

KPU RESEARCH ACTIVITY 2016-2017

ENHANCING SCHOOL DEMOCRACY

Enhancing School Democracy: The Kwantlen Educational Policy Incubator examined how parental participation in school governance may be enhanced with better access to information, and how undergraduate students can connect their work to their communities. The resulting report was published through Kwantlen Open Resource Access (KORA) and distributed throughout BC Confederation of Parent Advisory Councils (BCCPAC). This outreach created the structure for a further study, the Surrey Portfolio Pathway Partnership, through which students are working to build a competency-based admission pathway from the Surrey Schools.

Supported by KPU's Office of Research and Scholarship

DESIGNING WASTE DISPOSAL SOLUTIONS

A group of Product Design students have developed a prototype and business plan that aims to solve Metro Vancouver's garbage and waste disposal problems. The working prototype was then presented to the Minister of Small Business and Tourism, the Parliamentary Secretary to the Prime Minister and the Parliamentary Secretary of Science, at Polytechnics Canada in Parliament Hill, Ottawa.

Supported by KPU's Office of Research and Scholarship



ANXIETY IN PAREIDOLIA AND DETECTION OF CAMOUFLAGED ANIMALS

This research aimed to determine whether laboratory induced anxiety could increase illusory image perception, as well as the speed of which hidden dangerous animals could be identified in their natural environment. Anxiety did not increase illusory image perception, however, it did increase the speed in which dangerous animals are found. It is possible that our brains have evolved to quickly detect a real threat when it matters the most.

Supported by KPU's Office of Research and Scholarship

DEVELOPING DIGITAL HUMANITIES PROJECTS WITH OPEN-SOURCE SOFTWARE

A group of English students have authored content and assisted in the development of a digital object using open-source software, which resulted in a KDoc promotional video, community outreach events, and a brand-new website for The Social Justice Centre. The content was also presented at the 2016 Digital Humanities Summer Institute, University of Victoria, to showcase the progressive work students are engaged in.

Supported by the 0.6% Faculty Professional Development Fund & KPU's Office of Research and Scholarship



SEDENTARY ACTIVITIES AND DIET QUALITY OF UNIVERSITY STUDENTS

A Biology student has explored associations between intakes of select diet quality indicators and different sedentary activities in University students. The findings seem to be novel as high rate of samples exceed recommended upper limit of sedentary time and falls below adequate intakes for fiber, which negatively impacts health in adults as it can increase risk in having chronic disease.

Supported by KPU's Office of Research and Scholarship

INDIGENOUS AGRICULTURE AND CLIMATE CHANGE IN MEXICO

Alexander Stark, a Sustainable Agriculture and Food Systems student, explored the effects of climate change on agricultural practices in an indigenous community in southern Mexico. He also investigated how members of the community made sense of the changes going on around them. He worked with an Anthropology Department faculty member, Julia Murphy, to conduct interviews with farmers – both men and women – and spent time studying the Maya language and learning about community life.

Supported by the 0.6% Faculty Professional Development Fund & KPU's Office of Research and Scholarship



DEVELOPING URBAN AGRICULTURE

The Institute for Sustainable Food Systems, together with City of Langley and Metro Vancouver, is creating a development and operations plan and budget for an urban agriculture/food system amenities on 10 ha powerline corridor right-of-way (ROW) in a Langley residential neighbourhood.

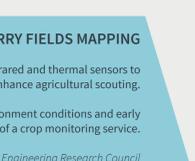
The project grew out of the City's desire to make better use of undeveloped municipally-owned land and to provide an accessible, educational and economic amenity to support the development of Langley as a complete community. Given that there are similar ROW sites in all member municipalities, this project presents a strong opportunity to field test an approach with a high potential for being replicated in other jurisdictions, and to design a framework for transferring the knowledge and lessons learned to other Metro Vancouver communities.

Supported by Metro Vancouver

EMPLOYMENT FOR PEOPLE WITH DISABILITY

Taylor Glaspey, a sociology student at KPU, is exploring the barriers and opportunities for persons with disabilities in finding and keeping meaningful employment. Key to her research was attending the National Conference on Work and Disability in Ottawa in December 2017. This opportunity helped enhance Taylor's critical thinking regarding the social and political issues relating to people with disabilities as well as providing the opportunity to network with organizations and government officials at the federal level while representing KPU, as she was asked to MC the official Ministers Reception on the Hill where she met and networked with Rick Hanson and Minister Hehr amongst other dignitaries.

Supported by KPU's Office of Research and Scholarship



DEVELOPING NEW PRODUCTS THROUGH CRANBERRY FIELDS MAPPING

The Institute for Sustainable Horticulture are using Unmanned Aerial Systems equipped with visible near-infrared and thermal sensors to map areas containing varying degrees to help develop new products that can enhance agricultural scouting.

This research will benefit growers by providing efficient tools to monitor crop responses to changing environment conditions and early detection of stress, which could further result in commercialization of a crop monitoring service.

Supported by the Natural Sciences and Engineering Research Council

TOWNSHIP OF LANGLEY FOOD SYSTEM DESIGN

The Institution for Sustainable Food Systems with support from the Township of Langley is applying their computational model (developed for the Southwest BC Bioregion Food System Design project) to the Township of Langley, which involves quantifying the township's current food system capacity, generating food system futures scenarios for comparison, exploring their food processing sector and needs, and preparing three short profiles to illustrate identified ways to increase agricultural viability.

Supported by the Township of Langley



MAKING PHYSICS LABS ACCESSIBLE

Physics instructors are building local experience and expertise in the delivery of online laboratory science courses by running Remote Web-based Science Labs. A pilot section of Physics (PHYS) 1100 had already been taught in collaboration with North Island College, and online offerings for this and other courses have since been expanded. Further expansion for this and other Physics courses are under discussion.

Supported by the 0.6% Faculty Professional Development Fund

CYBER SECURITY AND DIGITAL FORENSICS SYMPOSIUM

Mandeep Pannu, a Computer Science and Information Technology faculty member, led the "3rd Annual Symposium on Cyber Security and Digital Forensics" to bring together academics, students, industry, and law and government representatives. This has enhanced the employability of our graduates, who benefited from the knowledge and experiences of the invited presenters. The invited presenters included academics from UBC, SFU, BCIT, UVF, TRU and Trinity Western, as well as industries such as IEE, BC Hydro, City of Surrey, Telus, Fortinet, Sierra Wireless etc.

Supported by the Natural Sciences and Engineering Research Council



STUDYING PARASITES OF HORSES

The focus of this research is on the increasing resistance of an equine parasite to nematode strongyles, which are a considerable source of equine disease worldwide. The results gathered are aimed to signal livestock farmers and other equine owners that antimelic regimens must be implemented, and to mitigate the selection for drug-resistant cyathostomins on our local pastures.

Supported by KPU's Office of Research and Scholarship

VISUAL MEDIA WORKSHOP

A Journalism faculty member conducted a two-part digital storytelling workshop with a local secondary school to gather empirical data and then produce a series of learning resources for high school students on the topic of sharing images of the body online and how young people engage with visuals online.

Supported by the 0.6% Faculty Professional Development Fund



DEBATING HEALTH CARE ETHICS

Two current and one retired faculty members of the Philosophy Department are co-authoring the second edition of the book: "Debating Health Care Ethics: Canadian Contexts". The authors debate various ethical issues that arise in health care. This text will benefit students of Bio-Ethics in Philosophy Departments and Nursing programmes at KPU and post-secondary institutions across Canada.

Supported by the 0.6% Faculty Professional Development Fund

DIVERTING WASTE TO A BIOFUEL FACILITY

Gurbir Khaira, an Environmental Protection Tech student, attended the GLOBE 2016 Conference where she gained insights on new innovative methods, ideas, and initiatives that helped companies reduce risk and be more sustainable, resilient, and efficient. These new insights were then used to enhance the integrity of the research project Gurbir was involved in, which was to divert organic waste from the landfill and use them towards City of Surrey's new Biofuel facility.

Supported by KPU's Office of Research and Scholarship



EFFECTS OF IMMIGRATION AND WEALTH ON HOUSING CRISIS

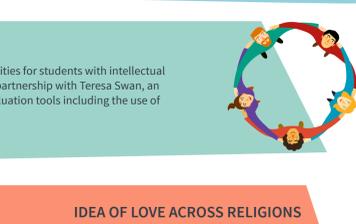
A Creative Writing faculty member researched, wrote and produced a play titled "Satellites", a dark comedy play that tackles Lower Mainland's current housing crisis and looks at how immigration and wealth have changed the cultural and physical landscape.

Supported by the 0.6% Faculty Professional Development Fund

INTERACTIVE VIRTUAL FIELDTRIP OF THAILAND

A group of instructors from History and Asian Studies departments are developing Open Education Resources to be used for introductory courses on Asian content. Robert Menzies from the History Department traveled to Thailand to take photos of Buddhist spaces and generate an interactive virtual fieldtrip of several significant cultural sites. This project supports KPU's Zed-Cred initiative and aims to provide interactive and visual resources for students.

Supported by the 0.6% Faculty Professional Development Fund



SOUND ART AS ACTIVISM

The purpose of this research is to curate and design an interactive sound installation built of the female voice. The work responds to violence against women and is built from original vocal compositions from seven diverse Canadian female artists. The interactive sound experience changes as audience members move through the space activating the voices to emerge, overlap, build, crescendo, and recede.

Supported by the 0.6% Faculty Professional Development Fund

EXPOSING CANADIAN PERCUSSION ARTISTS

A Music faculty member, Daniel Tones, increased the exposure of contemporary Canadian music for solo percussion in the European market by giving concert performances and masterclasses in major universities in the United Kingdom. Not only did this add Canadians' voices to the global discourse of new music, but it also built international recognition for KPU's Music Department through the expertise of one of its faculty members.

Supported by the 0.6% Faculty Professional Development Fund



KDOCS TALKS VIDEO LECTURE SERIES

Adapted from the KDocs Documentary Film Festival and led by experts in the field, these keynote speeches create dialogue around our most pressing social justice issues: indigenous rights, institutionalized racism, climate change, policing, migrant labour, disability rights, and refugee status. With a Creative Commons Attribution 4.0 International license, they are a digital humanities resource meant to be shared. <http://www.kdocsf.com/kdocs-talks-1/>

Supported by the 0.6% Faculty Professional Development Fund

LIFESPAN COGNITION LAB

The Lifespan Cognition Lab is currently in Year 3 of 4 of a comprehensive longitudinal study of social thinking across the Lifespan that now includes 600 community and university participants of all ages. In the past year, students in our lab have also completed or started several projects, including two honours theses examining social thinking in young adults and children with Fetal Alcohol Spectrum disorder as well as several studies examining cognitive biases such as hindsight bias, confirmation bias, the peak-end rule, and false memory. Students in the lab presented on this research at three conferences.

This work will inform theories of lifespan cognitive development, and could affect how we teach, parent, and interact with others.

Supported by the Canada Research Chair and Kwantlen Polytechnic University



INTERDISCIPLINARY PERFORMANCE PIECE

Jodi Proznick, a Music faculty member, aims to create and perform an interdisciplinary performance piece that touches on issues of on-line dating, loss, parenting, the spirituality of worry, and the heart of living a voluptuous life. Leading up to the performance, which is a combination of dance, voice, comedy, and poems with a mix of composed and improvised score, Jodi will be using videography and photography to create an e-portfolio that serves as an example of interdisciplinary and inquiry based academic and artistic work for students and faculty.

Supported by the 0.6% Faculty Professional Development Fund

INCLUDING ALL CITIZENS PILOT PROJECT

Including All Citizens Pilot Project has been transforming post-secondary educational opportunities for students with intellectual disabilities. This project being delivered by a Sociology instructor, Fiona Whittington-Walsh, in partnership with Teresa Swan, an Adult Special Education Program instructor, offers a wide range of teaching techniques and evaluation tools including the use of film, audio books, social digital media, etc.

Supported by the 0.6% Faculty Professional Development Fund



IDEA OF LOVE ACROSS RELIGIONS

Puqun Li, a Philosophy instructor, is writing about his argument that neo-Confucian Zhu Xi's (朱熹 1130-1200) conception of ren, as a transcendental foundation, an umbrella framework, and a moral ideal, is structurally and functionally comparable to the idea of love (agape) in the Christian Bible, albeit with important differences between them. The paper will soon be completed and published in a journal.

Supported by the 0.6% Faculty Professional Development Fund

MEMORIALIZING FENTANYL CRISIS VICTIMS

Aaron Goodman is a faculty member in Journalism and Communication Studies. He is conducting a research study involving participatory interactive documentary with the family and friends of one opioid overdose victim in B.C. The purpose of the study is to produce nuanced and humanizing counter-narratives about the opioid crisis.

Supported by the 0.6% Faculty Professional Development Fund

THE BIBLE AS A PHILOSOPHICAL DOCUMENT

Mark Glouberman, a member of the Philosophy Department, authored the book "I AM": Monotheism and the Philosophy of the Bible. Mark defends the thesis that the Hebrew Bible is a philosophical document, not a theological tract, nor yet the religious history of a nation. The book thus supplies new answers to age-old questions: Why was the Bible written in the first place? For whom was it written? How much truth does it contain? What is the place of men and women in the world? What is its connection with morality? What role does the character named "God" play? It will be published by the University of Toronto Press later this year and can be found at: <https://utorontopress.com/ca/fi-am-2>

Supported by the 0.6% Faculty Professional Development Fund

NETWORK TO ELIMINATE VIOLENCE IN RELATIONSHIPS

Network to Eliminate Violence in Relationships (NEVR), which was started at the request of community service providers, aims to create a society where physical, sexual, emotional, and financial violence in relationships are not accepted nor tolerated. NEVR has managed to create toolkits and a social media campaign, and successfully advocated for policy change since it was founded in 2011. Balbir Gurmi – a Nursing faculty member, founder and chair of NEVR, aims to share the initiatives, process, and outcomes of NEVR in the Global Nursing and Healthcare Conference, as well as to create connections and explore collaboration opportunities with attendees doing similar work.

Supported by the 0.6% Faculty Professional Development Fund

MORALITY AND INTUITION

The purpose of this research is to draft a manuscript that argues against the idea of relying on intuition in moral deliberation that recent philosophers take to follow from experimental results. Wayne Fenske, a Philosophy instructor, points out that shortcuts with this interdisciplinary case against moral intuition in an attempt to convince the audience that using intuitions as source of moral insight is not only appropriate, but also unavoidable.

Supported by the 0.6% Faculty Professional Development Fund

FIELDWORK IN PUNJAB, INDIA

Ranbir Johal, a Punjabi instructor in the Department of Language and Cultures, interviewed women who are pillars in the development of Punjabi theatre and how they succeeded in a field that is male-dominated. This research will contribute to the collection of oral histories of Punjabi women and further tackle the strong presence of "shame" that affects and silences women's voices within the Punjabi community.

Supported by the 0.6% Faculty Professional Development Fund

GENETICS AT KPU

The objective of this research is to build genetics infrastructure at KPU, which will unite multidisciplinary departments and provide tools and resources for faculty/student research, research skills development, discovery and innovation, and experiential learning. The infrastructure will reduce the means for faculty and students to engage with community partners to establish ongoing working relationships and student opportunities.

Supported by KPU's Office of Research and Scholarship

THE SOCIAL JUSTICE CENTRE

A Criminology faculty member is aiming to support and expand the existing Social Justice Centre by strengthening the cohesion of ten overlapping research areas and community outreach, engaging in grant writing, and forming community partnerships with pertinent community groups and stakeholders in each designated project research areas.

Supported by KPU's Office of Research and Scholarship

KWANTLEN EDUCATIONAL POLICY INCUBATOR

The Kwantlen Educational Policy Incubator (KEPI) is a research group that finds educational stakeholders (parents, students, administrators, community members, and more) with a need for knowledge about educational policy, and connects them with students who either collect or create that knowledge. What the students produce is disseminated through academic papers, publications, and presentations, as well as through various forms of media. This model means that KEPI is able to simultaneously support its community and provide undergraduate students with meaningful experiential learning opportunities.

Supported by KPU's Office of Research and Scholarship

Kwantlen Polytechnic University is committed to actively supporting innovative research and scholarship that informs authentic, relevant, and integrative learning communities. It is developing its cutting-edge curriculum and hands-on learning experiences to equip students with practical knowledge, skills and abilities.

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