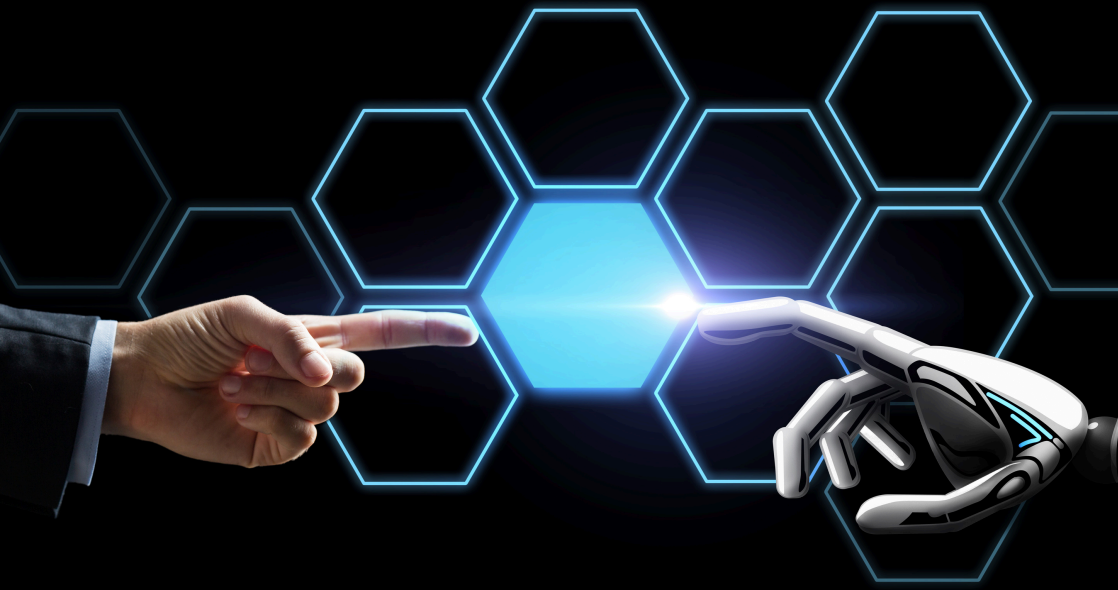
AI-DRIVEN DEEP LEARNING ASSESSMENT FRAMEWORK



A REPLICATION GUIDE

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This guide provides a plug-and-play structure for lecturers to implement the AIDD framework across subjects. Each stage contains its purpose, suggested workflow, prompt template, sample applications implemented in International Business (IB) and Foreign Market Entries (FME), and tips for lecturers. It is designed to be simple and adaptable — working especially well for text-intensive subjects such as business, humanities, and social sciences, while still being easily applied across a broad range of disciplines, including STEM and creative fields.

Figure 1 below illustrates the five-stage implementation of the AIDD learning assessment framework.

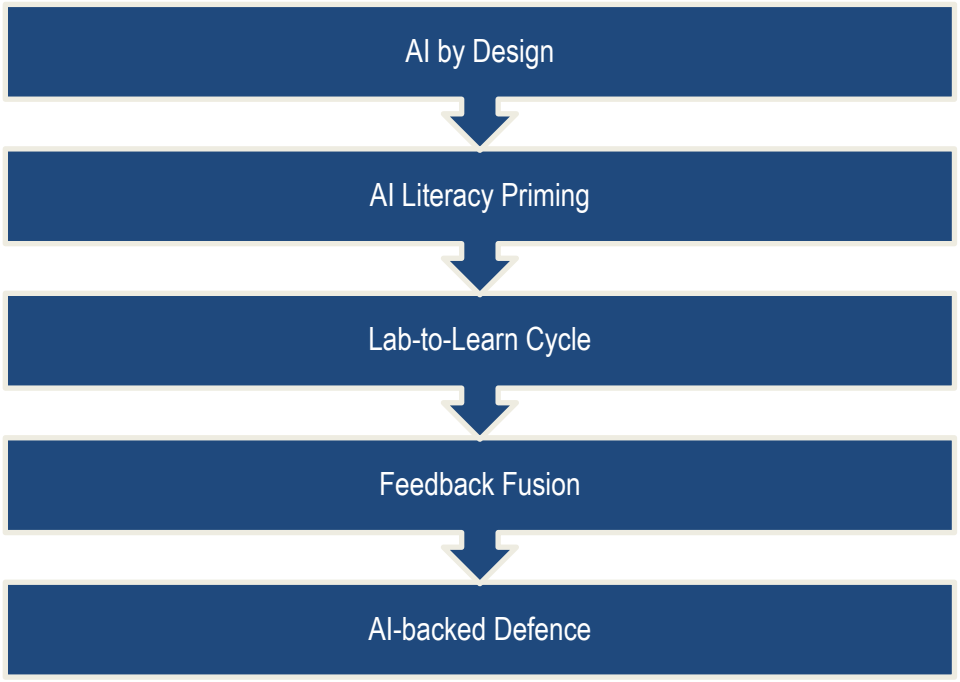

Figure 1 The five-stage implementation of the AI-driven deep learning assessment framework

Implementation Notes

1. AI Appendix should be made compulsory for all assignments.
2. AI as scaffold, not substitute: AI handles outlines, checks, and ideas; students handle synthesis and judgment.
3. Rubrics must reward both AI-use transparency and human critical reasoning.

Stage 1 — AI by Design

Purpose: Design assignments that explicitly embed AI tools while ensuring academic integrity.

Suggested workflow:

1. Draft assignment and rubric.
2. Get peer and AI feedback for clarity, CLO alignment, and to ensure the assignment cannot be easily copy-pasted.
3. Revise rubric to include AI-use documentation and evaluation criteria.

Prompt template (for lecturers):

"I am designing an assignment for [*subject/course*]. Review this draft and suggest improvements to ensure alignment with learning outcomes, fair workload, and clear AI-use requirements.

"Act as a [*insert subject*] lecturer. I am designing an assignment for my subject [*insert subject name*]. Use the attached draft assignment for context. The assignment must follow the attached replication guide. The total marks should be [*insert total assignment marks*].

The assignment should emphasize [*insert Bloom's taxonomy*] domain. Update the content to fit my subject's chapters and course learning outcomes.

CLO for reference: [*insert CLO here*]

Reference chapters: [*insert chapters here*]

Existing assignment: [*attach existing assignment to modify based on AIDD framework*]

Replication guide: [*attach replication guide*]"

Sample applications:

Lecturer provides basic assignment plan to AI with AI to refine it and make it resistant to copy-paste misuse

1. IB: AI suggests that rubric includes marks for AI-simulated classroom activity and penalties for uncritical AI use.

2. FME: AI suggests that the rubric includes marks for AI appendix, verification of AI outputs, and integration with real data.

Tips:

- Build critical analysis checkpoints into rubric through written reflections.
- Require AI Appendix (prompts + outputs + highlights on sections used in report).

Stage 2 — AI Literacy Priming

Purpose: Train students to use AI responsibly before starting assignments.

Suggested workflow:

1. Run AI Student Literacy Workshop.
2. Teach prompt engineering basics, APA citation of AI, and ethical use.
3. Require students to practice creating an AI Appendix.

Prompt template (for students):

"I am studying [*topic*]. Generate a simple explanation and provide examples. Highlight one part I should fact-check."

Sample applications:

1. **IB:** Students use AI to create cultural framework explanations or political risk summaries, then fact-check with academic sources.
2. **FME:** Students use AI to list Malaysian firms suitable for expansion, then verify company profiles using credible references.

Tips:

- Model one weak vs strong prompt in class.
- Run a quick quiz on AI ethics and documentation.

Stage 3 — Lab-to-Learn Cycle

Purpose: Support iterative drafting with AI and peer collaboration.

Suggested workflow:

1. Students draft an outline with AI and begin preparing Draft 1.
2. Lecturer briefly moderates Draft 1 using AI assistance.
3. Draft 1 undergoes peer review among students.
4. Students revise Draft 1 into Draft 2.

Prompt template (for students):

"Here is my outline for [*assignment topic*]. Suggest missing points, gaps in reasoning, and questions I should address."

Sample applications:

1. **IB:** Students draft framework-based analysis of sociocultural, sustainability, political, and legal forces.
2. **FME:** Students create screening tables with AI, then verify GDP, culture, and competition data before revising country choice.

Tips:

- Encourage peer review of AI outputs to detect errors.
- Insert “human-only checkpoints” (e.g., draft reflection without AI).

Stage 4 — Feedback Fusion

Purpose: Pre-evaluation with lecturer validation.

Suggested workflow:

1. Students use AI to conduct pre-grade scoring and obtain basic feedback using marking rubrics.
2. Students revise Draft 2 into their final report.
3. Lecturer pre-evaluates final report with AI assistance.
4. Lecturer finalises marks and adds deeper comments.

Prompt template (for lecturers):

"I need to grade this student's assignment using the attached rubric. For each rubric section, give a score and a 1–2 sentence reason with a short quote (if possible). If a section is missing or off-topic, give 0 and say why. Spot logic gaps, repetition, vague claims, and weak synthesis. Check flow and use of evidence across sections. Review AI use per policy without "detection" claims. Note signs like style shifts, generic filler, uncited or fake references, and copy-paste risk. Judge evidence of learning and real application. End with 3–5 concrete fixes, a short student note (≤120 words), and the final total mark.

Rubric: [*Attach rubric*]

Assignment: [*Attach assignment*]"

Prompt template (for students):

"I need you to act as my lecturer. Use the attached rubric to suggest marks for each section and provide constructive feedback to improve my draft."

Sample applications:

1. **IB:** AI checks that all four forces are covered. Lecturer provides deeper insights on application of frameworks.
2. **FME:** AI checks if all five screenings are covered. Lecturer verifies economic data accuracy and integration of evidence.

Tips:

- Add specific feedback where AI reliance is evident.
- Always cross-check AI's rubric scoring and override if evidence or reasoning is weak.

Stage 5 — AI-Backed Defence

Purpose: Develop students' ability to defend work in real-world settings.

Suggested workflow:

1. Lecturer with AI assistance generates potential questions for Q&A from final report.
2. Students prepare for Q&A with AI assistance.
3. Students present their findings based on the final report.
4. Lecturer and peers ask additional questions.
5. Students defend in live sessions.
6. Peers ask additional questions.

Prompt template (for lecturers):

"Based on this student report, generate 10 probing questions that test their ability to justify evidence, defend analysis, and reflect on weaknesses."

Prompt template (for students):

“Act as my lecturer. Read my report and create 5 –10 challenging questions I might face during the Q&A session. For each question, give me a short hint or key point that can help me answer it better. Focus on testing my understanding, pointing out weaknesses, and asking for clarification where my explanations may be unclear.”

Sample applications:

1. **IB:** Students defend how external forces affect chosen company.

   AI suggestion: AI simulates probing Q&A on cultural frameworks, political risks, and sustainability efforts.

2. **FME:** Students justify final country choice (e.g., Australia).

   AI suggestion: Probe reasons for the elimination of other countries in the list.

Tips:

- Focus grading on articulation and reflection, not memorisation.
- Encourage peers to use AI to generate cross-examination questions.