Authentic Assessment, Academic Integrity, and Artificial Intelligence

A guide for ECRS

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1. Authentic Assessment

Authentic assessment is an approach to evaluating a learner's knowledge, skills, and abilities in a real-world context that closely aligns with the tasks and challenges they would encounter in the relevant field or domain. It focuses on assessing students' ability to apply their knowledge and skills in authentic, meaningful, and relevant ways rather than relying solely on traditional methods such as multiple-choice tests or rote memorization.

> *In its most practical conceptualization, authentic assessment requires students to "use the same competencies, or combinations of knowledge, skills and attitudes, that they need to apply in the criterion situation in professional life" (Gulikers et al., 2004, p. 69).*

In authentic assessment, students are typically asked to complete complex tasks or projects that resemble real-world situations or challenges. These assessments often require students to demonstrate their understanding, problem-solving abilities, critical thinking skills, creativity, and communication skills. The emphasis is on the process as well as the final product, allowing students to showcase their abilities through hands-on activities, simulations, presentations, portfolios, performances, or other forms of tangible outputs.

The key characteristics of authentic assessment include:

- **Real-world relevance**: The tasks and challenges presented to students reflect the types of problems they would encounter in authentic, professional, or real-life contexts. This ensures that the assessment is meaningful and applicable beyond the classroom.
- **Higher-order thinking skills**: Authentic assessment tasks focus on assessing students' ability to analyse, synthesize, evaluate, and apply their knowledge in complex and practical ways. It goes beyond simple recall and memorization of facts.
- **Process-oriented**: Authentic assessment emphasizes the learning process rather than just the final outcome. It assesses how students approach and engage with a task, including their decision-making, problem-solving strategies, and reflection on their own learning.
- **Multiple measures:** Rather than relying on a single test or examination, authentic assessment can use a variety of methods and sources of evidence to evaluate students' performance. Assessment methods can include observations, interviews, portfolios, self-assessments, peer assessments, and feedback from experts in the field.
- **Student-centred:** Authentic assessment actively involves students in the assessment process, allowing them to have a say in the tasks, criteria, and standards for evaluation. It promotes self-reflection, self-assessment, and self-regulation of learning.

Overall, authentic assessment has gained prominence in higher education settings as it permits more comprehensive assessment of students' abilities while encouraging deeper learning and preparing students for real-world challenges. Below is a comparison of traditional versus authentic assessment (Abdao, 2015):

Traditional assessment	Authentic assessment
Serves to determine student success in acquiring knowledge; ascribe a grade for student against standards or other learners.	Serves to provide various means and opportunities for students to learn and demonstrate what they have learned.
Provides a snapshot of what the students know.	Reveals what students can do with what they know.
Measures students' knowledge of the content.	Evaluates students' ability to apply knowledge of the content in real-life situations or in meaningful ways.
Provides indirect evidence of learning.	Provides direct evidence of learning/competency; direct demonstration of knowledge and skills by performing relevant tasks.
Requires students to practice cognitive ability to recall/recognize/reconstruct body of knowledge that has been taught.	Provides opportunities for students to construct meaning/new knowledge out of what has been taught.
Teachers assess; students are assessees.	Involves and actively engages the students in the teaching, learning, assessment, and feedback process.

2. Innovative Assessment

Authentic assessment aligns with constructivist pedagogical approaches that emphasize active learning, problem-solving, and the application of knowledge in authentic contexts. See our guide **'How to Design Marketing Assessments'** for more on the principles of good assessment and devising assessment using constructive alignment. As such, authentic assessments tend to draw on innovative assessment practices that actively engage students with learning resources, fostering critical thinking and providing authentic learning experiences (Boud & Soler, 2016). However, implementing authentic assessment also presents challenges during assessment design. Therefore, innovative assessment should be designed with these challenges in mind.
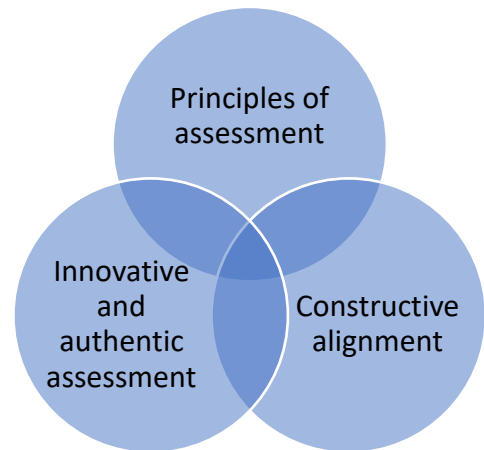
Some common approached to authentic assessment and questions you should ask yourself include:

1. **Case study analysis:** Present students with a real or simulated business case and ask them to analyse the situation, identify key issues, propose solutions, and justify their recommendations.

   How will you assess the depth and quality of analysis and ensuring that students consider a range of perspectives?

2. **Marketing plan development:** Task students with creating a comprehensive marketing plan for a venture, including market research, financial projections, marketing strategies, and operational marketing plans.

   How will you assess the feasibility and viability of the marketing plan while accounting for creativity and innovation? How are creativity and innovation evidenced in the assessment?

3. **Simulated marketing or business scenario**: Use simulations or role-playing exercises where students take on specific roles within a simulated business environment and make decisions based on market dynamics, financial constraints, and competitive forces.

   How will you provide adequate support and feedback throughout the simulation to facilitate learning and reflection?

4. **Consulting project:** Engage students in real-world consulting projects where they work with local businesses or organizations to solve specific marketing challenges or provide recommendations.

   How will you manage the varying expectations and timelines of external clients while maintaining academic rigor and assessment fairness?

5. **Marketing campaign design:** Have students develop a comprehensive marketing campaign for a specific product or service, including market analysis, target audience identification, branding, messaging, and media planning.

   How will you ensure the alignment of marketing strategies with business objectives and evaluating the effectiveness of the campaign?

6. **Financial analysis and reporting in marketing strategy:** Ask students to analyse financial statements, evaluate investment opportunities, and prepare financial reports and recommendations based on real or simulated company data.

How will you assessing students' ability to interpret financial data accurately and make informed decisions to support marketing decision making?

7. **Business ethics dilemma**: Present students with ethical dilemmas commonly faced in business settings and require them to analyse the situation, consider alternative courses of action, and justify their ethical choices.

   How will you assess the depth of ethical reasoning and understanding of ethical principles?

8. **Negotiation exercise:** Create a negotiation scenario where students negotiate with each other or with external stakeholders, simulating real business negotiations.

   How will you assess students' negotiation skills, ability to collaborate, and finding a balance between process and outcomes?

9. **Market research project**: Task students with conducting primary and secondary research to gather market data and insights, and then ask them to analyse the findings and make recommendations based on the research.

   How will you assess the rigor and validity of the research methods used and the ability to synthesize and interpret data effectively?

10. **Pitch:** Have students develop and deliver a pitch for a new product, brand, or business idea, including a value proposition, target market analysis, competitive analysis, and revenue model.

    How will you assess the persuasiveness of the pitch, the viability of the business idea, and the students' ability to communicate effectively?

To address these challenges, innovative authentic assessment requires careful planning, clear guidelines, and ongoing support to ensure successful execution. Consider the following when designing authentic assessments:

☐	Ensuring alignment	Align assessments with learning outcomes and program objectives to ensure relevance and coherence.
☐	Time management	Authentic assessments can be time-consuming for both students and faculty, so careful planning and clear expectations are necessary.
☐	Student experience	Design assessments to foster student motivation, participation, depth of learning and access to information throughout task to support a positive student experience.
☐	Consistency	Establish clear criteria and rubrics to ensure consistency in assessment and grading across different sections or instructors.
☐	Resource availability	Some authentic assessments may require additional resources, such as access to industry partners, business data, or specialized software.
☐	Assessment validity and reliability	Ensure that authentic assessments are designed to measure what they are intended to measure reliably and effectively.
☐	Assessment authenticity	Strive to create assessments that closely resemble real-world tasks and challenges but acknowledge the limitations of the classroom context.
☐	Feedback and support	Provide timely and constructive feedback throughout the assessment process to facilitate learning and improvement.
☐	Staff experience	Design assessment instruments (e.g., assessment rubrics) which shorten marking time, enhance transparency of judgement, and contribute to effective feedback.
☐	Scalability	Consider the scalability of authentic assessments, especially when dealing with large class sizes or limited resources.
☐	Assessment fairness	Design assessments that provide equal opportunities for all students to demonstrate their abilities, considering diverse learning styles and backgrounds.
☐	Reflection and metacognition	Encourage students to reflect on their learning experiences, self-assess their strengths and areas for improvement, and develop metacognitive skills.

3. Academic Integrity and Artificial Intelligence

Academic integrity is defined as a commitment to six core values: honesty, trust, fairness, respect, responsibility, and courage (International Centre of Academic Integrity, 2021).

As assessment is increasingly conducted online, the absence of invigilation or proctoring and the prevalence of generative artificial intelligence (AI) tools pose important treats to academic integrity.

For example, generative AI tools like ChatGPT, Google Bard, or Microsoft Bing Chat generate human-like text, making it easier for students to potentially plagiarize or submit work that is not their own. These tools can create original content, essays, or even answer exam questions, which raises concerns about academic honesty and the authenticity of student work.

Generative AI tools can potentially undermine the principles of academic integrity in the following ways:

- **Plagiarism**: Students can misuse generative AI tools to generate content that appears to be original but is, in fact, plagiarized. This challenges the notion of academic honesty and the assessment of students' individual knowledge and skills.
- **Originality and authenticity**: With AI tools capable of generating content, it becomes more challenging to differentiate between genuinely original work and work produced with the assistance of AI. This can compromise the authenticity of students' contributions and the value of academic assessment.
- **Assessment reliability**: Generative AI tools can introduce uncertainties in the reliability of assessment results. If students rely heavily on AI-generated content, the assessment may not accurately reflect their true abilities or understanding of the subject matter.

While authentic assessment is not a fool proof solution to the challenges posed by generative AI tools, designing generative AI into the assessment can help to address some of these concerns with:

- **Emphasis on application and process:** Authentic assessment focuses on assessing students' ability to apply knowledge and skills in real-world contexts. By designing assessments that require critical thinking, problem-solving, and the application of knowledge, it becomes more difficult for students to rely solely on AI-generated content.
- **Personalized and contextualized assessments**: Authentic assessment can be tailored to individual students or specific contexts, making it harder for AI tools to provide generic, ready-made answers. Personalized tasks and projects can showcase students' unique perspectives, insights, and abilities that AI tools may struggle to replicate.
- **Performance-based assessment**: Authentic assessment often involves students actively engaging in tasks or projects, demonstrating their skills through tangible outputs such as presentations, portfolios, or simulations. This hands-on approach makes it more challenging for AI-generated content to replace genuine student work.
- **Assessment design and variation**: By utilizing a variety of assessment methods and incorporating elements such as in-class exams, practical exercises, and collaborative projects, faculty can mitigate the impact of AI tools by creating assessments that require real-time thinking and demonstration of skills.

Incorporating AI into assessment
Embracing the use generative AI into assessment can enhance authenticity in various ways:

- **Real-world relevance:** By incorporating generative AI tools into assessments, we can mirror the evolving business landscape where AI technologies are increasingly prevalent. This allows students to gain practical experience in using AI tools that are relevant to their future careers.
- **Authenticity in data analysis**: Generative AI tools can assist students in analysing large datasets, identifying patterns, and generating insights. This aligns with the data-driven decision-making skills required in many business roles, such as marketing analytics or financial analysis.

- **Simulation of business scenarios**: AI tools can enable the creation of realistic business scenarios or simulations, providing students with hands-on experience in solving complex problems and making informed decisions. This enhances the authenticity of assessments by replicating real-world challenges.
- **Innovation and creativity:** AI tools can foster innovation by enabling students to generate novel ideas, explore new possibilities, and develop innovative solutions to business problems. This encourages entrepreneurial thinking and creativity, which are highly valued in the business world.

Activities in which generative AI might increase authenticity.

Some examples of assessment where the use of generative AI might increase the authenticity of an assessment include:

- **Market research and analysis**: Students can leverage generative AI tools to collect, analyse, and interpret market data, enabling them to generate comprehensive insights for marketing strategies, market segmentation, or consumer behaviour analysis.
- **Financial forecasting and modelling**: AI tools can assist students in developing sophisticated financial models, performing predictive analytics, and generating accurate financial forecasts based on historical data, market trends, and economic indicators.
- **Marketing strategy and planning**: Students can utilize generative AI tools to simulate and analyse different business scenarios, helping them develop strategic plans, evaluate market opportunities, and optimize resource allocation.
- **Data-driven decision-making**: Generative AI tools can be employed in case studies or business simulations, allowing students to make data-informed decisions based on realistic scenarios and large datasets.

It is crucial to acknowledge that addressing the impact of generative AI tools on academic integrity requires a dynamic and multifaceted approach. This includes educating students about responsible AI use. You might consider indicating to students how generative AI tools can be used in a given assessment and making them aware of the boundaries between ethical and unethical use in the given context. Additional facets of this approach might include institutional solutions to detecting AI generated content and ongoing adaptations to assessment methods to ensure academic integrity.

Some points you might consider are:

☐	Academic integrity	Clear guidelines and policies must be established to prevent misuse of AI tools and ensure students' work remains authentic and aligned with academic integrity standards.
☐	Ethical considerations	Discussions surrounding the ethical implications of AI and its impact on society should be incorporated into the learning process, helping students understand the responsible and ethical use of AI technologies.
☐	Skill development	While generative AI tools can automate certain tasks, it is crucial to ensure that students still develop essential skills such as critical thinking, problem-solving, and data interpretation, rather than solely relying on AI-generated outputs.
☐	Training and support	Adequate training and support must be provided to both faculty and students to effectively use generative AI tools in assessments. This includes providing guidance on tool selection, data interpretation, and critical analysis of AI-generated outputs.
☐	Access and equity	Considerations should be given to students' access to generative AI tools, as unequal access may create disparities among students and impact their learning experience.
☐	Continuous evaluation of the assessment	As AI technology evolves rapidly, the effectiveness and impact of generative AI in assessments should be continuously evaluated and monitored to ensure its ongoing relevance and alignment with learning outcomes. For more on evaluating assessment, see our guide **'How to Guide on Designing Assessments'**.

Ultimately, authentic assessment can contribute to promoting academic integrity, but it should be accompanied by comprehensive strategies and measures to prevent misuse of AI tools and maintain the trust and validity of academic assessments.

References

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