Friend or foe? Generative artificial intelligence and inclusive assessment in higher education Orna Farrell

orna.farrell@dcu.ie @orna_farrell

Ollscoil Chathair Bhaile Átha Cliath Dublin City University

About me



Dr. Orna Farrell Associate Professor of Digital Education School of Policy and Practice, Institute of Education

Chair of EDEN NAP SC Fellow of EDEN Digital Learning Europe

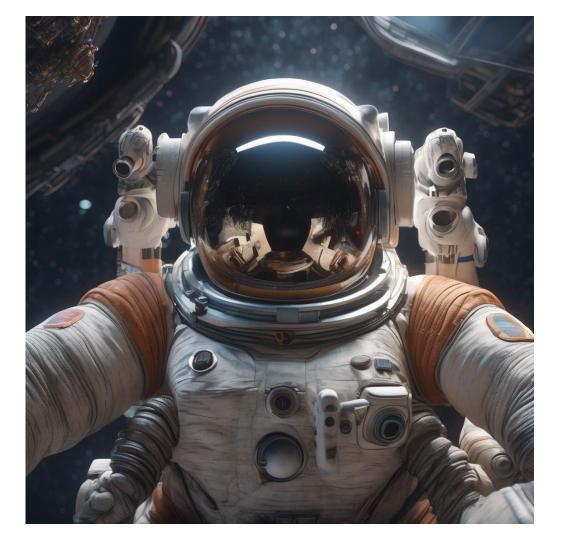
orna.farrell@dcu.ie @orna_farrell

Me, Myself and AI

Image generated by Imagine Pixar

Exploration Experiment Awareness **Ethics**

Image generated by Imagine Pixar





Speculative Futures on ChatGPT and Generative Artificial Intelligence (AI): A Collective Reflection from the Educational Landscape

Aras Bozkurt, Junhong Xiao, Sarah Lambert, Angelica Pazurek, Helen Crompton, Suzan Koseoglu, Robert Farrow, Melissa Bond, Chrissi Nerantzi, Sarah Honeychurch, Maha Bali, Jon Dron, Kamran Mir, Bonnie Stewart, Eamon Costello, Jon Mason, Christian M. Stracke, Enilda Romero-Hall, Apostolos Koutropoulos, Cathy Mae Toquero, Lenandlar Singh, Ahmed Tlili, Kyungmee Lee, Mark Nichols, Ebba Ossiannilsson, Mark Brown, Valerie Irvine, Juliana Elisa Raffaghelli, Gema Santos-Hermosa, Orna Farrell, Taskeen Adam, Ying Li Thong, Sunagul Sani-Bozkurt, Ramesh C. Sharma, Stefan Hrastinski, Petar Jandrić

Speculative Futures on ChatGPT - Article

ARTIFICIAL INTELLIGENCE- ASSESSMENT-ACADEMIC INTEGRITY





Project Website - DCU

Special Issue - Vol. 7(2)

The Games People Play: Exploring Technology Enhanced Learning Scholarship & Generative Artificial Intelligence



- What does AI really know about technology-enhanced learning?
- What happens when you go "all in" with AI?
- What does engaging in this process say not only about our discipline, but, our humanity and identity as scholars?

GenAI and minority languages...Gaeilge/Irish

ChatGPT 3.5 ~

🚺 You

write a paragraph about the weather in irish

ChatGPT

Is aoibhinn liom an aimsir in Éirinn. Bíonn sé teanga an tsamhraidh anseo leis na spéirli Ionrú go grianmhar ar an talamh. Is minic a bhíonn sé fuar agus fliuch sa gheimhreadh, Ie scamall donn agus baisteach ag saigheadadh síos. Ach nuair a théann an t-earrach i láthair, athraíonn gach rud. Bíonn bláthanna ag fás ar na crainn agus éin ag canadh go hard sa spéir. Téann an ghrian síos go mall, ag Ionrú ar na cnoic agus ag taitneamh ar gach rud ina slí féin. Is aoibhinn an radharc é, agus déanann sé mo chroí gléasta le hóige agus dóchas don todhchaí.





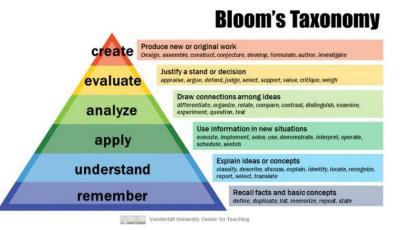
know all about Gaelige grammar. Ask me any

30 ④ per message · View details

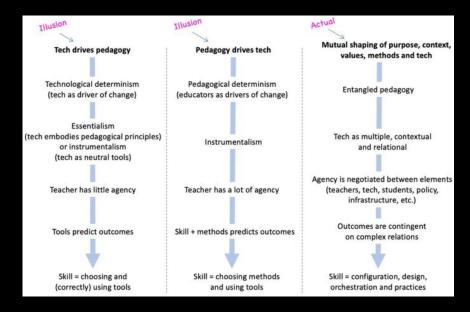
NEW

Why are educators concerned about GenAI?

- 1. Cheating, plagiarism, academic integrity
- 2. Challenges the validity of many traditional assessments
- 3. Changes our relationship to knowledge
- 4. Challenges our ideas about creativity
- 5. What else....??



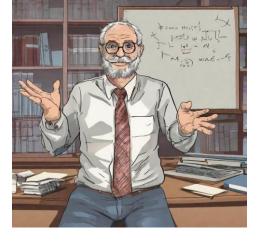
Technology and education have always been intertwined...an entangled pedagogy (Fawns, 2022)



Fawns, 2022

Inclusion?









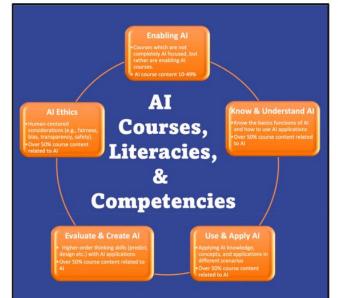
Critical AI literacy

Table 1

The UF AI Literacy Model: Descriptions for the five AI categories, content, and related student learning outcomes. AI Literacy types based on the model from Ng et al., 2021.

AI Literacy categories	Description	AI content ^a	SLOs
Enabling AI	Support AI through related knowledge and skill development (e.g., programming, statistics) and/or contain a lower total AI content of one of the four Core AI Literacy topics.	10–49%	SLO1. Identify, describe, and explain the components, requirements, and/or characteristics of AI. (Content knowledge and communication) SLO2. Recognize, identify, describe, define and/or explain applications of AI in multiple domains. (Critical thinking and communication)
Know & Understand AI	Know the basic functions of AI and to use AI applications	>50%	SLO1. Identify, describe, and explain the components, requirements, and/or characteristics of AI. (Content knowledge and communication) SLO2. Recognize, identify, describe, define and/or explain applications of AI in multiple domains. (Critical thinking and communication)
Use & Apply AI	Applying AI knowledge, concepts and applications in different scenarios	>50%	SLO3. Select and/or utilize AI tools and techniques appropriate to a specific context and application. (Critical thinking and content knowledge)
Evaluate and Create AI	Higher-order thinking skills (e.g., evaluate, appraise, predict, design) with AI applications	>50%	SLO4. Assess the context-specific value or quality of AI tools and applications. (Critical thinking) SLO5. Conceptualize and/or develop tools, hardware, data, and/or algorithms utilized in AI solutions. (Critical thinking)
AI Ethics	Human-centered considerations (e.g., fairness, accountability, transparency, ethics, safety)	>50%	SLO6. Develop, apply, and/or evaluate contextually appropriate ethical frameworks to use across all aspects of AI. (Critical thinking and content knowledge)

^a The initial identification of AI content percentages may change once more courses are evaluated and managed through this process.



7

Southworth et al, 2023

6 Tenets of Postplagiarism: Writing in the Age of Artificial Intelligence

Sarah Elaine Eaton

In Plagiarism in Higher Education: Tackling Tough Topics in Academic Integrity (2021) I introduced the idea of life in a postplagiarism world. Here, I expand on those ideas.

Hybrid Human-AI Writing Will Become Normal

Hybrid writing, co-created by human and artificial intelligence together is becoming prevalent. Soon it will be the norm. Trying to determine where the human ends and where the artificial intelligence begins is pointless and futile.

Human Creativity is Enhanced

Human creativity is enhanced, not threatened by artificial intelligence. Humans can be inspired and inspire others. Humans may even be inspired by artificial intelligence, but our ability to imagine, inspire, and create remains boundless and inexhaustible.

Language Barriers Disappear

One's first language will begin to matter less and less as tools become available for humans to understand each other in countless languages.

Humans can Relinquish Control, but not Responsibility

Humans can retain control over what they write, but they can also relinquish control to artificial intelligence tools if they choose. Although humans can relinquish control, they do not relinquish responsibility for what is written. Humans can – and must – remain accountable for fact-checking, verification procedures, and truthtelling. Humans are also responsible for how Al-tools are developed.

Attribution Remains Important

It always has been, and always will be, appropriate and desirable to appreciate, admire, and respect our teachers, mentors, and guides. Humans learn in community with one another, even when they are learning alone. Citing, referencing, and attribution remain important skills.

Historical Definitions of Plagiarism No Longer Apply

Historical definitions of plagiarism will not be rewritten because of artificial intelligence; they will be *transcended*. Policy definitions can – and must – adapt.



- Integration
- confidence
- competence

Teachers' Stages of GAI Integration and the Frequency of GAI Use for Teaching

The analysis involved running correlations between two measures. One measure involved the stages of teachers' GAI integration, and another measure involved the frequency of GAI use for teaching. Teachers selected their stage of GAI integration out of six categories (as adapted from Wozney et al., 2006):

- 1. *Awareness*: I am aware that the technology exists but have not used it perhaps I'm even avoiding it. I am anxious about the prospect of using ChatGPT.
- 2. *Learning*: I am currently trying to learn the basics of ChatGPT. I am sometimes frustrated using ChatGPT and I lack confidence when using it.
- 3. *Understanding*: I am beginning to understand the process of using ChatGPT and can think of specific tasks in which it might be useful.
- 4. *Familiarity*: I am gaining a sense of self-confidence in using ChatGPT for specific tasks. I am starting to feel comfortable using ChatGPT.
- 5. *Adaptation*: I think about ChatGPT as an instructional tool to help me and I am no longer concerned about it as technology.
- 6. *Creative application*: I can apply what I know about ChatGPT in the classroom. I am able to use it as an instructional aid and have integrated ChatGPT into the curriculum.

Kaplan-Rakowski et al, 2023

Awareness	 Critical discussions with students Ethics and responsible use Academic integrity and un/authorised use in assessment Asking about their experiences 		
Learning	 Demonstrating different GenAl tools Webquestand share experiences 		
Understanding	 Discussion of application in their teaching practice/context Scenarios of GenAI in Secondary schools/FE/Training contexts 		
Familiarity	 Integrating authorised use of GenAI in formative and summative assessment Use of process report to document use of GenAI Eg. idea generation, video creation using SteveAI, content and graphic creation, script writing, learning design 		
Adaption	Reflection on experiences and report on process		
Creative application	 Use of GenAI tools in project work, eg. creation of videos, graphics, Chatbots, mini courses 		

How?

Ask Mary the support bot for help





Welcome to HR5014 Digital Learning Design. I'm looking forward to working together on this module. We will learn about current and emerging approaches to learning design for digital, online and blended learning environments and how to apply these in a learning and development context.

Module Handbook Announcements

Authentic assessment is the answer

References

Concannon, F., Costello, E., Farrell, O., Farrelly, T., & Graves Wolf, L. (2023). Editorial: There's an AI for that: Rhetoric, reality, and reflections on EdTech in the dawn of GenAI. *Irish Journal of Technology Enhanced Learning*, 7(1). <u>https://doi.org/10.22554/ijtel.v7i1.116</u>

Southworth et al., (2023). Developing a model for AI Across the curriculum: Transforming the higher education landscape via innovation in AI literacy. *Computers in Education: Artificial Intelligence*, 4. <u>https://doi.org/10.1016/j.caeai.2023.100127</u>

Eaton, S.J. (2023) 6 Tenets of Postplagiarism: Writing in the Age of Artificial Intelligence https://drsaraheaton.wordpress.com/2023/02/25/6-tenets-of-postplagiarism-writing-in-the-age-of-artificial-intelligence/

Kaplan-Rakowski, R., Grotewold, K., Hartwick, P. & Papin, K. (2023). Generative AI and Teachers' Perspectives on Its Implementation in Education. *Journal of Interactive Learning Research*, 34(2), 313-338. Waynesville, NC: Association for the Advancement of Computing in Education (AACE). Retrieved September 26, 2023 from https://www.learntechlib.org/primary/p/222363/.