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Information Sheet - Part 1 of 2

Assessment and Artificial Intelligence

Contemporary approaches to assessment are holistic, valuing graduate attributes such as critical thinking, collaboration, communication and problem-solving skills alongside disciplinary knowledge, skills and application.

Designing assessment tasks

Here are some assessments tasks that minimise academic integrity concerns arising from improper use of artificial intelligence (AI) tools such as ChatGPT.

PROBLEM-SOLVING TASKS

Create tasks that require students to apply critical thinking, creativity, and problem-solving skills to real-world scenarios.

HANDS-ON ACTIVITIES

Encourage hands-on activities that allow students to apply what they have learned and demonstrate their understanding in a tangible way.

GROUP PROJECTS

Design group projects that allow you to observe and assess the process of collaboration, communication, and interpersonal skills, and the individual and team contributions. Reduce the evaluative weight on the final artifact in favour of the process.

AUTHENTIC ASSESSMENTS

Create assessments that reflect real-world tasks and situations, rather than rote memorisation or multiple-choice questions.

Portfolios: Collection of student's work that showcases their skills and knowledge over time (Pebblepad).

Performance tasks: Hands-on activities that require students to apply the theory they have learned to real-world situations (Practicals and Labs).

Oral presentations: Students present information or ideas verbally and receive feedback on their delivery and content (synchronous or asynchronous).

Peer review: Students evaluate each other's work and provide constructive feedback (using a rubric designed by you).

Self-reflection: Students reflect on their own learning process and evaluate their own strengths and areas for improvement.

Case studies: Students analyse real-life situations and make decisions based on the information provided.

Project-based learning: Students complete an authentic project that requires them to use multiple skills and knowledge areas.

Simulations: Students participate in simulated real-world scenarios to test their understanding and decision-making skills.

Authentic exams: Exams that test students' understanding of real-world scenarios and their ability to apply knowledge in practical situations.

WIL learning: Students complete a WIL project that helps them apply the theory they have learned to their WIL.

Continuing assessment: Student's complete a number of smaller assessments that demonstrate their progression towards their larger final assessment.

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Information Sheet - Part 2 of 2

Assessment and Artificial Intelligence

Incorporating AI in assessment for learning

COMPARE AND CONTRAST

Students generate a number of different examples of a topic and then compare and contrast them to different authentic scenarios.

IMPROVE THE OUTPUT

Students generate an answer to a problem and then critique the answer by referring to peer reviewed literature and course content. Assessment is weighted towards the student evidencing this process (e.g. track changes), and less on the final output.

CRITIQUE

Students critique the output against your rubric.

RANK THE OUTPUT

Students ask AI a question and rank the responses and write a justification.

FACTUAL

Students generate answers to a problem and determine what is right and wrong.

DESIGN A RUBRIC

Students design a rubric to evaluate AI output.

Programmatic Assessment

Programmatic assessment may mitigate the risk to academic integrity from inappropriate use of artificial intelligence.

This approach considers individual assessment items as data points that provide information on learner performance and feedback, and there is a continuum of low to high stakes decisions across the whole program (course). Decisions regarding progression are based on these cumulative data points in combination with high stakes (e.g., invigilated or otherwise resource-intensive to deliver) assessment tasks.

In this way, the risk and impact of academic misconduct, such as improper use of AI, in low stakes assessment items is minimised whilst learning is optimised (assessment for learning) and course learning outcomes are assured (assessment of learning). For an excellent account of programmatic assessment see van Der Vleuten et al. (2018).

Additionally, programmatic assessment ameliorates some of the unintentional impacts of:

- traditional assessment approaches (such as multiple choice questions and essays),
- learning is driven by external rewards (extrinsic motivation rather than intrinsic),
- learning that is assessment and grade-centric, and
- limited opportunities for meaningful and actionable feedback.

Reference

van der Vleuten, C., Lindemann, I., & Schmidt, L. (2018). Programmatic assessment: The process, rationale and evidence for modern evaluation approaches in medical education. *Medical Journal of Australia*, *209(9)*, 386–388.