



Towards AI Literacy: 101+

Creative and Critical Practices, Perspectives and Purposes



Edited by

Sandra Abegglen, University of Calgary
Chrissi Nerantzi, University of Leeds
Antonio Martínez-Arboleda, University of Leeds
Marianna Karatsiori, University of Macedonia
Javiera Atenas, University of Suffolk
Chris Rowell, University of the Arts London

Graphic Design/Images Leonor Aguero Vivas

Grant Imagination Lab Foundation




Affiliations



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Introduction

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Artificial Intelligence (AI) has gathered significant attention since November 2022, when ChatGPT, a GAI tool, was released to the broader public, and many other tools and platforms followed. That led to the rapid expansion and explosion of interest and engagement with AI, and in particular Generative Artificial Intelligence (GenAI), including in educational settings.

Since then, discussions and debates around the potential use of AI in education have become widespread. Amongst these are the creators, innovators and experimenters who forge ahead without seeking approval, while others await guidance and reassurance, engage in staff development initiatives, or simply wish to sideline AI, boxing it away in hopes that it will dissipate.

There has been a plethora of dissemination activities, events, and conferences but also speculative papers and experiments, and more and more we also see evaluative research emerging. We live in fascinating times and have

been since the dawn of digital technology, the Internet, social and mobile media, and AI. The technological advancements we have seen, especially in the last couple of years, are mind blowing.

In more recent months we have, started experiencing a shift in the conversation around AI. Is change in the air? Are we accepting that AI is here to stay? Do we realize now more that instead of wishing AI to go away, we need to learn how to use it properly? Responsible? Ethically? Critically and creatively? This seems to have surfaced questions around AI literacy, something that educators and students alike will need to develop to navigate with confidence and competence in this new and alien landscape.

As we contemplate the possible revolution that AI/GenAI can bring to the education field, this collection provides multiple inspirations on how we might navigate this ever-changing terrain as confident and competent explorers.

The collection is the second crowdsourced curation of ideas and practices around AI by education practitioners, open researchers and students from different parts of the world generated by the international #creativeHE community. The collection is edited by an international team - Sandra Abegglen, Chrissi Nerantzi, Antonio Martínez-Arboleda, Marianna Karatsiori, Javiera Atenas, and Chris Rowell - generously supported by Playful Hybrid Higher Education and #creativeHE.

The appetite for sharing has further grown since the release of the first collection, so we have additional ideas on how to use AI in education as well as resources for education practitioners, inspirations on what students do with GenAI, and reflections and positions on AI literacy more generally. However, as the title suggests, this collection is not a repeat or more of what we published in the first collection. The focus is now on experimental practice, perspectives and purposes. While we still see this as an opportunity to celebrate everyday creativity and the newness of learning, teaching and assessing with GenAI, it is also about criticality and thoughts around AI literacy: what could teaching and learning with AI really mean for educators and students now - and in the future?

Included in the collection are:

- Reflections and perspectives towards GenAI literacy
- Practice examples by and for education professionals
- GenAI outputs by students for their learning

These contributions present a chance to engage with voices and concerns about the use of AI in education, and embrace ideas to develop our individual and collective understanding of what we mean by AI literacy. As such, the collection contributes to the wider discussions around AI while also fostering collaboration and partnership between educators and students in co-designing learning, teaching, and assessment that help us all grow as responsible citizens of this world, explore what the practical implications and opportunities are while also addressing any ethical concerns, and gain insights into what we mean by becoming AI literate. There is a need to do all this with transparency and openness, and that is why the open education community plays a key role in these important conversations - and in this collection.

Creative and critical experimentation is at the heart of education. The two are inseparable! One does not exist without the other. Thus, being open to diverse ideas, perspectives and practices will drive our appetite to open-up to new possibilities, to novel discoveries that can lead to new insights to make a positive contribution to our students, our graduates, all of those working in education but also society as a whole.

Sandra Abegglen, Chrissi Nerantzi, Antonio Martínez-Arboleda, Marianna Karatsiori, Javiera Atenas, and Chris Rowell

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The collection has been generously supported by the Imagination Lab Foundation through the Playful Hybrid Higher Education project (<https://playhybrid.education/>) led by Sandra Abegglen and situated in the School of Architecture, Planning and Landscape at the University of Calgary.

Thanks go also to #creativeHE of which we, the editors, are all part of and that has acted as supporter of the creative AI collections from the very beginning. The #creativeHE community hosts all calls and dissemination activities for the AI collections on their website:

<https://creativehecommunity.wordpress.com/>

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GenAI Student Outputs

GenAI outputs by students for
their learning

A model for AI

in Technology Enhanced Assessment and Formative Assessment processes

FEDERICA PICASSO, PHD STUDENT

UNIVERSITY OF TRENTO

ITALY

ANNA SERBATI, ASSOCIATE PROFESSOR

DANIELE AGOSTINI, ASSISTANT PROFESSOR

UNIVERSITY OF TRENTO

ITALY

Description of your learning resource or course:

The model represents a design that considers AI's role in the assessment and feedback processes and interactions between academics and students. The theoretical basis of the model are founded on Assessment for Learning, Sustainable and Authentic Assessment theories (Sambell, McDowell, & Montgomery, 2013; Gulikers et al., 2004; Boud, 2000), and on the framework of Activity Theory (Engeström, Miettinen & Punamäki, 1999; Kaptelinin & Nardi, 2006). The model is designed to facilitate the integration of AI into assessment processes within the context of Higher Education, thereby promoting sustainable and effective practices. This approach enables students to derive learning benefits from the assessment process itself.

The model is composed of two levels of adoption:

- AI Mediated Assessment: The focus is on technology-enhanced assessment techniques, leveraging AI to provide fast, tailored, informed and meaningful feedback (Webb, 2023).
- AI Mediated Formative Assessment: The level focuses on the power of AI in assessment and feedback to monitor the whole learning process and lead formative design activities, as well as student and peer assessment processes (Mollick and Mollick, 2023; OpenAI, 2023).

Context in which the learning resource was created:

The research is developed in the context of the University of Trento's Teaching and Learning Centre: the theorisation and the validation of this AI assessment model could represent a

milestone of new research lines, scaffolding institutional change and bringing innovation to teaching and assessment practices.

AI tool(s) used:

ChatGPT, Claude.ai, Copilot

Explanation of the process followed:

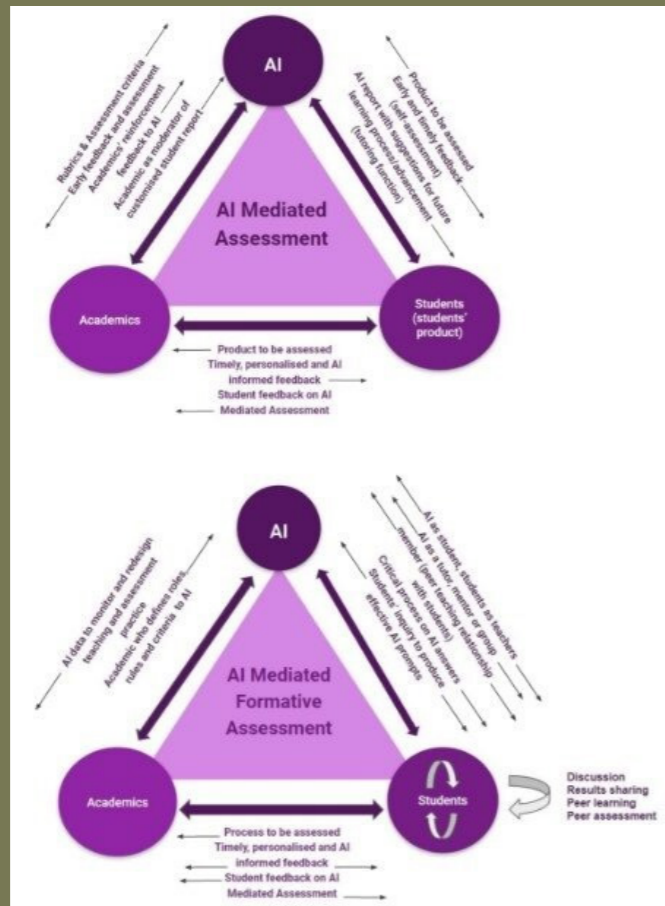
The model was created without the use of GenAI: it is based on the use of AI to enhance assessment and feedback processes in Higher Education context and it promotes practical actions, interactions and roles through which AI could be involved in the assessment, feedback and formative design processes.

Key learnings and recommendations for others:

The model proposes an overview of the activity of using AI in assessment processes. The triangulation of subjects of the actions, mediators and the interactions between them. AI acts as the technological mediator between academics and students. It also mediates the interactions between students and their own products. In fact, AI can cover a constructive role, helping teachers with the development and implementation of early feedback and assessment and, at the same time, play a guiding role to support students' assessment processes. It can also act as a students' peer, or as a memory of the processes, collecting feedback from the academics and students and improving its resources.

Links for more information:

<https://chat.openai.com/share/6b34eab1-78c2-468d-8e5d-94cdd99fbc39>



AI-Mediated Summative Assessment level and AI-Mediated Formative Assessment level

Relevant literature resources

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