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FLO Panel:

The Creative and Ethical Use of Artificial Intelligence in Post-Secondary Education, a BC Perspective

Hosted by Helena Prins

BCcampus

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January 16, 2024



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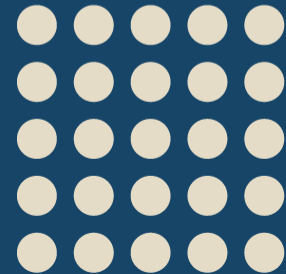
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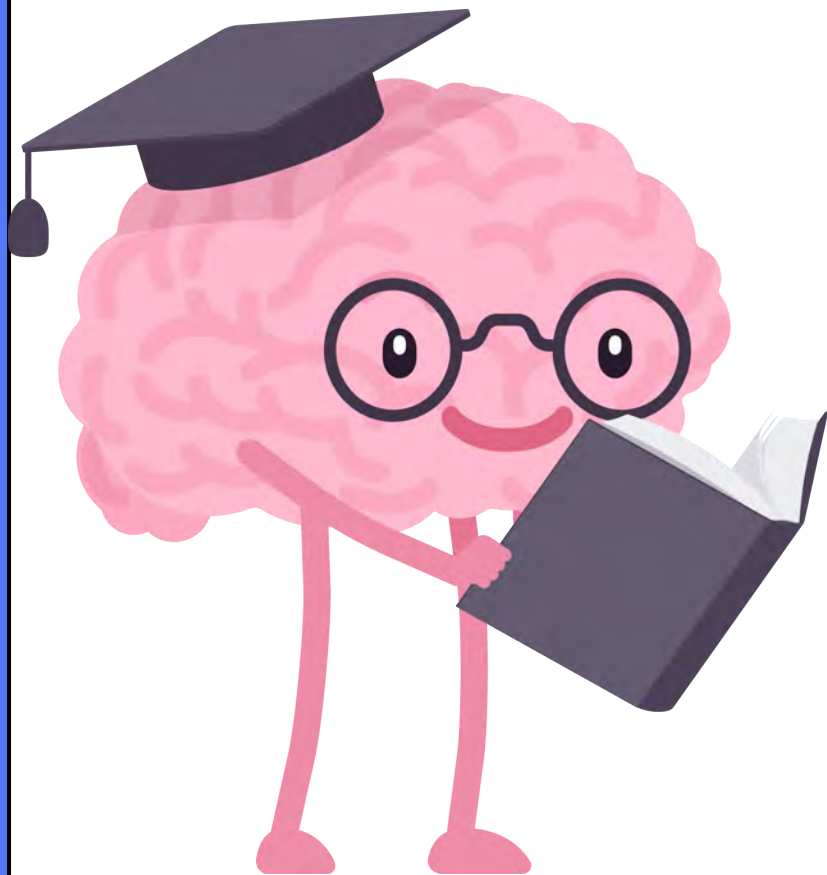
Territorial Acknowledgement



Alejandra Silvera Calvo

The Student Perspective





A STUDENT'S PERSPECTIVE ABOUT ACADEMIC INTEGRITY IN THE AGE OF AI

Alejandra Silvera

January 2024

ABOUT ME



My educational journey has been a mix of enlightenment and challenges, shaping my views on education, especially concerning academic integrity in the era of artificial intelligence (AI).

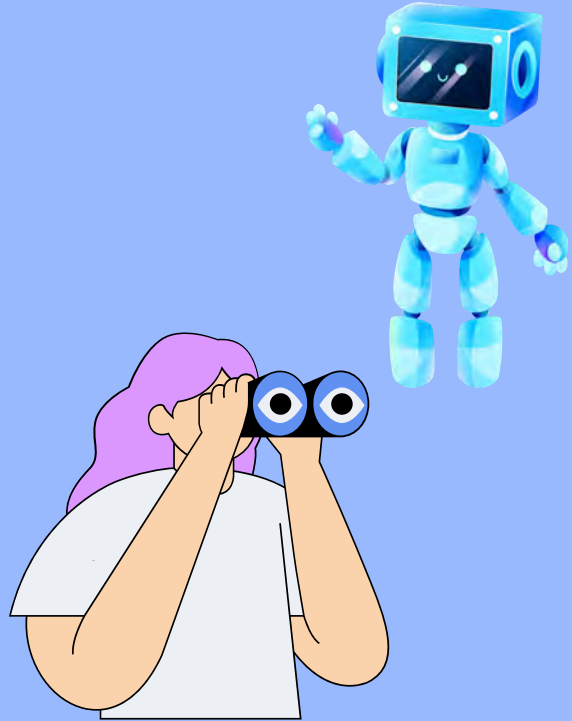
CHALLENGES I ENCOUNTER AS A STUDENT

- Adapting to a new cultural learning environment was a challenge.
- Learning to give proper credit to avoid academic misconduct was overwhelming at first.
- Balancing academics, work, and personal life.



MY VIEW ABOUT AI AND ACADEMIC INTEGRITY

- AI is here to stay: Our responsibility is not just acceptance but learning and teaching responsible AI integration while upholding academic integrity.
- It is important to build educational settings and to introduce the ethical use of AI alongside student-centered tools like Draft Coach to help students uphold academic integrity.



EXAMPLES OF ARTIFICIAL INTELLIGENCE

Chatbots

Smart assistants

E-Payments

Search algorithms

Media streaming



Smart cars

Navigation apps

Facial recognition

Text editors

Social media feeds

PROPER USE OF ARTIFICIAL INTELLIGENCE

The proper use of some AI platforms can tailor educational content to individual student needs, making education more inclusive for students





PROBLEMS AI CAN POSE TO EDUCATION



Lack of Personalisation

Although AI tools are constantly evolving, they lack the human emotions that are sometimes necessary for effective learning.

Bias and Discrimination

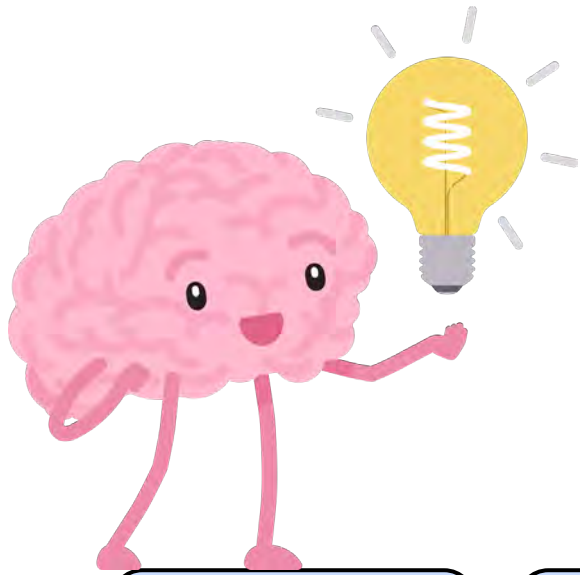
Bias can occur in AI systems because AI algorithms may reflect biases and stereotypes.

Dependence on Technology

Students may become too dependent on technology, blurring their ability to think critically or solve problems.

Data Privacy and Security

AI tools in general collect personal data, which might pose a threat to students' privacy and security.



IDEAS TO HELP STUDENTS USE AI TOOLS EFFECTIVELY

**Introduce AI
tools**

**Provide
support on
their use**

**Keep up-to-
date**

**Encourage
critical thinking**

ACADEMIC INTEGRITY STUDENT AMBASSADOR

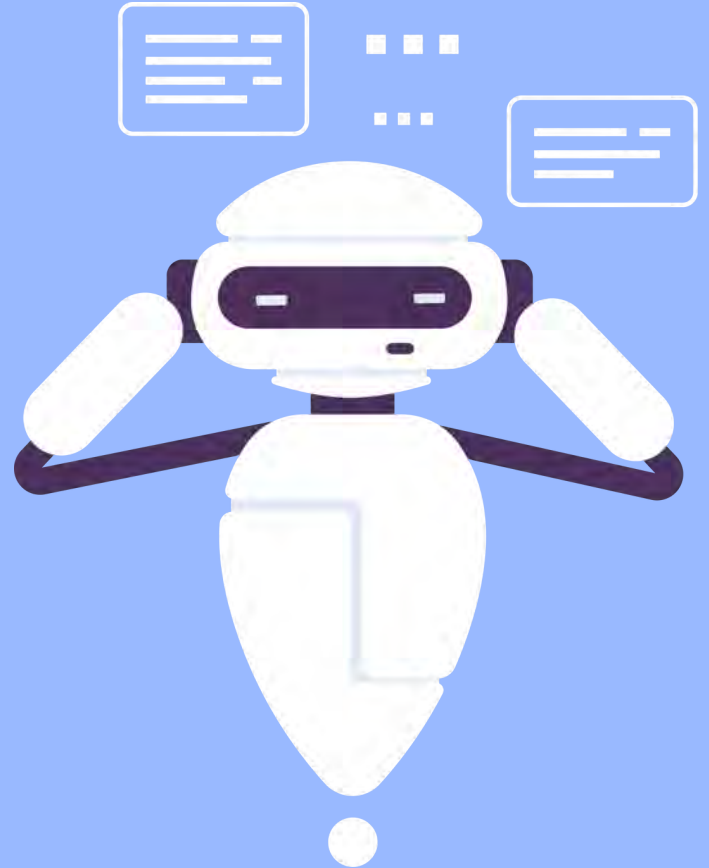
- Motivated to become an Ambassador due to the relevance of the topic.
- Active engagement with peers and faculty.
- Promote awareness.



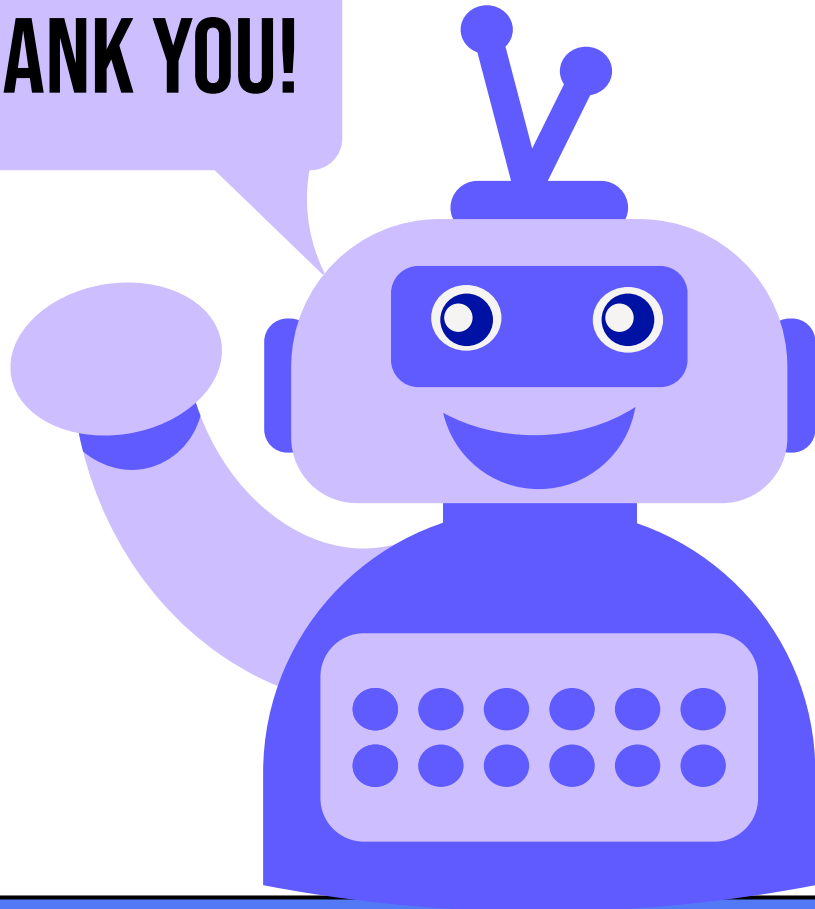
LOOKING TO THE FUTURE

Essential to equip students with knowledge and values for upholding academic integrity.

Engaging in conversations, promoting responsible AI integration, and fostering transparency are key.



THANK YOU!

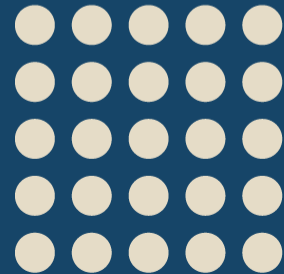




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Fuat Ramazanov

The Educator Perspective



The Creative and Ethical Use of
Artificial Intelligence in Post-
Secondary Education — a B.C.
Perspective

Teaching and Learning with AI

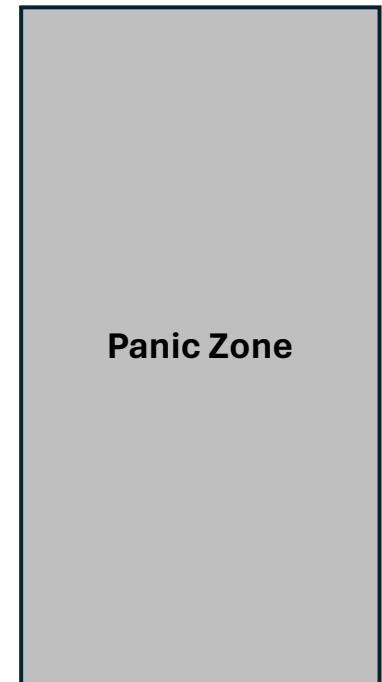
- “Have open and honest conversations with your students about your expectations regarding artificial intelligence apps and their use in your courses” (Eaton & Anselmo, 2023, para. 4).

Discussing Human-AI Collaboration in Job Tasks

- Typical duties of an Administrative Assistant
 - Coordinate and manage appointments, meetings, and events.
 - Maintain calendars for executives or teams.
 - Answer and direct phone calls.
 - Manage databases and records.
 - Prepare and distribute reports.
 - Order and manage office supplies.
 - Oversee equipment maintenance.
 - Prepare meeting agendas and materials.
 - Take and distribute meeting minutes.
 - Plan and coordinate company events.
 - Organize workshops or training sessions.
- Note: The above list was generated with the assistance of ChatGPT based on the provided prompt.

AI Trust Survey

1. How comfortable are you seeking assistance from a virtual assistant powered by Generative AI for academic tasks?
2. Would you be willing to use a Generative AI tools in shaping personal and professional decision-making processes?
3. How comfortable are you with utilizing Generative AI tools to automate repetitive tasks in your daily life?
4. Would you trust a Generative AI system to assist in making personal financial decisions on your behalf?
5. Would you be open to collaborating with Generative AI tools to enhance your own creativity in art or design?
6. How would you feel about Generative AI being used to personalize marketing content based on your online behaviour?
7. How open are you to using Generative AI for language translation and communication in a multicultural setting?
8. In personal health decisions, would you consider utilizing Generative AI to analyze health data and provide recommendations?
9. Would you trust Generative AI in analyzing your professional networking data to recommend connections or collaborations?
10. In your personal life, would you consider employing Generative AI to manage and organize your schedule and tasks?



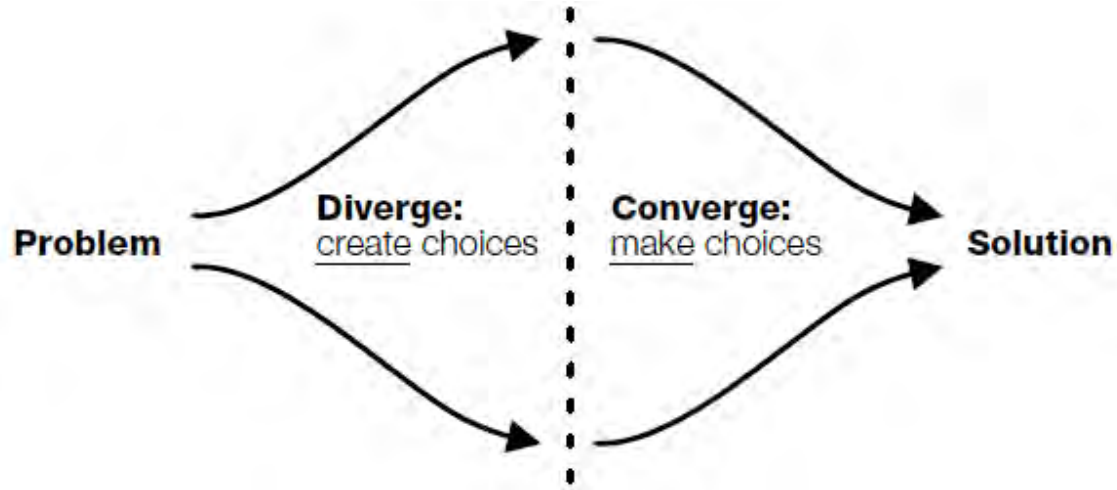
Different Views of AI

- The latest advancements in Artificial Intelligence (AI) imply new relationships between humans and machines (Gobet & Sala, 2019).
- Commonly cited scenarios of relationships include the use of Artificial Intelligence (AI) as:
 - a self-sufficient generator requiring minimal input from humans who acts as a passive admirer of the creation;
 - a creation tool, that allows to enhance human creativity, and
 - a co-creative partner (Esling & Devis, 2020; Gobet & Sala, 2019; Moura, 2023).

Different Views of AI

- “The limitations of independently creative AI direct the focus toward co-creative AI” (Wingström et al., 2022, p.10).
- “in the near future, ML-based AI will be adopted widely as a tool or collaborative assistant for creativity” (Anantrasirichai & Bull, 2022, p. 1)

AI in the Creative Process



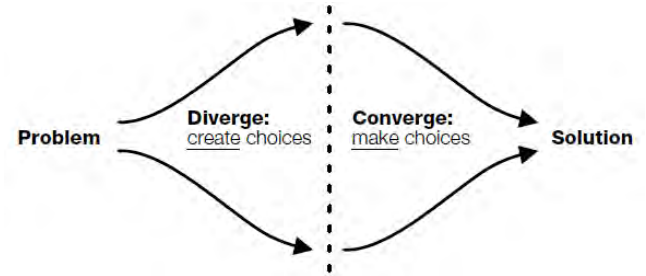
Adapted from Griebel et al., 2020

AI in the Creative Process

- Today, AI can be used in tasks that require divergent and convergent thinking or problem finding and solving (Wingström et al., 2022, p.4).
- “In divergent thinking, this would mean that artificial intelligence develops a large number of possible solutions/designs and therefore supports creatives in idea generation. In convergent thinking, this would mean help in idea selection” (Griebel et al., 2020, p. 1).

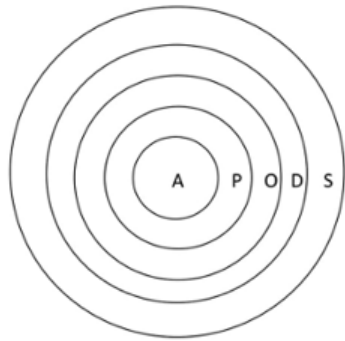
AI in the Creative Process

- “The positive future of creativity and AI lies in a harmonious collaboration that can benefit everyone, potentially leading to a new level of creative productivity respecting ethical considerations and human values during the creative process” (Vinchon et al., 2023, p. 1).
- In this collaboration, the human keeps a central role at two key moments of the creative process: at the beginning and at the end (Vinchon et al., 2023, p. 4).

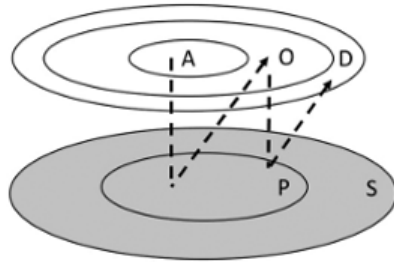


Adapted from Griebel et al., 2020

Common Elements in the Definitions of Creativity



A = Actor
P = Process
O = Outcome
D = Domain
S = Space



From A to O = Creation process

From O to D = Evaluation process

Adapted from Wingström et al., 2022

AI in the Creative Process

- Scenario 1: The use of Generative AI as a participant with domain expertise in brainstorming sessions to support the idea generation process (divergent thinking).



Visual created by Midjourney, based on my input "Students sitting around a desk doing brainstorming and AI sitting with them helping them with brainstorming" 13 Nov 2023.

AI in the Creative Process

- Scenario 2: The use of Generative AI as an anonymous expert in the forecasting procedure using the Delphi method.



Visual created by Midjourney, based on my input "A robot in a central room enclosed and 4 other experts in the conference room communicating" 26 Dec 2023.

Teaching for AI, with AI, and about AI

- “as with creativity, where there is teaching with creativity, for creativity, and about creativity, there should be teaching for AI, with AI, and about AI” (Marrone et al., 2022, p. 7).

Thank You!

References

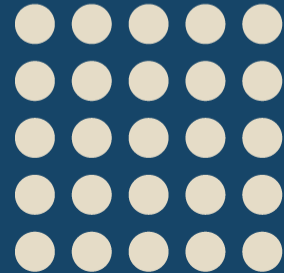
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Stacey Linton

The Program Perspective



Innovative Learning for the Careers of Tomorrow

Stacey Linton, Manager
UNBC Continuing Studies

Overview

- ✓ Introduce UNBC and Continuing Studies
- ✓ Discuss our new AI courses in partnership with RoboGarden
- ✓ Share how we are helping to meet the challenges and embrace the opportunities presented by AI



UNBC and Continuing Studies

UNBC

- ✓ Established in 1990
- ✓ Built in response to The 16,000 who called for a university in and for the North

Continuing Studies

- ✓ Supports the needs of northern residents and northern industries
- ✓ Offers a wide range of short-term, skills-based programming



UNBC CS Programming

1

Environment and Natural Resources

Environmental Monitoring
Land Reclamation
Wildlife Monitoring
Wildlife Danger Tree

2

Indigenous Priorities

Cultural Tourism
Indigenous Entrepreneurship
Traditional Ecological Knowledge
Working with Indigenous Communities

3

Health and Quality of Life

Occupational Health and Safety
Dialectical Behaviour Therapy
Mindfulness
Language Programs

4

Northern Community Sustainability and Development

Project Management
Supervisor Fundamentals
Admin. Assistant
Art, Design and Media
NEW! Machine Learning and AI

Meet RoboGarden



- ✓ Calgary-based
- ✓ Subsidiary of Micro-Engineering Technology Inc. (METI)
- ✓ Extensive experience in digital transformation
- ✓ Provides AI and software solutions for multiple industries and sectors
- ✓ Delivers a range of Machine Learning and AI training



NEW! Machine Learning and AI Courses

Machine Learning Foundation

- ✓ 12-hour Micro-credential
- ✓ Online self-paced
- ✓ Intro to Python, Jupiter Notebook, Machine Learning
- ✓ Model: see -> learn -> do
- ✓ Course finishes with sandbox project

Powered by  RoboGarden

Machine Learning and AI Bootcamp

- ✓ 450-hour Certificate
- ✓ 10 Modules
- ✓ Combination of virtual live instruction and online self-paced activities
- ✓ Assignments, lesson quizzes, final mini projects to assess each module
- ✓ Industrial activities show more complex scenarios

AI-Driven Learning

Gamification

- ✓ Learning through games
- ✓ Eases initial concerns
- ✓ Tracks student progress
- ✓ Rewards engagement and commitment

AI-Support

- ✓ Offers “hints” so can continue without needing to leave the platform
- ✓ Alerts instructor if struggles continue
- ✓ Provides extra challenges if progressing ahead of the rest of the cohort
- ✓ Helps maintain momentum and build confidence

Powered by  RoboGarden

In-Demand Skills

- ✓ Implement cutting-edge techniques to make data analysis more efficient
- ✓ Perform large-scale experimentation to identify relationships between variables
- ✓ Create advanced machine learning algorithms
- ✓ Prepare and extract data
- ✓ Implement new methodologies to solve business problems
- ✓ Visualize data to draw conclusions and make decisions



High-Opportunity Careers

- ✓ BC has strong average wages per hour among all provinces at the 0-3 year and 3-6 year experience levels
- ✓ BC has the HIGHEST (by \$3+ per hour) average per hour wage at the 6+ year experience level among all provinces

Source: jobbank.gc.ca



Industries with AI Job Opportunities



Healthcare



Engineering



Construction



Forestry



Mining



Energy

Industry Example: Canfor

Investing in a state-of-the-art sawmill in Houston BC.
Site preparation scheduled for this spring.

- ✓ Expected cost: \$200 million
- ✓ Capacity: 350 million board feet
- ✓ Employment: 200 people
- ✓ Use of AI: optimize operations



Where Do We Go from Here

Facts

- ✓ AI is here to stay
- ✓ AI's influence is growing
- ✓ We must prepare our students for a career that involves AI

Next Steps

- ✓ Work with industry and community to identify their needs
- ✓ Support students in their educational journey



Thank You

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unbc.ca/continuing-studies



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Mentimeter Moment:



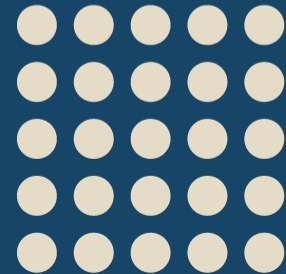
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Dr. Leean Waddington

The Institution Perspective





Teaching
& Learning
Commons

FLO Panel: The Creative and Ethical Use of Artificial Intelligence in Post-Secondary Education — a B.C. Perspective

Dr. Leann Waddington

AVP, Teaching and Learning

Kwantlen Polytechnic University

Territorial Acknowledgement

We at Kwantlen Polytechnic University respectfully acknowledge that we work, live, and study in a region that overlaps with the unceded, traditional and ancestral lands of the xwməθkwəy̓ə m (Musqueam), qí cə́ y̓ (Katzie), SEMYOME (Semiahmoo), scə́ wəθən (Tsawwassen), qiqéyt (Qayqayt), Kwikwetlem, and the lands of the qw̓ ɑ:n̓ ǎ́ n̓ (Kwantlen) First Nation, which gifted its name to this university.

In the cause of reconciliation, we recognize our commitment to address and reduce the ongoing systemic colonialism, oppression and racism that Indigenous Peoples continue to experience.



Timeline of Generative AI Activities at TL Commons

April 2023



[Generative AI resource site](#) launched by TL Commons

May 2023



Generative AI Discussion Series launched for KPU Instructors

August 2023



Dr. Leeann Waddington presentation to HESA's [AI Roundtable: Governance and policy](#) (August 28th, 2023) - Key insights

September 2023



- Dr. Leeann Waddington presentation on AI and the Future of Higher Ed: What Every Cabinet Leader Needs to Know
- Generative AI Discussion - Senate Standing Committee on Teaching and Learning

October 2023



- Generative AI Formal Training - for T&L Representatives
- Generative AI Discussion - Faculty of Entrepreneurial Leadership
- Generative AI Discussion - Criminology Department

November 2023



- Project Planning Phase 2 - TL Team
- Generative AI Discussion - English faculty
- Generative AI Discussion - Entertainment Arts

December 2023



- Generative AI Discussion - Asia Studies
- Creation of a Gen AI Playlist in LinkedIn Learning

January 2024



- Dr. Leeann Waddington presentation - Mapping a Strategy for Generative AI in Teaching and Learning
- Generative AI Discussion - Department of Academic Honesty
- Generative AI Discussion - Business Faculty

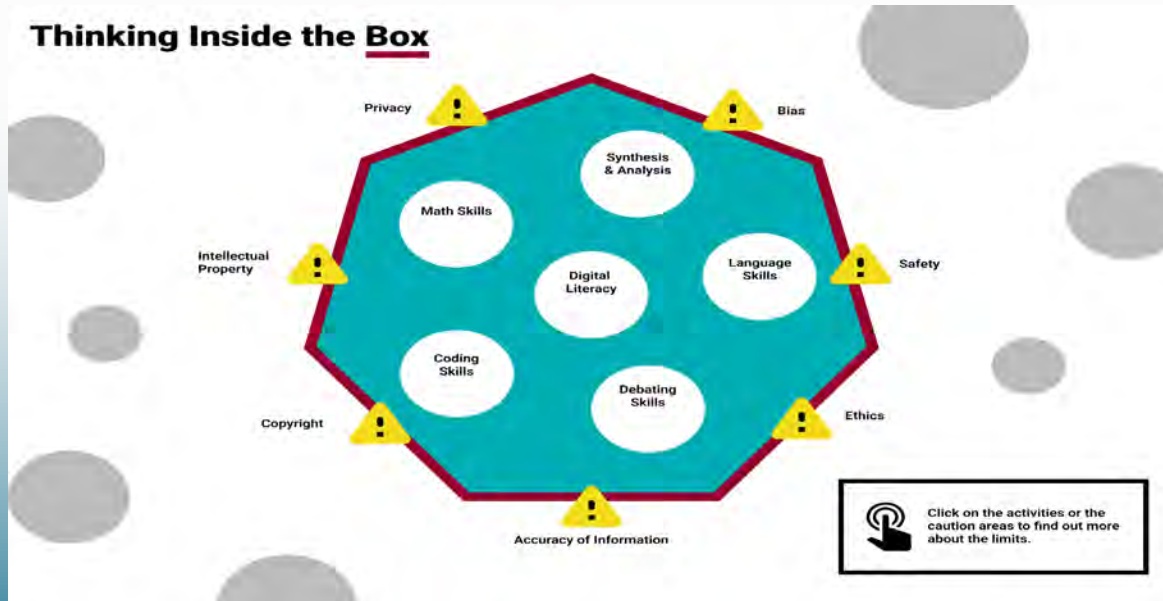
Challenge Before Us

- Provide guidance on something we are not expert in and that we are not clear about how it works
- Assess and mitigate risk to the organization and to students
- Time sensitive/quick turnaround



Thinking Inside the Box

Inspired by Cye Wakeman - Reality Based Leadership



Our guidance for instructional use

- Allow choice
- Protect Privacy
- Recognize complexity related to copyright, inclusion, IP, etc
- Consider ethics
- Educate our partners on potential risks



Complexities

- Unknown faculty use
- Fluidity of Employee skill, knowledge, openness
- Unanticipated technology changes create conflict
- Lack of addressing parameters of use/restrictions (the conscientious objectors)
- Determination of business use
- We have not currently endorsed specific tools
- Keeping pace with change

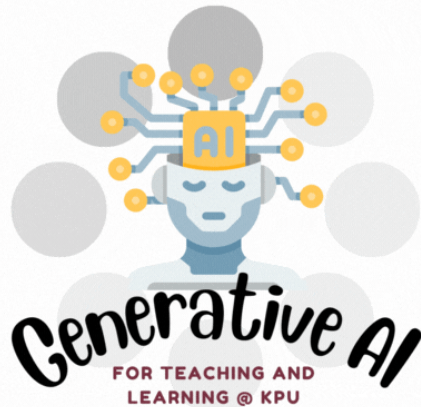
Next steps

- Office of the Provost and the Faculty areas are considering potential curricular changes needed to support graduate competencies with gen AI
- Senior leadership engaging in discussions about business use parameters
- TL and IT discussing future software needs
- Ongoing support of departments
- Revising our guidance
- Planning workshops to build faculty knowledge and skills

Paul Hennessy of Shutterstock said:

“I think there are two choices in this world. Be the blacksmiths that are saying, “cars are going to put us out of the horseshoe-making business”, or be the technical leaders that bring people, maybe kicking and screaming, into the new world.”

KPU Generative AI Guidance for Faculty an Evolving Resource





”
Through active intentional partnering, the Teaching & Learning Commons provides pedagogical leadership that is grounded in community, ethics, creativity, and care.

Stay Connected!



kpu.ca/teaching-and-learning

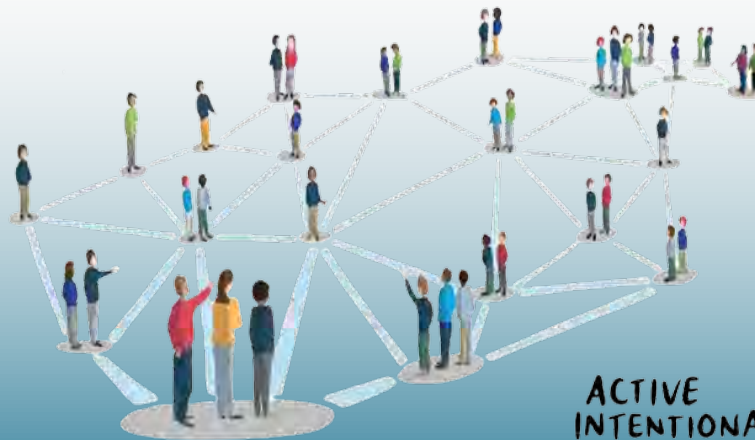


Teaching.andlearningcommons@kpu.ca



[KPU Teaching & Learning Commons](https://www.linkedin.com/company/kpu-teaching-learning-commons)

Through active intentional partnering, the Teaching & Learning Commons provides pedagogical leadership that is grounded in community, ethics, creativity, and care.



**ACTIVE
INTENTIONAL
PARTNERING**

An Opportunity to Share

Don't forget to add to the collaborative Google docs!

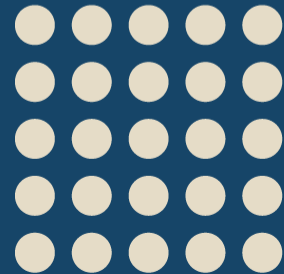




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Clint Lalonde

The Open Perspective





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Generative AI and OER

Considerations for Creators

Clint Lalonde

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January 16, 2024

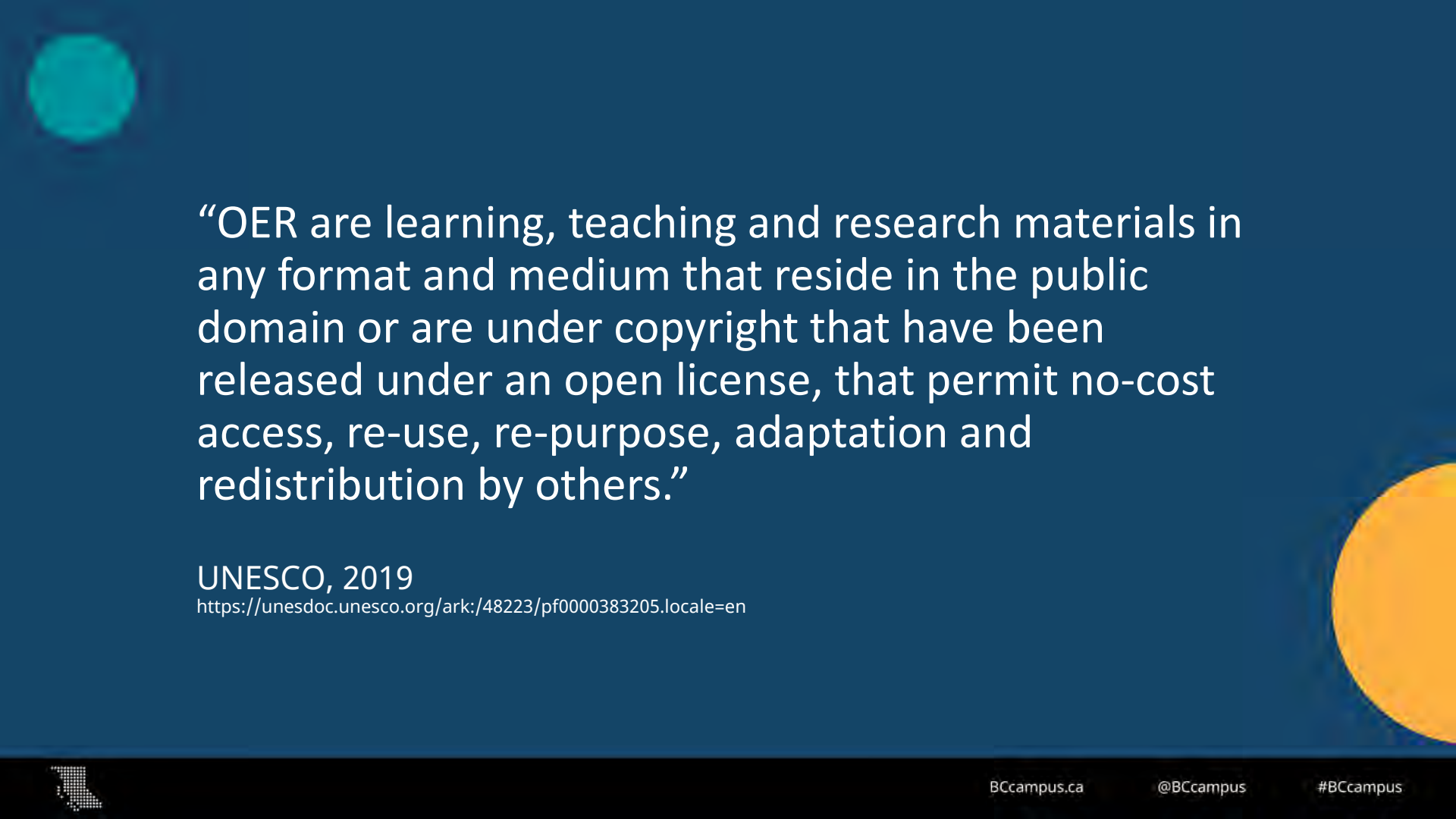


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UNESCO, 2019

<https://unesdoc.unesco.org/ark:/48223/pf0000383205.locale=en>



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Guiding Principles

1. Don't say no
2. Intentional v Unintentional use
3. Field in flux

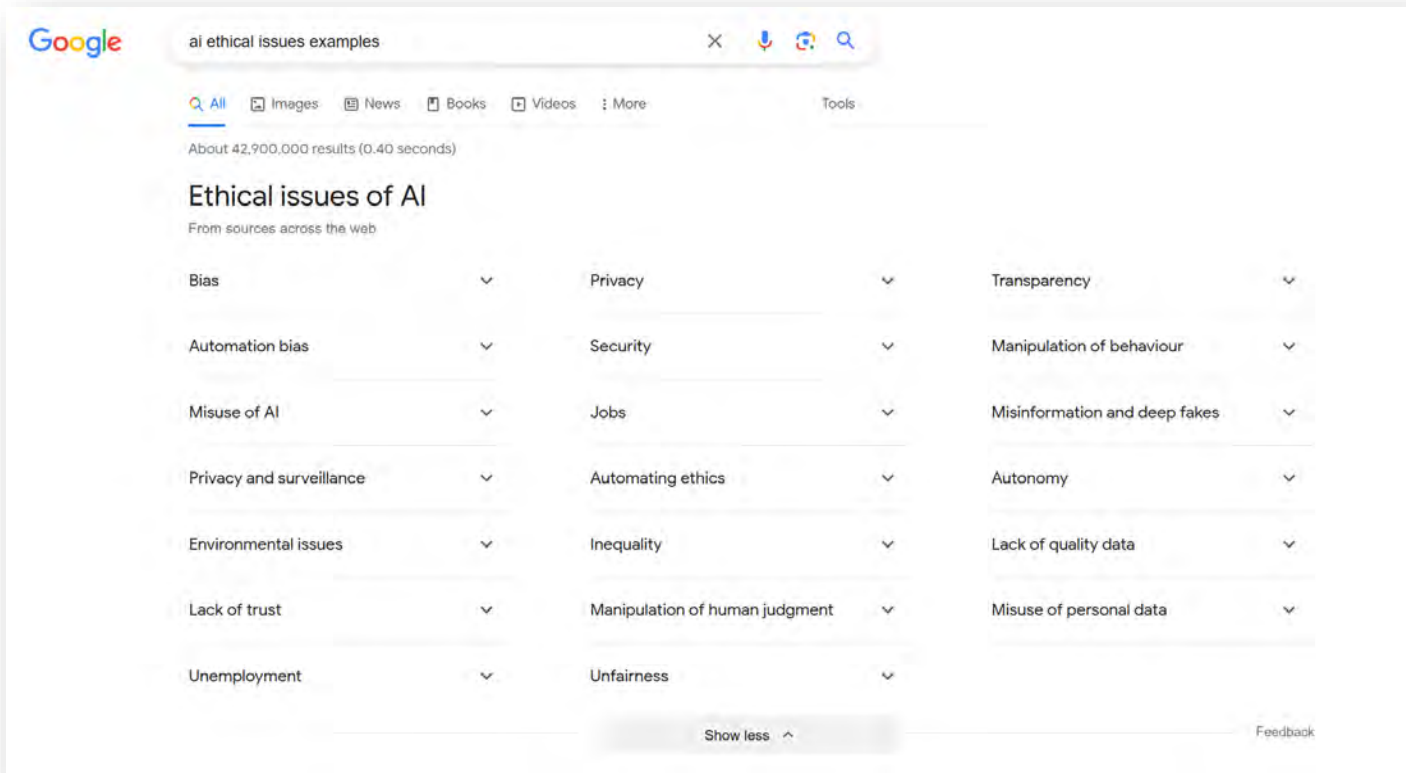


Don't say no

- To create questions sets, case studies, and other types of instructional resources.
- To analyze a photo to create alt text for accessibility purposes.
- To create illustrations and photo-realistic images for both decorative and instructional purposes.
- To generate scripts that can be used for videos and podcasts.
- To create instructional videos.
- To generate sentences, paragraphs, and chapters for a textbook.
- To analyze and create summaries of longer sections of text.
- To automate the creation of an audio version of text, usually for accessibility purposes.
- To translate text to another language.



But yet....



Google

ai ethical issues examples

Tools

All Images News Books Videos More

About 42,900,000 results (0.40 seconds)

Ethical issues of AI

From sources across the web

Bias	Privacy	Transparency
Automation bias	Security	Manipulation of behaviour
Misuse of AI	Jobs	Misinformation and deep fakes
Privacy and surveillance	Automating ethics	Autonomy
Environmental issues	Inequality	Lack of quality data
Lack of trust	Manipulation of human judgment	Misuse of personal data
Unemployment	Unfairness	

Show less

Feedback



Intentional v Unintentional



Second, we wanted to acknowledge that people may be using generative AI tools without even knowing they are using generative AI. AI is being built into many of the content creation tools we are currently

Rewrite PREVIEW
Here are a few other ways to write this

Secondly, we wanted to acknowledge that people may be using generative AI tools without knowing they are using generative AI. ...

We wanted to acknowledge that people may be using generative AI tools without even knowing they are using generative AI.

We wanted to acknowledge that people may be using generative AI tools without knowing they are using generative AI.

 ... 

...ing they are using it. For
around how to improve your
tions to come across as highly
ble or be punished by using
...
...mendations were evergreen,
very early days of generative AI
ily. For example, while there is
ound generative AI, there is still
and we need to be flexible to
me.

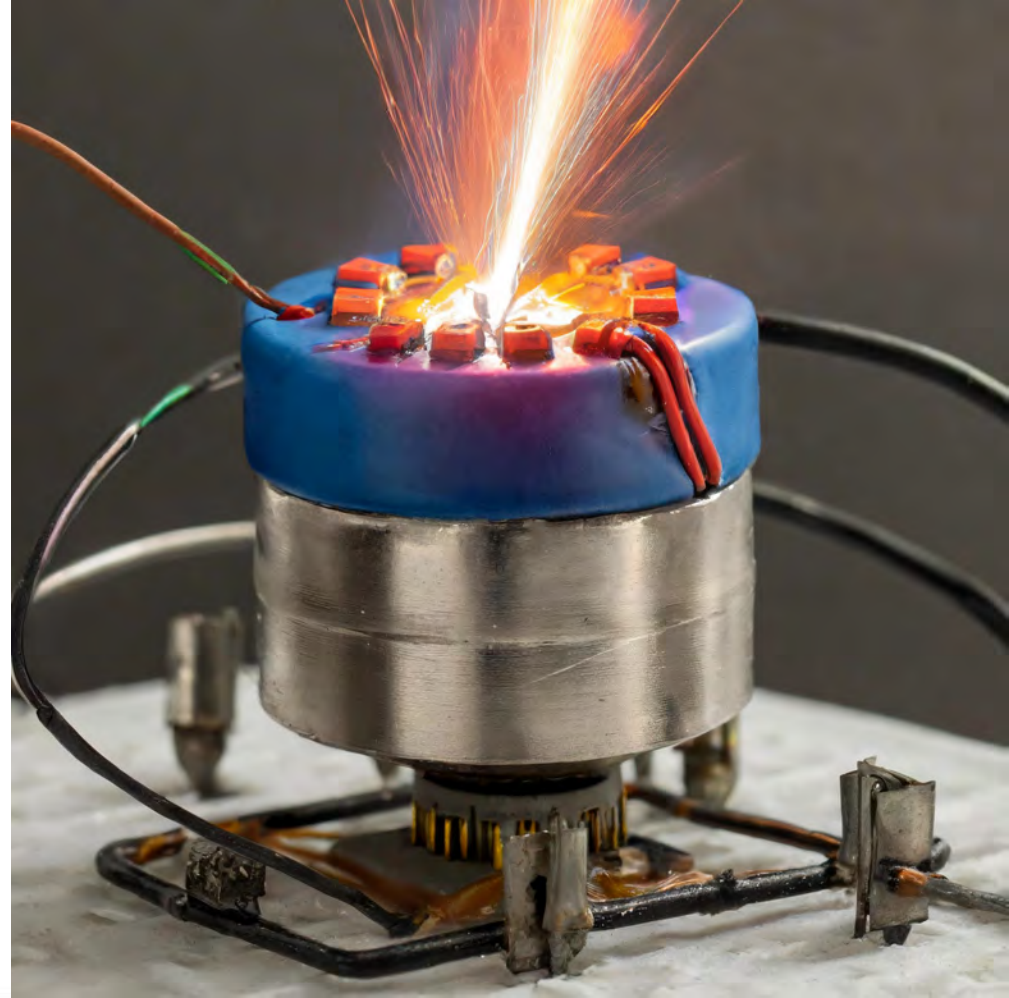
Bccampus Getting Started with

OER Publishing guide at [Generative Artificial Intelligence – Getting Started: OER Publishing at BCcampus](#)



A field in flux

A decorative image of a fictional flux capacitor autogenerated on January 15, 2024 by [Adobe Firefly](#) using the prompt “An overloaded flux capacitor that is about to explode”



Getting Started: OER Publishing at BCcampus

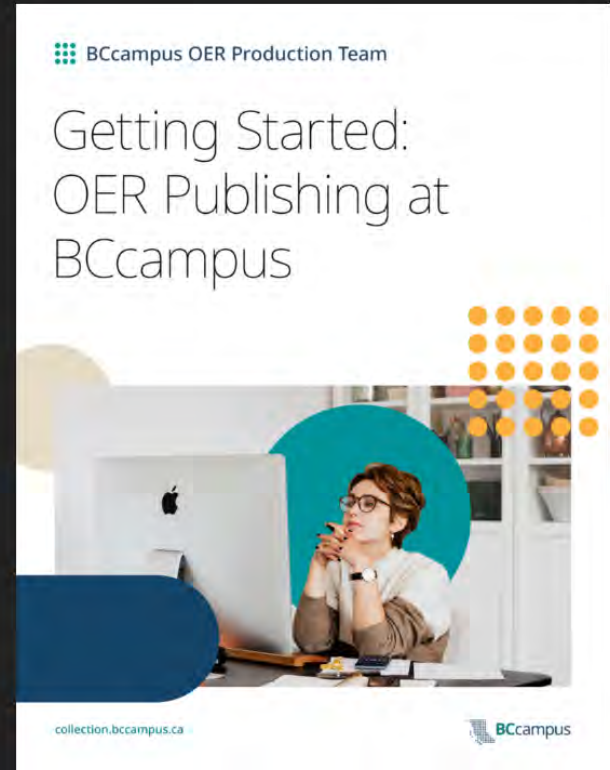
Resources and Guidelines

BCcampus OER Production Team

This resource provides an overview of everything you will need to know when creating an open educational resource (OER) that will be published by BCcampus. It provides a high-level overview of things to keep in mind as you work on your project and links to resources that go into more depth so you can easily find the information you need.



Creative Commons Attribution



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5 Considerations

1. Lack of transparency
2. Bias
3. Accuracy of results
4. Intellectual property and copyright
 - a. Use of content train the models
 - b. Applying copyright to generated output
 - c. Using AI to summarize copywritten works
5. Environmental Sustainability



8 Recommendations

1. Be cautious and deliberate with your use of generative AI
2. Manually review and assess all AI generated content for accuracy, appropriateness & usefulness.
3. Closely review all AI generated content for biases in the output.
4. Do not use AI generated content for an area or subject you don't have the appropriate level of knowledge or understanding of to verify accuracy.
5. Be transparent about your use of Gen AI. Document;
 - a. what content was generated
 - b. what tools were used to generate the content, including links to the tool,
 - c. how you used that tool (ie what prompts was the tool given that generated the content)
 - d. the date the content was generated
 - e. what steps were taken to review the content to ensure it was valid and correct.
6. Do not copyright (and therefore apply an open license to) AI generated content.
7. Avoid generating content that may infringe on trademarks or patents.
8. Review AI generated summaries to ensure they accurately represent the source material.





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Thank you

Considerations & recommendations available at:
opentextbc.ca/gettingstarted/chapter/generative-artificial-intelligence/



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Q & A

Psssst!

*Please add to the collaborative Google doc
before you leave!*

Please complete the short event survey.



BCcampus

Learning. Doing. Leading.

Thank you!



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