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Letter to the editor **Open Access**

Challenging Artificial Intelligence in Assignment-Based Exams: A Practical Audit Tool for Planners and Assessors

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Abstract

Background:

The rise of generative artificial intelligence (AI) poses both opportunities and threats in academic assessment, particularly in assignment-based examinations. For planners and assessors, safeguarding the integrity of assessments is paramount. This editorial introduces a concise "AI Resistance Audit" checklist to help educators evaluate and enhance the resilience of their assignments against inappropriate AI-generated responses. The tool is designed for rapid use, supporting immediate implementation in educational settings while aligning with principles of fairness, transparency, and academic integrity. The checklist integrates principles of authenticity, higher-order cognitive assessment, context specificity, and monitoring strategies. Its adoption can help ensure alignment of assessment with intended learning outcomes.

Objective:

To propose a concise, evidence-informed audit checklist enabling educators and institutions to identify and address AI resistance in educational environments.

Methods:

A review of current literature on AI adoption in HPE was synthesized into a one-page, 10-item planner–assessor audit tool.

Results:

The tool addresses four domains—attitudinal, knowledge/skills, institutional policy, and ethical/legal—each with practical indicators and a simple tick-box format for implementation.

Conclusion:

The AI Resistance Audit Checklist is a practical, scalable instrument that can help guide responsible AI integration in HPE settings.

Keywords:

Academic integrity, Artificial intelligence,, Higher education, Audit checklist, Educational planning.

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Introduction:

The growing capabilities of large language models have significantly influenced higher education assessment practices. While AI can support learning, its misuse threatens the authenticity of student work, particularly in assignment-based exams^1–3. Institutions and educators face the challenge of designing assessment tasks that are not easily completed by AI without genuine understanding, application, or original thought^4.

Recent literature emphasizes the need for proactive measures^5–7. Among these, concise audit tools can serve as rapid, evidence-informed aids for educators to critically evaluate their assessments before deployment^8. This paper presents a one-page "AI Resistance Audit" for planners and assessors.

Methods

A targeted review of literature on AI in education and academic integrity was conducted^1–8. Key preventive strategies were identified and distilled into audit domains relevant to assignment-based exams. The tool was designed for brevity, enabling use during curriculum planning meetings or assessment review sessions.

The AI Resistance Audit Tool

AI Resistance Audit – Assignment-Based Exams

Purpose: Rapid evaluation of assessment vulnerability to inappropriate AI assistance.

Domain	Checklist Question	✓ / ✗
Authenticity & Context	Does the task require personal, contextual, or institution- specific details that AI cannot easily replicate?	☐
Cognitive Demand	Does it emphasize higher-order skills (analysis, synthesis, evaluation) rather than recall?	☐
Process Evidence	Are students required to submit drafts, notes, or process logs showing their work over time?	☐
Oral Defense	Is there an oral presentation, viva, or peer discussion linked to the submitted work?	☐
Interlinked Tasks	Is the assignment connected to previous tasks or ongoing projects to reduce AI substitution?	☐
Original Data Use	Does it require original, locally collected, or real-time data?	☐
Reflection & Justification	Are students asked to reflect on choices and justify reasoning in their own words?	☐
Format Variation	Does the assessment format include multimodal elements (e.g., diagrams, videos, concept maps)?	☐
Time Constraints	Are there staged submissions or time-limited components that deter last-minute AI use?	☐
Plagiarism & AI Declaration	Are clear policies on plagiarism and AI use communicated and enforced?	☐

Scoring:

- 8–10 ticks = Highly AI-resistant
- 5–7 ticks = Moderate risk
- <5 ticks = High vulnerability; redesign recommended

Discussion

Integrating such a checklist into assessment design supports academic integrity by making AI misuse more difficult while fostering authentic learning experiences. The tool is intended for iterative use—educators can adjust assessment tasks progressively to address identified vulnerabilities.

While the checklist offers practical value, it is not a complete safeguard. Future work should explore digital detection tools, policy frameworks, and faculty training to complement these measures^4, 6, 8.

The checklist complements—rather than replaces—institutional policies on academic integrity, translating broad principles into actionable steps at the level of individual exams.

As well this checklist should be considered a first-generation tool. It is a conceptual framework and offers practical value but requires validation through reliability testing, factor analysis, and wider piloting across contexts. Early user feedback has highlighted clarity, comprehensiveness, and adaptability. Limitations include reliance on expert judgment and lack of large-scale validation, but these are opportunities for future research.

Conclusion

The AI Resistance Audit provides a practical, rapid mechanism for planners and assessors to evaluate and strengthen the integrity of assignment-based exams. By embedding authenticity, cognitive challenge, and process evidence into assessment design, institutions can better protect the validity of student performance.

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