

---

# OPEN EDUCATION REPORT | 2019

[open.bcit.ca](http://open.bcit.ca)

**BCIT**<sup>TM</sup>



## BCIT OPEN EDUCATION REPORT 2019

“Open Education encompasses resources, tools and practices that are free of legal, financial and technical barriers and can be fully used, shared and adapted in the digital environment.” **SPARK.**

### OPEN EDUCATION IN BRITISH COLUMBIA

Supported by BCcampus, British Columbia is a trailblazing province in Open Education. Colleagues across the country follow BC’s lead in supporting the development and use of Open Educational Resources (OER) and Open Education (OE) practices.

**BCcampus calculates that British Columbia students have saved at least \$10M on textbook costs since the open textbook project started in 2012.**

### BCIT’S OPEN EDUCATION WORKING GROUP

Sponsored by the AVP, Education Support and Innovation, the BCIT Open Education Working Group supports and promotes the development and use of OER and OE teaching practices, and functions as a community of practice. The Working Group oversees the Open Education Grants program. Find out more at [open.bcit.ca](http://open.bcit.ca)

Every school at BCIT now has at least one class using open education materials and at least one faculty member who has received an open education grant.

### BCIT OPEN GRANTS

BCIT is in its fourth year of providing \$5,000 open education grants. These grants fund the development of Open Education Resources or give faculty time to redesign courses to incorporate Open Educational practices and open course materials. Some of the grants are joint-funded by BCcampus and BCIT, and some are funded exclusively by BCIT.

Projects funded by this year’s grants include:

- Sim Lab exercises (simulator labs): bring ship to operational speed and compare NOx emissions developed by the Main Engine at various RPMs and operational conditions; and, use Indicator cards to accurately predict the cause of deviation in the operational parameters of the main engine and suggest appropriate corrective action, Sanjeev Sarwal
- Review, revise and remix course on basic electricity, Chad Flinn
- Develop two user manuals detailing the procedures of capturing and processing multi-spectral images using the Parrot Sequoia and MicaSense RedEdge-M sensors mounted on an Unmanned Aircraft Systems (UAS), with student involvement, Eric Saczuk
- Adapt OpenStax Astronomy textbook, enhance it with auxiliary resources, James Brewer

Chad Flinn is an electrical and entrepreneurship instructor at BCIT. He is an innovative teacher with a focus on student-led experiential learning. Chad is currently doing his MA, Learning and Technology, at Royal Roads University.

*“Becoming part of the Open Education community through BCIT has transformed my teaching and practice. Not only was authoring an Open textbook an incredible learning process, but it opened up my practice to using more innovating and engaging methods in my own classroom. Trades education and Open Education are a great fit, and I look forward to continuing to use Open Educational Practices and Open Educational Resources in my own practice.”*

Chad’s YouTube channel, [The Electric Academy](#), has 14,000+ subscribers. His book, [Trigonometry and Single Phase AC Generation for Electricians](#), is part of the [BCcampus open textbook collection](#).



OPEN EDUCATION CHAMPION CHAD FLINN

## BCIT IN THE PROVINCE AND BEYOND

### INDIGENIZATION PROJECT

[Foundations Guide](#) by Kory Wilson

Kory Wilson, Executive Director of BCIT Indigenous Initiatives, has authored the Foundations Guide, part of the “[Pulling Together: A Guide for Indigenization of Post-Secondary Institutions; A Professional Learning Series](#)”.

*“One of the goals of the Indigenization project was to co-create open educational resources that support faculty and staff with the incorporation of Indigenous epistemologies into professional practice, enabling post-secondary institutions to continue to build the structures and processes by which Indigenous students experience their post-secondary education in resonance with their own lives, worldviews, and ambitions.” - BCcampus*



1 Pulling Together: Foundations Guide cover by Lou-ann Neel is under a [CC BY-SA 4.0 International Licence](#)

### EDUCATIONAL ELECTRONIC HEALTH RECORD SYSTEM (EDEHR) PROJECT

BCIT’s Glynda Rees is co-leading a provincial initiative to build “an open-source, pilot-ready prototype to provide healthcare learners with hands-on experience with an EHR system in classrooms and simulation labs.” Rob Kruger, Janet Morrison, and Cheryl Isaak are also involved in this project.

The open textbook [Health Case Studies](#), by Glynda Rees, Rob Kruger and Janet Morrison, was the first step in building the EdEHR System.

### OPENING UP RESEARCH: HOLOCOPTER PROJECT, JAMES ROUT

“The Helicopter research project was a collaborative initiative with support from BCIT, SFU, Centre for Digital Media, and UBC. It involved the study of an augmented reality software application designed to demonstrate the flight dynamics of a Helicopter rotor head, as part of the Aerospace Maintenance Engineer (AME) program at BCIT. This included examining the student learning experience and their conceptual understanding of flight dynamics after using the application, as well as their insights regarding its usage and effectiveness.

Both the software application and the research and results of the study will be openly licensed, to support the broader community in using these resources for learning, teaching, and future research”.



*Thank you to UBC MLIS student Chantal Lyon-Stevenson who is doing her professional experience class at BCIT, working on open education initiatives.*



The content of this report is licensed with a CC-BY 4.0 license. This does not include the cover and back material which are all rights reserved.

**British Columbia  
Institute of Technology**

3700 Willingdon Avenue  
Burnaby, British Columbia  
Canada, V5G 3H2

**[bcit.ca/library](http://bcit.ca/library)**

