIMTEC project entered its third year of operation, providing an additional \$500,000 revenue.

Enhance Evidence-Informed Education and Training

- CAR continues to strengthen its Ethics processes and infrastructure. The existing ethics application forms have been reworked in line with the Tri-Council Policy Statement on research ethics (TCPS 2) and to better support the types of research activities at the JIBC. CAR is working with Technology Services to implement a web-based version of the revised forms.
- The JIBC Ethics Review Board approved 13 research projects.

MEASURING SUCCESS IN 2014

ACTIVITY	COMMENTS
Ongoing Policy and Procedure renewal	Comprehensive review of all Research Policies and Procedures completed in 2014.
Number of Ethics approvals and renewals	13
Number of research proposals submitted	14 from 6 divisions representing all three JIBC Schools.
Number of research projects	12 Projects: <ul style="list-style-type: none"> - SIMTEC - Critical Infrastructure Assessment Tool for Local Authorities - Paramedic Association of Canada: Roles of Paramedics in Canada - Aboriginal Disaster Resilience Program - Worksafe: Grey Fleet - Worksafe: Current Issues - ePACT Applied Research & Development project - ePACT IRP project - CRHNet workshop - Land-use Workshop - Alberta College of Paramedics: Industrial Paramedicine Issues - Mass Gathering Medicine Minimum Data Set
Value of research projects	\$970,656.58
Percentage of successful to submitted research proposals	8/14 = 57% Note: 4 projects were direct awards. Success rate on competitive proposals is 4/10 = 40%.

OPPORTUNITIES FOR THE UPCOMING YEAR

High Impact Funding Opportunities

The Centre for Applied Research is currently working with JIBC Schools and Divisions in anticipation of submitting proposals to the following funding opportunities:

- Canadian Safety & Security Program: Open call (annual) and Targeted Investment stream; increased participation in Communities of Practice
- Social Sciences and Humanities Research Council: College Innovation funding program
- Natural Sciences and Engineering Research Council (NSERC): Applied Research Development grants (1 in progress; MGM data base proposal in development)
- Canada First Research Excellence Program: Proposal in development in association with the UBC Mass Gathering Medicine Interest Group and the World Health Organization Collaborating Centres on Mass Gatherings and High Visibility/High Consequence Events
- Public Safety Canada's Policy Development Contribution Program
- Formation of industry-based applied research advisory group(s) with JIBC Schools and Divisions to identify and monitor industry's current and anticipated applied research priorities and create partnership opportunities.
- In addition, CAR will work with JIBC faculty, divisions, and schools to develop proposals or take advantage of other funding opportunities as required.

Profession Building

- Canadian Safety & Security Program Communities of Practice (COP): CAR faculty sit on both the Police and Paramedic COPs .
- CAR and Health Science Division faculty continue to take a lead role in the development of a national occupational profile for Paramedics in Canada.
- CAR faculty sit on the executive committees for the BC Applied Research & Innovation Network and the Canadian EMS and Paramedic Research Network.

Scholarly Activity

- Seed funding for student and faculty-level research projects.
- Development of student/classroom-based research ethics processes and infrastructure.
- Develop a repository for scholarly works.

Student Research Support

- Implement the Student Research Skills Framework.
- Develop and implement course-based ethical approval.
- Support student-led capstone projects.

Centre for Graduate Studies & Academic Planning

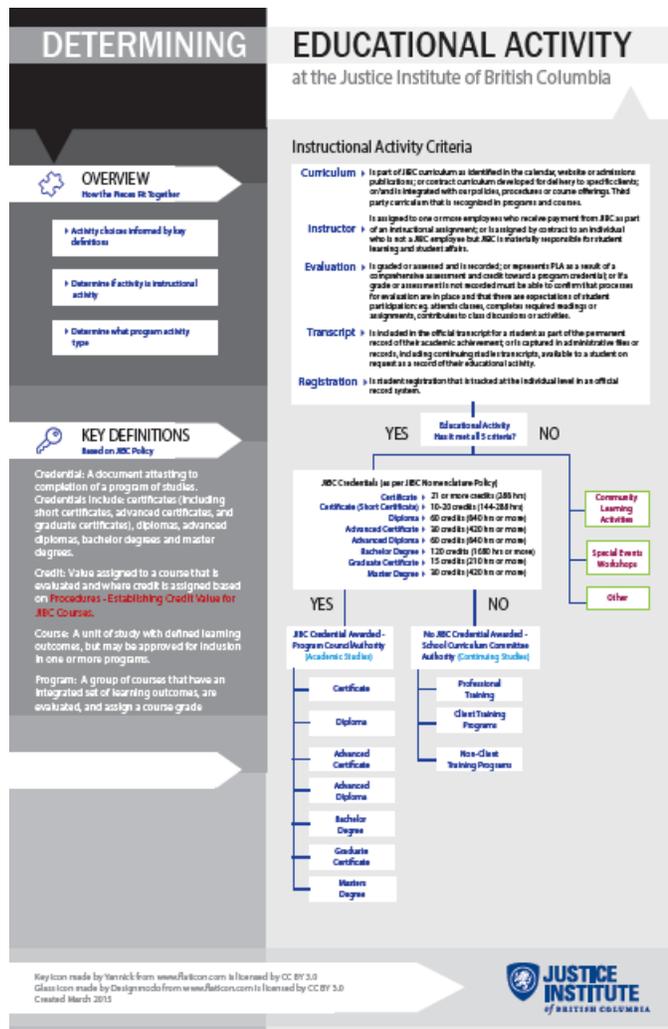
WHO WE ARE

The *Centre for Graduate Studies and Academic Planning (CGSAP)* works in support of the strategic and academic plan on behalf of all education and training at Justice Institute of British Columbia. The Centre achieves this *vision* by facilitating career laddering opportunities through linkages and pathways between interdisciplinary academic and training programs, enhancing justice and public safety curriculum, leveraging learning technologies and methodologies, and increasing public awareness. CGSAP creates opportunity for lifelong career growth and institutional growth through leading edge educational planning and development.

WHAT WE DO

CGSAP fulfills its *mandate* under three broad areas of opportunity:

- Builds capacity in academic quality assurance, including policy governance.
- Advances the development and quality assurance of appropriate and leading edge programs.
- Leads in the development and administration of graduate level programming and research.



CENTRE FOR GRADUATE STUDIES & ACADEMIC PLANNING SUCCESS IN 2014

The Centre for Graduate Studies & Academic Planning develops an annual set of objectives that cascade from the JIBC's strategic and academic plans. In calendar 2014, the CGSAP completed the following activities in support of these cascading objectives:

Enhance Stakeholder Relationships

Continuous quality improvement initiatives

- Collaborated on the development of the Quality Assurance Framework
- Collaborated on the creation of the Government request for the JIBC Core Review document

Increase partnerships to meet the future needs of the province

- Advised and reviewed a number of MOU opportunities with each School
- Revised UVIC-JIBC LOA for the Bachelor of Public Safety Administration

Increase faculty/staff engagement on policy development

- Developed a process for consultation on policy and procedure work including impact assessment, communication steps, institutional website presence, institutional repository, and increased awareness of policy activity on the intranet
- Ensured that all policy and procedure proponents engage systematic consultation with appropriate staff and faculty

Increase Degree Path Graduates

Offer programming informed by justice and public safety

- Collaborated and advised on the new Fire Fighting Technologies Certificate approved August 2014
- Collaborated and advised on the development of a new Certificate in Public Safety
- Implemented three new liberal studies courses developed and advised by public safety professionals – 1 3rd year Research course and 2 Business courses and 1st year Psychology

“Loved the program! I recommend it to everyone and it is why I have my current position!” (Graduate)

Innovate and adapt new applied learning technologies

- Developed and adapted open source textbooks in conjunction with BC Campus for English 1100 and Psychology 1100 saving students approximately \$54,000 in book fees
- Promoted discussion of open learning and new innovative learning approaches – multi access as an example

This year, more than 425 JIBC students in liberal studies and specific public safety courses will be using open textbooks [published under a creative commons license](#).

Collectively, JIBC students will be saving at least \$54,000 in textbook costs this year alone.

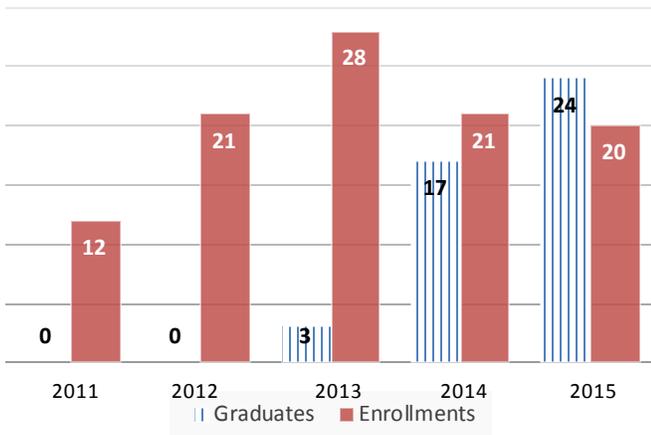
<http://www.jibc.ca/news/students-save-big-use-free-and-open-textbooks-jibc>

Increase Revenue

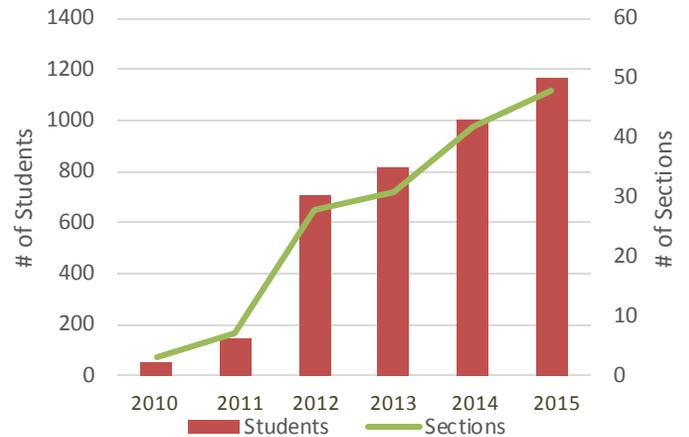
Grow revenues from existing courses

- A tuition growth of approximately \$128,000 over fiscal '14 for liberal studies courses
- Supported growth in Tactical and Intelligence Graduate Certificate

Graduate Data



Liberal Studies Data



Development of new revenue sources

- 4 new courses implemented to support the BLES degree
- 2 new courses being implemented in fiscal 2016

Build Strategic Alliances

Increase inter-professional applied research

- Collaborated in the development of the JIBC Student Research Skills Development Framework
- Co-Investigator in the JIBC Open Education Research Project

OPPORTUNITIES FOR THE UPCOMING YEAR

- Further promotion and development of all institutional policies, including improving institutional literacy and practices
- Ongoing support and increasing frequency of Program review Reports
- Promote the expectation and practices for increased Program Advisory Committee meetings
- Increase the exposure and formalized agreements for internal and external program laddering and educational pathways
- Sustained growth of Liberal Studies and Business courses
- Facilitate the implementation of the Graduate Certificate in Public Safety Leadership

Centre for Teaching, Learning, & Innovation (CTLI)

WHO WE ARE

The Centre for Teaching, Learning & Innovation's (CTLI) mandate is to provide strategic support and direction in partnership with JIBC Schools and Divisions in developing and delivering quality teaching and learning that meets JIBC's overarching goals of educational excellence and student success. CTLI adopts a team-based approach to the planning, design, development, and delivery of its services to the institute, external clients and partners. The team is composed of instructional designers, web and graphics specialists, a simulations specialist, a video and audio producer, and a faculty and student development coordinator. The team is built upon an understanding of promoting a relationship between the student, the instructor, the institution and fostering collaboration opportunities with clients and the community.

WHAT WE DO

The purpose of CTLI is to share expertise and resources, support development and delivery of JIBC online and blended programs, and innovate in technology-enabled teaching and learning at JIBC. Our team provides expertise in the areas of instructional design, project management, the design of online learning environments, simulations, and faculty and student support and development. We fulfil our mandate through 8 core function areas as follows:

Innovation: Educational technology innovation is an important function performed by CTLI because it characterizes a dynamic institution that is in tune with current practices and future needs in the workplace and the community. Innovation is also needed to ensure JIBC's relevance in the dynamic post-secondary education market.

Enhanced Teaching and Learning with Technology (eLearning): CTLI advises the institute on strategies for technology enabled learning and teaching. CTLI initiatives amplify JIBC's capacity for online and technology enhanced learning and teaching. The Institute now serves more than 9,000 Distributed Learning students annually, which represents about 37% of JIBC's instructional activity.

Diverse and Flexible Learning Opportunities/Experiences: CTLI has created integrated processes for the development of flexible and accessible learning environments which responds promptly to the evolving needs of our students, clients and partners. CTLI takes into account the converging learning contexts of workplaces, communities, and institutions that characterize our learners. The activities align with broader institutional priorities that include indigenization, internationalization and accessible learning.

Student Learning and Support: CTLI supports students directly and indirectly throughout their learning journey. CTLI provides student education in digital responsibility, LMS support, digital learning artifacts and digital resources. CTLI works with other service areas that support and enhance the student learning experience.

Faculty Development and Support: CTLI provide faculty support, development and engagement in the application of current and emerging teaching and learning practices, informed by research. Increasingly, this requires that instructors have a solid understanding of how educational technology is inseparable from applied education, and be able to demonstrate this application in their teaching.

Supporting Function: CTLI provides support for schools and divisions in terms of curriculum development, outreach events and participating in the completion of RFP's. The Centre liaise with the library, IT, and student services to ensure quality in the development and delivery of e-learning.

Applied Research: CTLI uses instructor and student feedback to inform best practice and adopt a 360-degree approach to design, delivery and support of online and classroom based learning. CTLI participates in applied research to allow evidence based decisions.

External Clients, Partnerships and Collaboration: CTLI collaborates with clients and cultivate partnerships related to innovation projects and educational technology research.

CENTRE FOR TEACHING LEARNING & INNOVATION SUCCESS IN 2014

Implement effective and innovative educational technology	
<p>Innovation Simulations</p> <ul style="list-style-type: none"> • JIBC-UBC (http://academica.ca/top-ten/jibc-developed-simulator-enables-experiential-medical-training-ubc) • Go pros for simulations • D2L sandbox • Western Diversification funding for Praxis • Community and mobile module purchased for Blackboard • Oxford Properties simulations • BCHousing simulations • Storyline simulations • PCP tablet pilot year 2 • BC e-health simulations committee • Average of 1 Praxis simulation delivered/week and up to 3/day • Hazmat ebook release • ProShow producer for creating course videos • JIBC police guide 	<p>Innovation Mobile Learning</p> <ul style="list-style-type: none"> • ICS/IMS Glossary iPhone App https://itunes.apple.com/ca/app/jibc-ics-ims/id506721629?mt=8 • ESS2Go App - https://itunes.apple.com/ca/app/ess2go/id669853349?mt=8 • Hazardous Materials for Awareness Level Personnel iPhone App - https://itunes.apple.com/ca/app/hazardous-materials-for-awareness/id671062854?mt=8 • Innovative classroom project (1 classrooms) in conjunction with TS • Learndash/Wordpress plugin for Shift into Winter Worksafe project

Optimize shared services
<p>Cultivate partnerships related to innovation projects and educational technology research</p> <ul style="list-style-type: none"> • Wordpress shared service sandbox with UNBC, and TRU • Consulted with BCIT on iBooks and privacy issues • University of Guadalajara faculty development project: student centered and mobile learning.

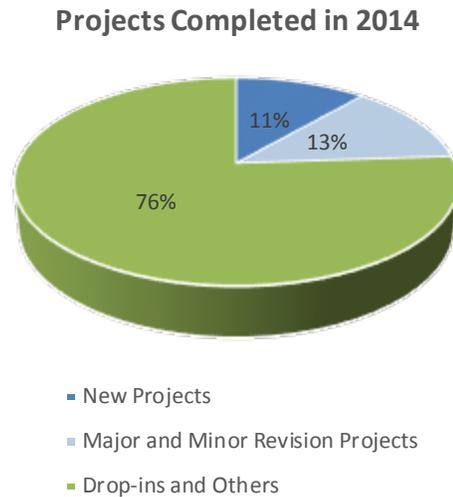
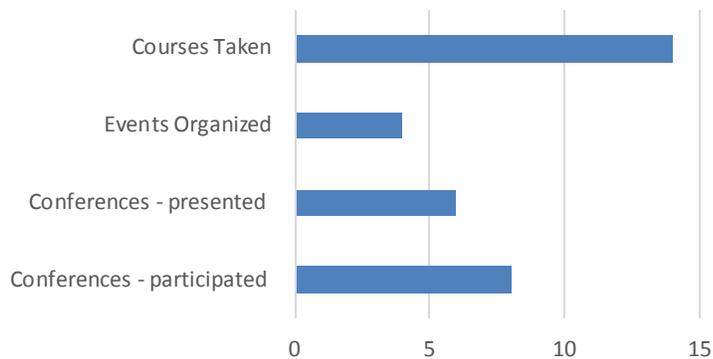
Awards
<ul style="list-style-type: none"> • Horizon awards (2 bronze awards for Worksafe BC– Winter Driving Project) • Blackboard exemplary course award

Innovate and adapt new applied learning approaches	
<p>Faculty Development and New Models</p> <p>BC campus news release – Open Textbooks</p> <ul style="list-style-type: none"> • LESD receives BCcampus funding <ul style="list-style-type: none"> ○ LESD textbook published ○ English 100 textbook completed • INDC 100/Essential Skills for Instructors (ISW) proposal and development • Lunch and Learn Teaching with Technology Series (6 sessions) • Classroom technology needs survey • Representation on ETUG, SCETUG and UCIPD committees • Representation on BCcampus FIPPA working group • Faculty communication and newsletter 	<p>Technology-Enabled Learning and Teaching</p> <ul style="list-style-type: none"> • Rural Disaster Resilience Planning. http://wp-rdrp-dev.jibc.ca/ • Aboriginal Disaster Resilience Planning. http://adrp.jibc.ca/ • JIBC Police Guide. http://policeguide.jibc.ca/ • Introduction to Reception Centres. http://wp.jibc.ca/irc/ • Introduction to Group Lodgings. http://wp.jibc.ca/igl/ • ABC of Autonomic Dysreflexia. http://wp-dev.jibc.ca/abcofad/ • Road Safety at Work. http://roadsafetyatwork.jibc.ca/ • Simulation Training and Exercise Collaboratory (SIMTEC) Project. http://simtec.jibc.ca/ • Open Textbook <i>Writing for Success</i>. http://open.bccampus.ca/2015/08/14/new-open-textbook-writing-for-success-1st-canadian-edition/
<p>Exploring and Sharing New Models</p> <ul style="list-style-type: none"> • Demofest • BC Housing Clip • University of Guadalajara faculty development project: student centred and mobile learning. • Paramedic mobile program pilot. 	<p>Applied Research</p> <ul style="list-style-type: none"> • OER research study (Sept-Nov 2014) • CNIE presentation (May 2014) • ETUG presentations (May 2014) • Open Education conference presentation (November 2014) • Adult Global Learning and Change visit (June 2014)

JIBC showcases its latest applications of educational technology

JIBC Demofest highlighted more than a dozen innovative examples of new educational technology being incorporated in its courses and programs

“For a post-secondary institution of our size, there is an amazing amount of work being done at JIBC incorporating educational technology,” said Dr. Tannis Morgan, Associate Dean of JIBC’s Centre for Teaching and Learning Innovation (CTLI). “There are so many examples throughout the institution improving the effectiveness of the education and training being provided at JIBC.”



OPPORTUNITIES FOR THE UPCOMING YEAR

1. Expand JIBC faculty development, support and engagement opportunities
2. Open Education Resources Initiatives - Pressbooks
3. Mobile Learning
4. Multi-Access Learning
5. Applied Research Opportunities for 2015:

Applied research makes an important contribution to the educational and disciplinary field and is recognized as an institution value. Participating in applied research will allow CTLI to make evidence based decisions in our planning, as they are directly tied to knowledge gaps in our centre and institutional practices. For the upcoming year we begin research efforts in one or more of the following areas:

- Digital learners at JIBC
- Applied education and the use of simulations
- Mobile learning
- Benefits of Open Educational Resources

JIBC on the annual list of Canada's Top 50 Research Colleges



Justice Institute of British Columbia (JIBC) has been recognized as one of Canada's top post-secondary institutions for research. JIBC ranked 28th nationally and 2nd in BC on this year's list of Canada's Top 50 Research Colleges compiled by [Research Infosource Inc.](#)

In fiscal 2014, JIBC attracted nearly \$1.8 million in research income that funded a wide-range of applied research in the areas of public safety and security. Aligned with the Institute's mandate and strategic goals, these projects were either provincial or national in scope.

"Given our unique focus and mandate as a public post-secondary institution, JIBC is well-positioned to provide applied research that helps enhance public safety in communities in B.C. and across Canada," said Dr. Greg Anderson, Dean of JIBC's Office of Applied Research and Graduate Studies. "Our focus on collaboration and building effective partnerships has been one of the keys to our success in delivering leading-edge research that's providing new insights, innovation and best practices in public safety."

Students save big with use of free and open textbooks at JIBC



Hundreds of JIBC students will collectively save more than \$50,000 because of the use of open and free textbooks at JIBC; new textbooks under development. Justice Institute of British Columbia (JIBC) is increasing accessibility and affordability of post-secondary education through its use and development of free and open textbooks in a number of its courses.

This year, more than 425 JIBC students in liberal studies and specific public safety courses will be using open textbooks published under a creative commons license. Three of these books come from the [BC Open Textbook Collection](#) available from BCcampus, a publicly funded organization that uses information technology to connect the expertise, programs, and resources of all B.C. post-secondary institutions under a collaborative service delivery framework.

Collectively, JIBC students will be saving at least \$54,000 in textbook costs this year alone.

"Several years ago, JIBC recognized the opportunity and value of open textbooks and other open educational resources to increase accessibility of our education and training," said Dr. Laureen Styles, JIBC's Vice-President, Academic. "Our dedicated team in the Office of Applied Research and Graduate Studies has continued to do a tremendous job of incorporating open educational resources in our various programs with faculty, helping students realize significant savings in the cost of their education."

"[Open textbooks] are lighter on the pocketbook and lighter in the backpack," said Dr. Stuart Ruttan, Associate Dean for the Centre for Academic Planning and Graduate Studies. "And we aren't sacrificing quality. It's one thing to save money, but we've got to make sure the quality is there. The BCcampus framework for review [of open textbooks] has been very helpful, and we were able to make rational decisions based on the feedback from colleagues across the province."

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