

Collaborative Exploration of Ethical AI Use: a Case on Critical Classroom Practices

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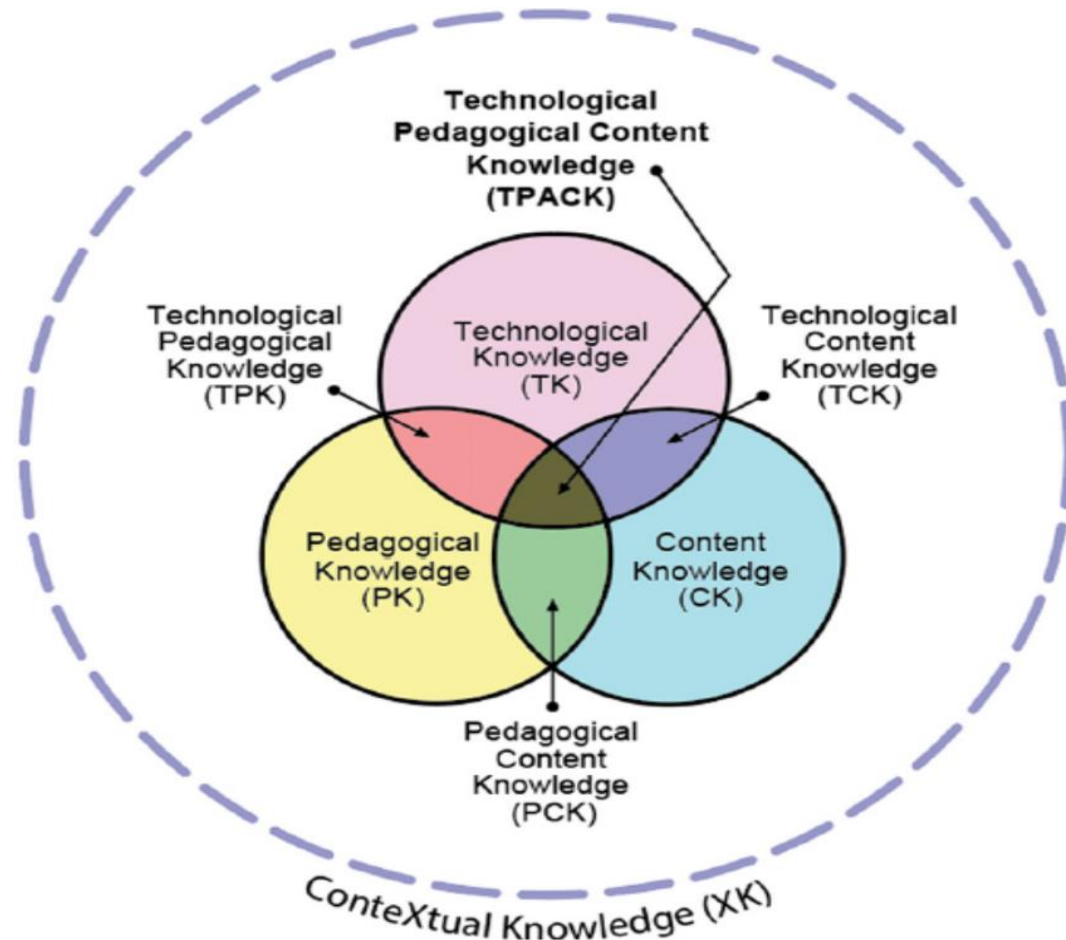
coast
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college

Agenda



- Teaching and Learning Context at CMTN
- Ethical Pedagogical Problems in learning with AI
- Case Overview: Classroom Collaboration Example
- Reflections and Suggestions

Framework: TPACK



- It is about the relationship between **technology, pedagogy and content**.
- Gen AI is **generative** and **social**.
- How does **the interaction with AI** change what and how we teach?

Teaching and Learning Context at CMTN



Adventurous, Transformative, and Integrity

- **Multiple Campuses:** Terrace, Prince Rupert, Smithers, Hazelton, and Haida Gwaii
- **Experiential Place-Based Learning (EPBL):** A priority
- **Indigenous Integration:** Embedded throughout programs and practices (e.g., Freda Diesing School of Northwest Coast Art)
- **Community-Oriented Learning Environment:** Fostering collaboration and local connections



Importance of Ethical Use of AI



TRANSPARENCY
AND
ACCOUNTABILITY



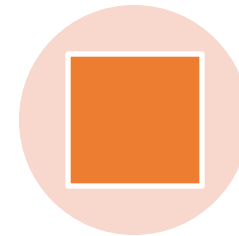
FAIRNESS,
EQUITY AND BIAS



PRIVACY, DATA
PROTECTION,
AND COPYRIGHT



ACADEMIC
INTEGRITY



PEDAGOGY AND
SYSTEMIC
ISSUES

Ethical Pedagogical Problems in Learning with AI

Differing Syllabi Statements:

- No use
- Specifically prescribed use
- Some use (with disclosure)
- Unrestricted

The student perspective:

- Is it dangerous for my academic career to use AI?



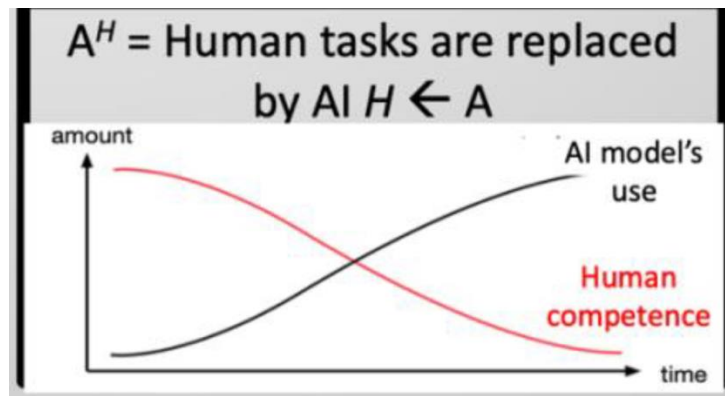
Developing the Model

Human-AI Collaboration

If we do not teach student to direct AI, AI will direct students.

(Based on the work of Papert, 1980)

"The over-reliance on AI could lead to the atrophy of critical competencies in the long term" (Cukurova, 2024)



In low agency, high AI use, learner's competencies can diminish over time.

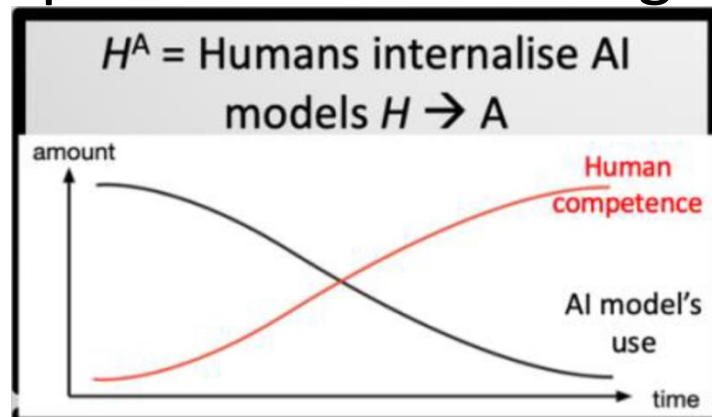
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Adapted from Cukurova, 2024

In high agency models, learner's competency increases over time and AI support is scaffolded.

The Plan

Premise: Provide techniques for students to use AI while still developing their own work and thus agency.

AI Guidelines

DO:

Provide feedback

Question and identify flaws

Cross-reference

DO NOT:

Provide ideas or outlines

Provide written work

Provide answers

Practical Definitions



EXAMPLE PROMPT

- Rubric and Analysis
 - You are a writing coach. I will provide you with a rubric, and in the next message, provide you with a rough draft of an essay. Review the essay in the context of the rubric and identify strengths and specific places where better grades can be obtained.
- Questions, not solutions
 - For all identified issues, do not provide suggested solutions, but identify the problems as questions or comments for improvement.

Practical Definitions & Benefits



Iterative Feedback – can be obtained quickly and multiple times

Questions, not Solutions – Does not inhibit learning through providing answers

High Agency – The Learner is developing ideas, drafts, and revised writing.

No Fear of Criticism – In working with technology, there is less worry of judgement.

Collaboration Case Overview



The Context: We delivered a 45-minute interactive demo for first-year chemistry students.

- In this class environment, the instructor encouraged AI use for his students with significant emphasis on the student reflecting how AI had changed their work (Lab Reports).
- This demo emphasized how to use AI to increase learning, with demos for ChatGPT using writing analysis tools, and NotebookLM as a study aide.

Collaboration Case Overview



Initial Observations:

- Varied levels of AI familiarity among students
 - Early adopters with customized AI use
 - Some with no prior use due to unawareness or academic misconduct concerns
- High interest in using NotebookLM for study support

Initial Qual Assessments of the Model, Students



"I use AI as a backup tool after first using my course material and internet research to learn from... I use critical judgement to reassess the feedback chatGPT provides and amend my work *if necessary...* it's very helpful" - 2nd year nursing student, emphasis mine

"It's a game-changer. I see it as a really big help" - 1st year sciences student

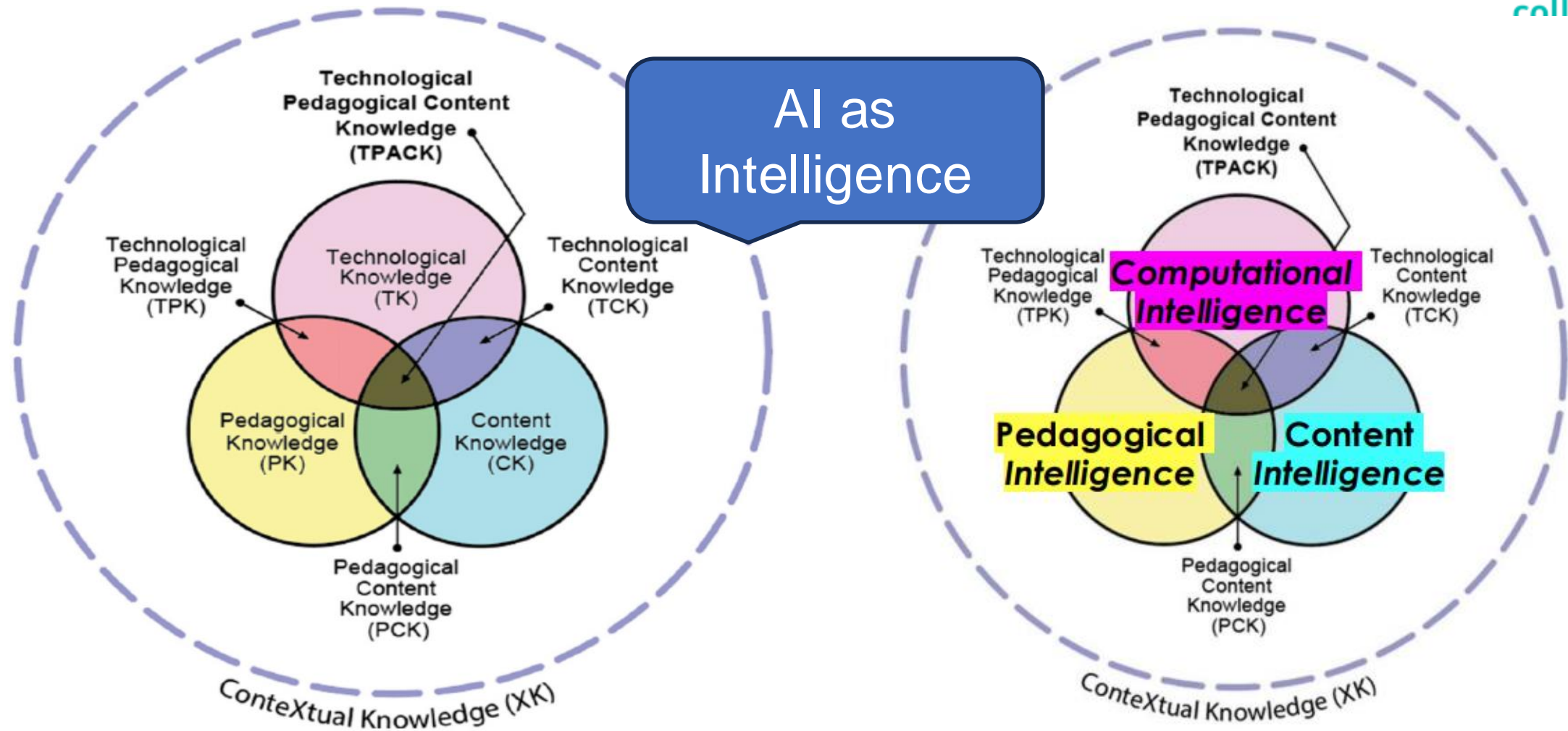
Initial Qual Assessments of the Model, Instructors



"The students who are already doing well are using AI... I've seen a significant increase in the quality of their work. They've really moved towards it being an assistant rather than writing for them.

However, there are a lot of students who were already struggling and are apprehensive about admitting they have used it."

Integrating from TPACK to TPAIK



Reflections and Suggestions



Reflections



Collaboration as a pedagogical strategy:

- Ethical AI use requires ongoing dialogue and collaboration.
- Preparing the students for ethical use of AI:
 - A. Build AI Literacy by hands-on experience
 - B. Discuss AI pros and cons by guided reflection
 - C. Students are active participants

Next Step



1

Organize a boot camp on the topic of AI literacy

2

Create training modules and resources

3

Find student ambassadors to promote ethical AI use

Developing Human-AI Collaboration Literacy



Based on UNESCO's framework for AI competency for students.

15 hour, 1 credit course with modularity.

Potential Deliverables:

- Integrated with classroom practice
- Integrated with programs, delivered as a course in first semester
- Part of a return to studies program after academic probation
- Online, asynchronous resource



<https://unesdoc.unesco.org/ark:/48223/pf0000391105>



Teaching with AI

Information and Guidance on AI and tools

General Guideline



UNESCO Guidance on ChatGPT and AI



PDF

ChatGPT-and-Artificial-Intelligence-in-higher-education-Quick-Start-guide EN FINAL

This guide provides a quick start for integrating ChatGPT and artificial intelligence into higher education, highlighting their potential benefits, ethical considerations, and practical applications. It offers recommendations for educators on using AI responsibly to enhance learning and teaching

AI Literacy



AI Literacy



craft.stanford.edu

Resources | CRAFT

The CRAFT resources provides comprehensive materials on the societal implications of AI. These resources include lesson plans, case studies, and ethical discussions designed to facilitate the teaching of AI's impact on society, bias in algorithms, and responsible data use.

ChatGPT



how to talk to your students about ChatGPT



drsaraheaton.wordpress.com

Dr. Sarah Eaton's post offers a lesson plan for educators to discuss ChatGPT with high school and college students, focusing on AI's role in generating content and its implications for academic integrity.

+ Add comment

Ten facts about ChatGPT

Syllabus Statement Examples



Course-Readiness Guide (UBC)



PDF

Course-AI-Readiness-Guide

+ Add comment

U of Toronto



AI Tools for teaching



101 creative ideas to Use AI



media-and-learning.eu

101 creative ideas to use AI in education, a crowdsourced collection

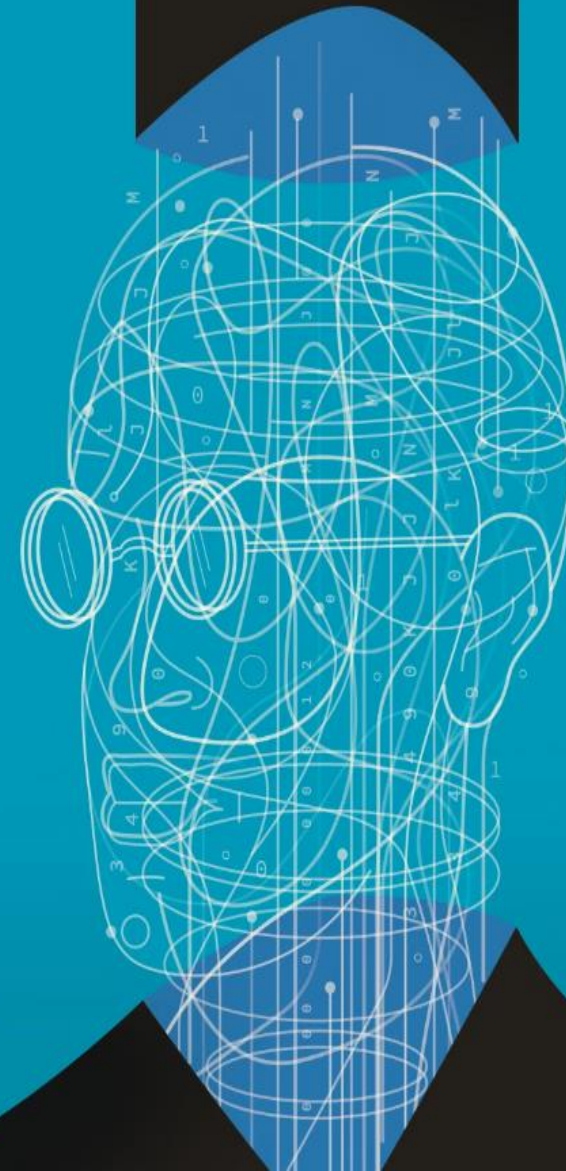
This collection offers 101 innovative ways to use AI in education, contributed by individuals from 19 countries with an emphasis on ethical considerations and responsible use.

+ Add comment

AI Tutor Pro

The Future Is Hybrid

Colleges begin to reimagine learning in an AI world.



Feedback and
Suggestions

Thank you so
much!

