

ASCILITE 2023

People, Partnerships and Pedagogies

Modifying assessment tasks to ensure learning occurs in the era of artificial intelligence.

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The launch of ChatGPT 3.5 in November 2022 has had a profound influence on teaching and learning from both students' and staff members' engagement. It is unclear how students are engaging with AI in creating submissions for assessments tasks, potentially impacting their learning. It is also unclear how educators are modifying their assessment design and how this may be impacting the learning outcomes of their cohorts. University systems run at a slow pace meaning that policies, course and program changes are not able to engage at the rate staff need in order to respond to this new technology. Staff have been left to deal with the use of AI in assessment tasks, often with little guidance or sufficient digital skills to make relevant changes or modifications.

This workshop will focus on the role of Artificial Intelligence (AI) and assessment. Participants will be given structured activities to understand and develop activities that provide learning for students without being compromised by artificial intelligence. They will apply their learning in the workshop to an assessment they are using or plan to use.

Keywords: Artificial Intelligence, Assessment, SAMR

Background

AI has had a significant impact on many industries over the last few years including architectural design (Bölek et al., 2023; Pena, et al., 2021), visual arts (Caramiaux & Fdili, 2022; Santos, et al. 2021), customer service (Song, et al., 2022) and marketing (Mehta et al., 2022; Vlačić et al., 2021). Since the launch of ChatGPT 3.5 late in 2022 there have been reports in the literature that this AI tool can pass legal (Choi et al., 2023; Mazurek, 2023) and medical (Humar, 2023) exams, provide answers to most questions posed in education and has been either banned or explicitly acknowledged as an issue that is of critical importance in schools and higher education institutions.

Whilst staff and students may not be universally aware of the capacities of AI, leadership of institutions have been working to consider the ramifications of AI tools in the learning space (Malinka et al., 2023; Ouyang et al., 2022). Staff have been left to deal with the use of AI in assessment tasks, often with little guidance or sufficient digital skills to make relevant changes or modifications. University systems also run at a slow pace meaning that policies, course and program changes are not able to engage at the rate staff need in order to respond to this new technology.

AI generated text is created through a process of data harvesting and many clever algorithms which examine a large database for likely answers to questions posed of it. ChatGPT (OpenAI) behaves like a chatbot on the surface and has a text window in which users can type questions. The response to this question is vastly different than what you might encounter in a typical search engine, providing clearly articulated text written in good English, similar to the dialogue you might genuinely expect from a human. Whilst ChatGPT does not 'know' what it is writing in the same way we do, it has been trained to mimic a human (Ariyaratne et al., 2023). It is relatively easy to subvert AI detection tools such as those in common tools in higher education such as Turnitin. We need to focus on learning (Al-Husseiny, 2023; Sullivan et al., 2023) rather than 'catching' violations of academic integrity and to do that our focus must be on assessment.

Objectives

In this workshop we will engage with common assessment types and assess how 'broken' they may be in our courses when students have access to AI. Participants will work in groups, first to analyse the potential weaknesses of a task, identify what learning outcomes the task aims to measure and then create a new task that will not have those weaknesses. We will use the SAMR (Substitution, Augmentation, Modification, and Redefinition) approach to frame the changes made to the assessment tasks. The specific learning outcomes are

that participants will be able to:

1. Analyse existing assessment tasks with an understanding of how AI might subvert the intention of the tasks,
2. Demonstrate the use of SAMR in examining and changing assessment tasks, and
3. Design different assessment tasks to embrace or resist AI that ensure learning.

The intended audience for this workshop are any members of a higher education institution, either professional or academic staff who are involved in course design or run assessments for their students. No prior knowledge of artificial intelligence is required, and groups will be formed that have varying levels of expertise with this technology.

Workshop Structure – Presentation Mode: Face-to-face (5 – 50 Participants) Structure (half day workshop)

Item	Time Required (Total 3 hours)	Detail
Ice breaker activity	10 mins	Mentimeter quiz to get people talking to each other and to get a feel for the expertise in the room
Introduction	20 mins	Discussion of AI and its impact to date. Example of assessments which are easily subverted by AI
AI Design Task Part 1	35 mins	Participants will be able to choose from a variety of different assessments and in groups work together to try and make them ‘AI proof’ and ensure that the learning outcomes intended are delivered
Discussion	20 mins	Participants will come together to share their findings
Summary and break	15 mins	Results will be summarised and placed in context with the facilitators research and learnings articulated. This will prepare participants for task 2.
Break	10 mins	Facilitator will list a series of guidelines based on his work and the discussion,
AI Design task Part 2	30 mins	Analyse individual assignments and apply some aspects of SAMR. Participants will identify key aspects of AI resilient assessments and apply them to their own task.
Discussion	20 mins	Group discussion on what principles participants have applied to their design and
What I’m doing?	10 mins	My approach to ensuring learning occurs with my assignments
Questions and (some) answers	10 mins	

Where participants don’t have access to technology eg for Mentimeter, an equivalent no-technology task will be allocated.

What do you need to bring?

Attendees need to bring one assignment they’d like to work on with regard to AI, but a mobile device that can run ChatGPT or other AI tools relevant to your discipline would be helpful. Group work will use butchers’ paper, markers and sticky notes, but the use of AI tools devices will add to the depth of discussion.

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