DIGITAL EDUCATION COUNCIL

Scaffolding AI in Teaching

A Practical Guide to Advancing and Evaluating AI Use in Teaching

By the DEC 2026 Teaching with AI Working Group

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Contributors



Jennifer Sparrow
Chair, DEC 2026 Teaching with AI Working Group
Associate Vice President, Research and Instructional Technology & Chief Academic Technology Officer
New York University

DEC 2026 Teaching with AI Working Group Delegates

Ariadna Padrós Estivill
Technology-Enhanced Learning Consultant at Esade Center for Excellence in Teaching & Learning (CTL)
Esade

Artemis Preeshl
Director of the Center for Teaching, Innovation, & Research and Coordinator of High Impact Practices
Adams State University

Carla Barreiros
Head of the Centre for Project Based Learning
IT:U Interdisciplinary Transformation University Austria

Carlos Jensen
(Former) Associate Vice Chancellor for Educational Innovation
University of California, San Diego

Csaba Csáki
Head of the Artificial Intelligence Integration Centre
Corvinus University of Budapest

Dale Pike
Associate Vice Provost for Technology-Enhanced Learning and Online Strategies
Virginia Tech

Diego Alejandro Patiño Guevara
Dean of the Faculty of Engineering
Pontificia Universidad Javeriana

Elsa Beatriz Palacios Corral
Director of Educational Innovation and Digital Learning
Tecnológico de Monterrey

Erfan Mojaddam
(Former) Deputy Chief Academic Technology Officer
University of California, Berkeley

Fleur Dumont
Learning Designer
Vlerick Business School

Giuseppe F. Italiano
Professor of Computer Science and Deputy Rector of Artificial Intelligence and Digital Skills
LUISS Guido Carli University

Irene Talavera Fabra
Director of Academic Models and Digital Transformation
Universidad Europea

Jiaxin Wu
Deputy Director of Learning Technologies
University of Nottingham Ningbo China

DEC 2026 Teaching with AI Working Group Delegates

João Couvaneiro
Director of the Pedagogical Innovation and E-Learning Department
Egas Moniz School of Health & Science

John Rachlin
Associate Teaching Professor
Northeastern University

Josie Milliken
Dean of Distance Education
Pima County Community College District

Juana Mendenhall
Vice Provost of Academic Innovation & Learning and Walter E. Massey Professor of Physical Sciences
Morehouse College

Karyn Rastrick
(Former) Director, Digital Innovation and Strategy
University of Waikato

Kenrick Cabrera
Chief Technology Officer
Oxford International Education Group

Konstantinos Diamantaras
Professor, Department of Information and Electronic Engineering; Vice Rector of Internationalization and Digitalization
International Hellenic University

Loïc Plé
Full Professor, Strategy and Sustainability; Director of Teaching and Learning
IÉSEG School of Management

Luke Dowden
Vice Chancellor for Digital Learning and Transformation
Alamo Colleges District

Lynn Fong
Senior Director and Registrar; Director, Centre for Learning & Teaching Excellence
Ngee Ann Polytechnic

Magdalena Cantabella Sabater
Director of Digital Competences, Vice-Rectorate for Virtual Education
Universidad Católica San Antonio de Murcia

Maggie Mosher
Assistant Research Professor at the Achievement & Assessment Institute
University of Kansas

Martina Pasquini
Associate Professor of Strategy and Director of Learning Innovation
IE University

Michael Pazinas
Acting Director; Pedagogical Innovation Specialist, Center for Educational Innovation
Zayed University

Michelle Valerie Di Leo
Learning Innovation Designer & Project Manager
Bocconi University

Nina James
Academic Director, Joint Education Institutes
Adelaide University

Paul Gallacher
Academic Lead, Apprenticeships
Walbrook Institute London

Rupendra Paliwal
Provost and Chief Academic Officer
Bryant University

Sherri Braxton Castanzo
Deputy CIO for Digital Innovation
Bowdoin College

DEC 2026 Teaching with AI Working Group Delegates

Silvana Balarezo
Digital Learning Experience Manager
Universidad Peruana de Ciencias Aplicadas (UPC)

Silvana Pérez Läherinta
Specialist of Digital Learning
Aalto University School of Business

Simon Sheather
(Former) Dean, Gatton College of Business and Economics
University of Kentucky

Sonja Strydom
Deputy Director (Academic Development & Research) at the Centre for Learning Technologies
Stellenbosch University

Sorabh Bajaj
Director of the Centre for Digital Learning
FLAME University

Stephanie Long
Associate Dean for the Faculty Center for Learning Innovation (FCLI)
Austin Community College District

Stephen Manitta
Director
Victoria University

Stian Reimers
Professor of Psychology; Academic Director for Digital Education and Innovation for the School of Health and Medical Sciences
City St George's, University of London

Susan Benvenuti
Head of Academic Quality Assurance, Graduate School of Business Administration
Wits Business School

Tawnya Means
(Former) Assistant Dean for Educational Innovation and Chief Learning Officer
Gies College of Business, University of Illinois at Urbana-Champaign

Thomas James Tiam-Lee
Director for AI Integration and Assistant Professor
De La Salle University

Vincent Liardi
Global Marketing Lead for Industry Engagement & Advocacy
Pearson Education Limited

Yeo Wee Loon
Senior Assistant Director, Faculty Development
Singapore Management University

Executive Summary

AI use cases in teaching are expanding quickly, but adoption remains uneven. Faculty differ significantly in their readiness to use AI, while institutions are still working out which use cases create meaningful educational value and which may introduce new risks or weaken learning.

The **DEC 2026 Teaching with AI Working Group** developed this report to bring greater structure to that landscape. Its central contribution is a taxonomy framework that helps educators and institutions understand where AI can be applied across teaching. The framework also identifies appropriate entry points for faculty at different levels of readiness.

The framework maps AI use across **seven domains** and **four levels of application**: Entry-Level, Intermediate, Advanced and Expert. The progression reflects how substantially AI changes both the underlying teaching practice and the expertise required to implement it effectively.

The intention is not to push every educator towards the highest level, but to provide a scaffold that allows adoption to progress in line with faculty readiness and institutional capability.

The report also introduces an **evaluation framework** built around three dimensions: Impact, Risk and Resources. Considered alongside the four levels of AI application, these dimensions provide a structured way to evaluate and prioritise different practices. The framework also emphasises the need to scaffold learning itself. AI use should be designed in a way that is appropriate for the learner journey.

Part II of the report translates the framework into practice through a **Use Case Bank**, with real-world use cases drawn from various teaching contexts. This Use Case Bank aims to provide practical reference points for educators seeking to adapt similar approaches within their own courses or institutions.



Bringing Structure to Teaching with AI

The Expanding Scope of AI in Teaching

The use of AI in teaching and learning now spans a broad and rapidly expanding range of practices. Educators are using AI across a growing range of teaching activities, from lesson design and classroom use to assessment and feedback. Institutions are also investing in the capabilities and support structures needed to enable effective faculty use.

As experimentation grows, so do the number and diversity of use cases available to educators. Yet these practices are often developed in isolation from one another. Without a shared structure for organising these use cases, it can be difficult for educators and institutions to understand how different approaches relate to one another and build on each other's work. Mapping the landscape of teaching with AI can therefore provide a common language through which practices can be positioned and progressively developed across the sector.

Faculty Are Starting from Different Levels of Readiness

Educators are approaching AI from very different starting points. Some are already experimenting with sophisticated applications, while others are encountering these tools for the first time and require accessible, low-risk entry points. A single set of recommendations is therefore unlikely to meet the needs of all faculty.

Supporting meaningful adoption requires a scaffolded approach that recognises different levels of confidence and readiness, while creating clear pathways for educators to progress from initial experimentation towards more advanced practice.

The Challenge of Evaluating AI Use Cases

A further challenge is determining which uses of AI are appropriate and whether they translate into meaningful learning impact.

According to the Digital Education Council AI in Higher Education Global Survey 2026, early student evidence already points to the need for more careful evaluation. Some students report becoming dependent on AI to produce better work, while also feeling that they retain less when they rely on it. At the same time, 24% say that the integration of AI into their courses feels largely new or novel, with limited learning benefit.

A further 42% describe their experience of AI in courses as only somewhat helpful, rather than leading to a more substantially enhanced or transformed learning experience.

These findings underline an important distinction between the presence of AI in teaching and its educational value. Educators are increasingly presented with a large number of possible applications, but the sector has yet to establish mature and widely applicable approaches for assessing which uses genuinely improve learning.

The Teaching with AI Taxonomy Framework

The DEC 2026 Teaching with AI Working Group developed a framework to organise the growing range of AI use cases in teaching and learning across seven domains and four levels of application.

The framework is designed to serve two purposes. First, it provides a shared structure for understanding where AI is being used across the teaching process. Second, it gives faculty at different levels of AI readiness a more appropriate point of entry, while showing how practice can progress towards more advanced applications over time.

Rather than treating teaching with AI as a single category of practice, the framework recognises that adoption takes place across different parts of teaching and at different levels of sophistication.

Seven Domains of Teaching with AI

The seven domains emerged from mapping AI use across the teaching cycle. The Working Group recognised that effective adoption also depends on the capabilities behind that cycle.

At the core sits Faculty Development & Institutional Capability. This is the enabling foundation of the framework. It reflects the fact that meaningful adoption of AI in teaching depends on the capability of faculty and the institutional conditions that support it.

Surrounding this core are five domains that broadly follow the arc of teaching, from course preparation through to feedback and student support. Together, they capture the main areas in which AI is being applied across teaching and learning.

Inclusivity, Accessibility & Equity encloses the framework. It acts as a continuous guardrail across all domains.

Figure 1. Seven Domains of Teaching with AI



Table 1. Seven Domains of Teaching with AI

	Domain	Description
	**1. Faculty Development & Institutional Capability**	The enabling foundation for teaching with AI. This domain covers how institutions build faculty AI capacity, alongside the organisational resources needed to sustain adoption. It also considers how transparent and responsible AI use builds student trust and shapes institutional culture.
	**2. Lesson Preparation & Course Development**	The use of AI in designing and refining courses before teaching takes place. This includes support for learning materials, course structures, syllabi, rubrics, curriculum review and course redesign.
	**3. Content Delivery & In-Class Engagement**	The use of AI to support how learning is delivered and experienced during teaching. This includes classroom activities, simulations, interactive exercises and other forms of AI-enabled engagement in live or asynchronous settings.
	**4. Assessment & Assessment Design**	The use of AI in shaping assessment approaches and responding to the new conditions created by AI. This includes the design of authentic, AI-aware assessments and practices that make student learning more visible.
	**5. Feedback & Grading**	The use of AI to support the feedback and grading process while retaining appropriate academic oversight. Applications may help faculty provide targeted feedback at scale and identify patterns in student learning.
	**6. Student Support**	The use of AI to extend support beyond formal teaching interactions. This includes tutoring support, study planning, guidance tools and systems that help institutions respond to emerging student needs.
	**7. Inclusivity, Accessibility & Equity**	A cross-cutting domain that applies across the framework as a whole. It considers whether AI-enabled practices improve access and equitable participation, while also drawing attention to the risk of new forms of exclusion.

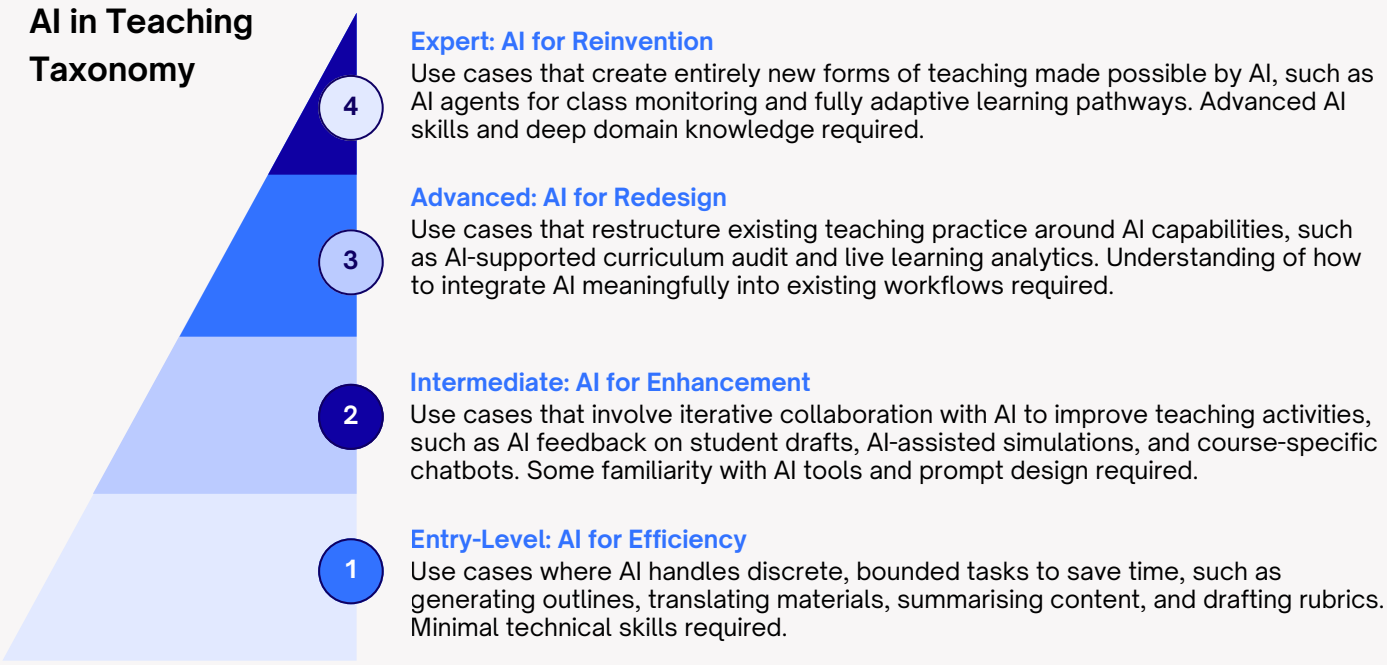
The Four-Level Progression

Domains 2 to 7 are further organised across four levels of AI application. These levels provide faculty with different entry points depending on their current proficiency in integrating AI into teaching.

The progression reflects both how substantially AI changes the underlying teaching practice and the level of expertise required to implement it effectively. At the earlier levels, AI is used for clearly bounded tasks that are accessible to faculty with limited experience. At more advanced levels, AI begins to reshape existing approaches or enable new forms of teaching, requiring greater proficiency in the use of AI.

Faculty Development & Institutional Capability (Domain 1) is not organised using the same four-level progression. Instead, it acts as the enabling domain that supports movement across the framework. Institutional initiatives within this domain can be aligned to faculty AI proficiency and readiness as those capabilities develop.

Figure 2. AI in Teaching Taxonomy



The progression is what makes the framework a scaffold rather than a menu of disconnected use cases. Educators and institutions can enter at a level that reflects their current readiness and move towards more advanced applications as capability develops through practice.

Each level includes a set of practical use cases that educators can refer to as examples of how AI may be applied in different domains. Part II of this report presents the full Use Case Bank, with implementation detail for highlighted institutional case studies.

Evaluating AI Use Cases

Not every use of AI improves learning, and a practice that works in one context may not work in another. The question is whether a use case creates sufficient educational value and is feasible to implement, without introducing unacceptable risks. As practices expand across the sector, educators and institutions need a structured way to assess which use cases are worth adopting.

The DEC 2026 Teaching with AI Working Group identified three dimensions for evaluating AI use cases: *Impact, Risk and Resources.*

Impact

Impact is the anchor of the evaluation and a use case should be judged first on its educational value.
As practices and innovation expand, educators increasingly ask for evidence before investing in new approaches.

Measuring impact, however, remains one of the hardest parts of evaluation. It is often multidimensional and may require a mixed approach, drawing on indicators such as assessment outcomes, learner experience, teaching effectiveness and employability across both short- and long-term outcomes.

Risk

Risks can be deal-breakers. Before weighing a use case further, educators and institutions can apply an initial go/no-go filter and screen out applications with unacceptable risks, however high their potential impact.

Beyond these deal-breakers, other risks, such as copyright and coherence in curriculum, can be better treated as a set of gaps that need to be managed before implementation.

Resources

AI can be costly to implement, and adoption may draw on infrastructure, applications, financial investment and personnel support.

More complex use cases may also require substantial planning and change management throughout implementation. This dimension keeps the framework grounded in what an institution can realistically deliver and sustain.

Table 2. Guiding Questions for Evaluating AI Use Cases Across Dimensions

Dimension	Criterion	Guiding Question
Impact *Is it worth doing?*	Learning Value	Does AI improve learning outcomes and push students towards higher-order thinking?
	Cognitive Challenge	Does the use case maintain “desirable difficulty” so students still have to struggle to think?
	Student Creativity & Judgement	Does the activity leave room for student creativity and judgement?
	Developmental Fit	Is the level of AI use appropriate for the learner’s stage of development?

Dimension	Criterion	Guiding Question
Risk *How much risk does it carry?*	Human Oversight	Is there a human-in-the-loop for important decisions such as grading or feedback?
	Student Accountability	Are students responsible for producing, interpreting, or defending the work?
	Transparency	Are students and faculty clearly informed when and how AI is used, and how their data may be processed by AI tools?
	Policy Compliance	Does the use follow institutional policies and relevant regulations?
	Equitable Access	Do all students have access to the AI tools required for this activity?
Resources Required *How many resources are needed?*	Usability	How much effort is required for faculty, staff, and students to learn and use this tool effectively?
	Scalability	How much extra support and coordination would scaling this approach need?
	Sustainability	How much ongoing investment is required to maintain this approach (cost, maintenance, vendor dependency)?
	Infrastructure Support	What level of institutional infrastructure and technical support is required to implement this use case?

The criteria under each dimension are intended to be adapted to institutional context. Institutions may weigh criteria differently based on their priorities and policy context, or set aside those that do not yet apply. For example, one institution may prioritise equitable access, while another may defer policy compliance until a formal AI policy is in place.



How to Use the Evaluation Framework

1 Assess the three dimensions

Rate the use case across Impact, Risk and Resources, using a 4-point scale, where 1 is low and 4 is high.

The criteria under each dimension are prompts for judgement, not a checklist to score mechanically. The aim is to form an overall assessment of the use case in context. Different educators may reach different ratings, reflecting differences in course and institutional conditions.

Impact
Is it worth doing?

Risk
How much risk does it carry?

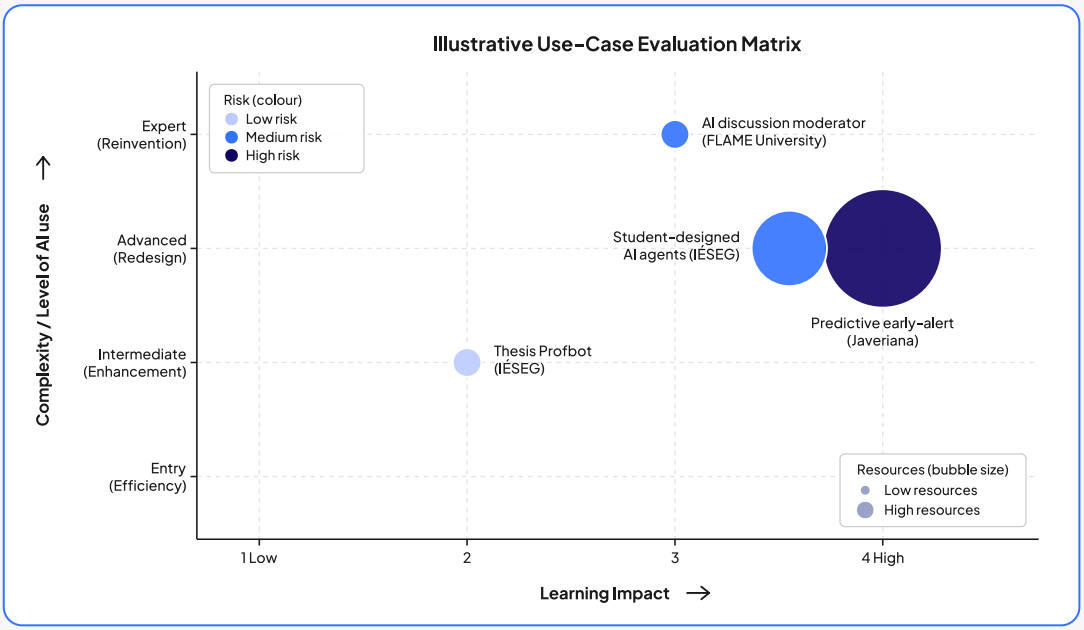
Resources
How many resources are needed?

2 Plot the use case on the matrix

Use the ratings to position the use case:

- **Horizontal axis – Impact: the expected benefit to teaching or learning.**
- **Vertical axis – Level: the level of AI application, from Entry-Level to Expert.**
- **Bubble size – Resources: the level of effort and investment required.**
- **Bubble colour – Risk: the level of risk that needs to be managed.**

Plotting multiple use cases creates a common view for comparison and prioritisation.



3 Interpret the trade-offs

Use the position of each use case to guide the decision. For example:

Quick wins
High impact, low resources and low risk: quick wins for early adoption.
Small, pale bubble on the right

Plan for it
High impact, high resources: longer-term investments that require planning.
Large bubble on the right

Mitigate first
High risk: requires mitigation before adoption, regardless of potential impact.
Dark bubble, wherever it sits

Deprioritise
Low impact: low priority and potentially not worth pursuing.
Bubble towards the left

The matrix does not identify a universally optimal use case. It provides a structured way to judge which applications are most appropriate for a specific course or institutional context.

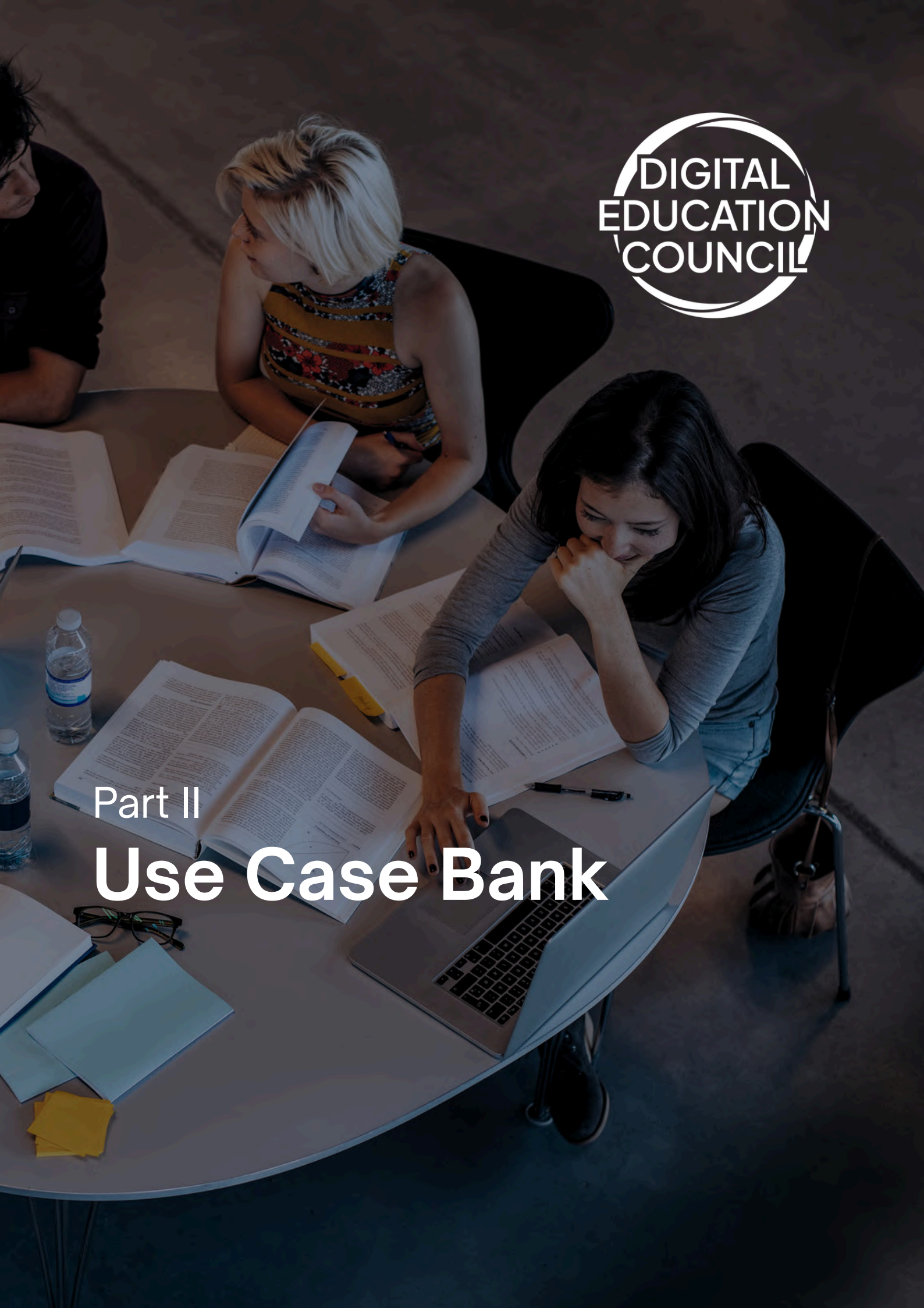
Scaffolding Learning with AI

When evaluating AI use cases, educators and institutions should ask whether AI's role is appropriate for the learner's current stage and whether it supports progression towards the capabilities the course is intended to build. Institutions should also proactively review AI use across the programme to address disconnected or contradictory approaches and ensure a coherent progression in learning.

Scaffolded learning is therefore an important consideration before adoption. Drawing on pedagogical frameworks such as Bloom's Taxonomy, AI use cases should be designed in relation to the learner journey, with the role and level of AI changing as students develop. The aim is to preserve the productive struggle through which learning is built.

The same use case may therefore be appropriate in one context and unsuitable in another. A tool that risks bypassing foundational reasoning for an early-stage learner may be entirely appropriate for a more advanced student. Evaluation should consider not only what the use case does, but when it is introduced and whether the productive struggle remains with the learner.





Part II

Use Case Bank

Use Case Bank

Domain 1: Faculty Development & Institutional Capability is a foundational domain. It is not mapped to the four levels.

1. Faculty Development & Institutional Capability Use Cases			
1	Short AI upskilling workshops for faculty	**8**	Student-faculty co-creation of AI tools
2	AI literacy courses for staff/faculty	**9**	Prompt libraries and discipline-specific case repositories
3	Leadership AI competency training	**10**	Safe AI sandbox environments for faculty experimentation
4	AI teaching community of practice (cross-departmental)	**11**	Infrastructure & resources for AI adoption
5	AI course redesign workshop (collaborative, multi-stakeholder)	**12**	Teaching grants tied to AI integration initiatives
6	Addressing faculty inertia: mindset and emotional readiness programmes	**13**	AI literacy test as gateway to institutional AI tool access
7	Discipline-specific AI clinic sessions		

Domains 2–7: Use Cases by Taxonomy Level

	2. Lesson Preparation & Course Development	3. Content Delivery & In-Class Engagement	4. Assessment & Assessment Design	5. Feedback & Grading	6. Student Support	7. Inclusivity, Accessibility & Equity
Expert: AI for Reinvention	• AI-driven full course generation with human co-design • Autonomous curriculum adaptation based on real-time learning analytics	• AI moderator for asynchronous discussions • AI-generated personalised learning pathways for students	• AI agent for interactive student evaluation • Continuous competency mapping	• Real-time formative feedback embedded within learning activities	• AI-driven holistic student success platform integrating academic, wellbeing and career data • Personalised AI learning companion that evolves with the student across semesters	• Fully personalised accessible learning environment adapting to each student's profile in real time
Advanced: AI for Redesign	• AI-supported curriculum audit against learning outcomes • Curriculum audit against external/accreditation standards • AI learning experience designer for course design	• Live learning analytics on engagement • Create course-level digital twins of faculty • Collaborative group work orchestrator with individual contribution tracking • AI-driven XR simulations for professional skill practice • Student-designed AI tools	• AI support for authentic, real-world assessment design • Personalised / adaptive assessments tied to individual student goals • Process-based assessment design: grading the learning journey	• Feedback loops for instructors (where teaching needs adjustment) • Personalised feedback at scale using rubrics	• Predictive analytics for early intervention • Proactive engagement-based nudge and early outreach system • Course sequencing and planning based on performance across semesters	• Adaptive content delivery based on individual learning needs and preferences

Domains 2–7: Use Cases by Taxonomy Level (continued)

	2. Lesson Preparation & Course Development	3. Content Delivery & In-Class Engagement	4. Assessment & Assessment Design	5. Feedback & Grading	6. Student Support	7. Inclusivity, Accessibility & Equity
Intermediate: AI for Enhancement	• Generate alternative formats (podcasts, videos, summaries) • AI-supported content updates using latest data • Course alignment checks • AI review of course plans against institutional requirements • AI analysis of course evaluations to guide redesign • Open Educational Resources (OER) integration and AI-assisted development of supplemental materials	• AI-driven simulations (role-play, immersive experience) • Gamified activities generated by AI • Real-time micro-assessments in class • AI-powered Socratic questioning tools	• Generating examples of flawed student work for student critique • Matching assessment activities to learning goals and competencies • AI-first draft with student critique and reflection as the graded output	• AI analysis of faculty's own feedback for bias, tone and constructiveness • AI feedback on student drafts before submission • AI-generated remediation resources for each student, based on rubric performance • AI-generated supplemental materials for class-wide knowledge gaps	• Course-specific tutor chatbots trained on teaching materials • AI study planner within LMS • FAQs chatbot for student services	• Bias detection in content • AI-powered live translation and transcription • AI audit of assessment instruments for cultural or linguistic bias
Entry-Level: AI for Efficiency	• Generate course outlines and teaching materials • First-draft creation of rubrics • Rapid generation of discipline-specific examples • Syllabus generator with built-in AI policy options • AI-assisted writing of measurable learning objectives • AI-generated slides from session topics	• AI-generated discussion prompts tailored to session topic • Quick AI-generated recap of previous session for class start	• AI-assisted generation of assessment and quiz questions • Generating multiple versions of the same exam • AI-generated practice questions for student self-testing • Per-assessment AI use declaration policy	• Learning gap identification from student work • Generate solution sets for student self-assessment	• AI-generated study guides from course materials	• Convert materials into multiple formats • AI-generated alt-text and image descriptions for course materials • Content translation and adaptation

Institutional Use Case Highlight

IÉSEG School of Management
Integrating Student-Designed AI Agents into a Business Simulation

Domain: Content Delivery & In-Class Engagement

Level: Advanced (AI for Redesign)	**Maturity**: Piloting
Impact score: 4/4	**Resources required**: 3/4

The Practice
Students designed and calibrated their own AI assistant to support decision-making during a marketing business simulation. The aim was to use AI as part of the learning process without allowing it to replace student judgement. Rather than receiving an instructor-built chatbot, each team had to define the agent's role and how it should support strategic reasoning.

How It Works
Students were asked to:

- identify the analytical needs of their team
- define the role of the AI assistant
- decide how the AI should interact with users
- integrate relevant marketing theories
- establish rules for uncertainty and hallucinations
- test and refine the agent during the early simulation rounds

The agent was framed as a cognitive partner rather than a decision engine. It was expected to question assumptions, connect decisions to theory, and support reflection. The instructor could also review each group's AI environment, creating visibility into how students prompted and checked AI during the simulation.

Evidence of Impact
Student feedback showed that AI was generally used as support rather than as a substitute for judgement:

- 41% reported relying mostly on their own judgement
- 54% combined their own judgement with AI guidance
- 5% were uncertain about their level of reliance

Students reported the strongest benefits in:

- understanding complex reports
- structuring their thinking
- generating strategic ideas

The instructor also observed clear differences between teams that used AI reflectively and those that delegated too much cognitive effort.

Risks & Mitigation

- **Cognitive delegation:** Students might allow AI to make strategic decisions.
  - ***Mitigation***: Students were required to explain and defend decisions and connect them to theory.
- **Hallucinations and inaccurate outputs:** Students might trust AI-generated analysis without verification.
  - ***Mitigation***: Students were trained to verify outputs and design agents that acknowledged uncertainty.
- **Technical and organisational complexity**: Managing multiple AI environments required substantial instructor coordination.
  - ***Mitigation***: Dedicated accounts and structured implementation procedures were used.

FLAME University

AI Moderator for Asynchronous Online Discussions

Domain: Content Delivery & In-Class Engagement

Level: Expert (AI for Reinvention)	**Maturity:** Scaling
Impact score: 3/4	**Resources required:** 1/4

The Practice

Asynchronous discussions support critical thinking and engagement beyond class, but LMS forums face recurring challenges: delayed feedback that disrupts momentum, declining participation over the semester and repetitive posts that limit diverse viewpoints. Monitoring threads, identifying struggling students and facilitating dialogue also demand increasing faculty time as classes grow.

FLAME University introduced an AI moderator to act as an extension of the instructor's teaching voice, bringing the benefits of live, facilitated dialogue into a flexible asynchronous space.

How It Works

FLAME used the AI Moderator platform (developed by SmartLearning.dk), which is built around the Community of Inquiry framework. The system reads student posts and adds targeted prompts to strengthen teaching presence, while leaving the thinking and interaction to students.

Key features include:

- **Custom discussion design**: faculty set the learning objectives, topics and rules the AI should follow when guiding discussion
- **Real-time feedback**: students receive instant, personalised feedback and probing questions to deepen their reasoning
- **Inclusive participation**: AI tracks who is contributing and nudges quieter students to take part
- **Adjustable moderation style**: the tone can be set to fit the discipline and the instructor's own voice
- **Analytics dashboard**: faculty receive discussion transcripts, engagement metrics and participation summaries

Evidence of Impact

FLAME conducted an eight-week randomised controlled trial with 156 undergraduates across four courses, split equally between AI-moderated discussions and traditional faculty-moderated forums.

- **Participation**: rose from 72% to 92% in the AI group, while it fell from 68% to 48% in the traditional group
- **Activity**: 4.2 vs. 2.3 posts per student per week; the reply-to-post ratio doubled (2.8 vs. 1.4)
- **Depth:** posts were 60% longer (285 vs. 178 words), peer citations more than doubled (+118%), and thread reply depth rose by 78%
- **Diversity of views**: Perspective Diversity Index of 4.0 vs. 2.5, the strongest effect in the study
- **Satisfaction**: 4.2 vs. 3.1 overall, with higher ratings for feedback quality (4.3 vs. 3.2) and access to learning support (4.4 vs. 2.9)

Faculty time also shifted from routine thread monitoring towards curriculum development.

Risks & Mitigation

- **Data privacy and algorithmic bias**
  - ***Mitigation***: The implementation uses sandboxed, vetted enterprise infrastructure with privacy safeguards. The model is configured to filter harmful content and make AI work transparent.

IÉSEG School of Management
Marketing Thesis Profbot

Domain: Student Support

Level: Intermediate (AI for Enhancement)	**Maturity:** Established
Impact score: 2/4	**Resources required:** 1/4

Link to the bot: https://chatgpt.com/g/g-qaqLCtQh2-ieseg-marketing-thesis-profbot

The Practice
Writing a master's thesis places students in an unfamiliar long-term project where expectations may not always be clear and questions can arise throughout the process. Thesis directors are also not always available to provide immediate support.

In late 2023, IÉSEG's Marketing Department developed a custom GPT that allows students to ask common questions directly and receive guidance at their own pace, while remaining within the school's thesis requirements.

How It Works
The custom GPT was built as a Retrieval-Augmented Generation chatbot using documentation on academic writing, APA 7 formatting and the Marketing Department's thesis requirements.

- Institutional documentation is used as the primary source.
- Public web sources may be used when an answer cannot be found in the provided documentation.
- Suggested questions structure interactions around common friction points in the thesis-writing process.
- Answers include a disclaimer asking students to double-check information with their thesis advisor where there is doubt or room for interpretation.

Evidence of Impact
Qualitative evidence:

- Students have provided verbal feedback about the convenience of the chatbot and the reassurance of having this support available.

Quantitative evidence:

- The chatbot has held more than 1,000 conversations with students since its launch.
- It has a 4.2/5 star rating.
- Initially launched in the Marketing Department, the chatbot was quickly adopted in other programmes within the school.

Risks & Mitigation

- **Answers deviating from school requirements**
  - ***Mitigation*:** Institutional documentation is used as the primary source, with public sources as a secondary source.
- **Over-reliance and cognitive surrender**
  - ***Mitigation*:** An explicit disclaimer reminds students to double-check information with their thesis director.

Pontificia Universidad Javeriana

Predictive Analytics for Early Identification of At-Risk Students

Domain: Student Support

Level: Advanced (AI for Redesign)	**Maturity:** Scaling
Impact score: 4/4	**Resources required:** 4/4

The Practice

Student retention and academic success are major priorities in engineering education. Traditional support mechanisms often identify students at risk only after academic difficulties have become significant.

Pontificia Universidad Javeriana has been exploring predictive analytics and AI to identify students who may require academic support at an earlier stage, enabling proactive intervention and more personalised support.

How It Works

The initiative combines historical academic data, enrolment information, course performance indicators, and behavioural patterns to identify students who may be at risk of academic difficulties.

The system supports:

- Early identification of at-risk students.
- Targeted outreach by academic advisors.
- Data-informed decision-making by programme directors.
- Personalised support strategies.
- Monitoring of intervention effectiveness.

Importantly, AI is used as a decision-support tool rather than an autonomous decision-maker. Human judgement remains central throughout the process.

Evidence of Impact

Qualitative evidence:

- Improved visibility of student risk factors.
- Enhanced capacity of academic advisors to prioritise interventions.
- Greater use of evidence-based decision-making.

Quantitative evidence:

- Predictive models capable of identifying students requiring support before critical academic outcomes occur.
- Increasing institutional adoption of learning analytics for student success initiatives.

Risks & Mitigation

- **Privacy and data protection concerns**
  - ***Mitigation*:** Compliance with institutional policies and applicable regulations.
- **Algorithmic bias**
  - ***Mitigation*:** Continuous monitoring and validation of predictive models.
- **Over-reliance on automated recommendations**
  - ***Mitigation*:** Human review and decision-making remain mandatory.
- **Student perception of surveillance**
  - ***Mitigation*:** Transparent communication regarding objectives and data use.

IÉSEG School of Management
AI Day for Faculty

Domain: Faculty Development & Institutional Capability

Maturity: Established

Impact score: 3/4 | **Resources required:** 1–2/4

The Practice
As faculty roles evolve with the rapid development of AI, IÉSEG organised an AI Day for faculty at its Lille campus in January 2026.

Rather than a conventional training day, the event was designed to give faculty an opportunity to discuss and think more deeply about AI-related challenges across teaching and research, including AI's implications for students' learning experiences and the development of knowledge and skills.

How It Works
The day included:
- a presentation of IÉSEG's overall AI strategy by institutional leadership
- a guest talk from the Digital Education Council on the impact of AI on academia
- two parallel workshop sessions, one in the morning and one in the afternoon
- networking and informal exchange between faculty

Faculty could choose from 14 workshops, with seven options offered in each session. The programme combined research-focused and teaching-focused sessions, alongside broader discussions on ethics.

Formats ranged from roundtables and World Café discussions to hands-on build labs and live demonstrations. Topics included: AI, copyright and ethics, building a custom assessment tool, AI agents in business games, GenAI for student dialogue, cognitive friction and AI-free learning spaces, designing AI-resilient exercises, GenAI as a teaching partner, low/no-code app building, AI avatars and course videos, and VR-supported public speaking practice. The programme and schedule were themselves developed using AI tools, including NotebookLM, to demonstrate possible applications before the event.

Evidence of Impact
Qualitative evidence:
- Participants reported highly positive feedback on the event and workshops.

Quantitative evidence:
- More than half of IÉSEG permanent faculty attended the day (about 100 attendees in total)
- Six new AI-related projects emerged from the day.

Risks & Mitigation
- **Professors not registering for the day**
  - ***Mitigation***: Several rounds of communication, registration extensions and early sharing of the programme. Involving faculty directly in workshops also helped encourage participation.
- **Lack of professors sharing their practices in the workshops**
  - ***Mitigation***: IÉSEG drew on ongoing engagement with faculty to identify emerging practices and potential contributors, supplemented by a short call for workshop proposals.

Practices from the Wider DEC Community

Use cases shared by members across DEC working groups

Hong Kong University of Science and Technology

AI Co-designer: Hybrid-Intelligence Course Design

Domain: Lesson Preparation & Course Development

Level: Advanced (AI for Redesign) | **Maturity:** Piloting

The Practice

A platform that helps faculty make pedagogically sound decisions when designing or redesigning courses. It supports junior faculty and teaching and learning centres, and generates outcomes and syllabi aligned to institutional standards.

How It Works

Built on Retrieval-Augmented Generation using learning science and institutional policy. Faculty write intended learning outcomes using Bloom's Taxonomy. The platform then proposes aligned assessments and activities, with alignment checks built in. Every output comes with reflection questions, so faculty stay in control of the design.

Evidence of Impact

Three rounds of user testing involved faculty from all schools. Faculty found the outputs well-tailored to their courses, and some reported course planning time savings of up to 50%.

Hong Kong Baptist University

AI-Supported Experimental Design in Undergraduate Chemistry

Domain: Assessment & Assessment Design

Level: Advanced (AI for Redesign) | **Maturity:** Established

The Practice

In traditional "cookbook" labs, students followed instructions but could not explain their procedures. The redesign uses AI as a scaffold to make inquiry-based lab work achievable.

How It Works

After a workshop on responsible AI use, student groups use ChatGPT and Gemini to draft a lab manual for a real-world analytical problem. Instructors and professional chemists review the drafts for safety and feasibility. Students then run their own experiments with minimal guidance. Assessment is based on the final manual, which must justify design choices, and a group presentation.

Evidence of Impact

Student confidence in designing experiments rose, with the median response moving from Neutral to Agree. Early drafts copied vague AI outputs, but consultations turned these into lessons in verification. Staff observed students troubleshooting independently. Published in the Journal of Chemical Education (2026).

Practices from the Wider DEC Community

Use cases shared by members across DEC working groups

Tecnológico de Monterrey

TECgpt: Enabling Faculty to Build AI Learning Experiences at Scale

Domain: Faculty Development & Institutional Capability

Maturity: Scaling

The Practice

Commercial AI tools produced generic outputs and raised concerns about faculty agency and data sovereignty. Tec de Monterrey built its own platform, treating AI as a pedagogical medium rather than a standalone tool.

How It Works

TECgpt is a secure institutional AI platform. Faculty can create Skills (custom prompts that automate repetitive tasks) and Agents (conversational tools for teaching and learning). Pilots in 2025 were supported by training and communities of practice. In January 2026, access opened to more than 90,000 students and 9,000 faculty across 26 campuses.

Evidence of Impact

By December 2025, more than 1,394 faculty were actively using the platform. Faculty reported a 70% reduction in time spent on repetitive tasks, and satisfaction was 4.03/5. An open-source edition has been adopted by 27 institutions in 15 countries.

DIGITAL EDUCATION COUNCIL