جامعة الملك سعود
King Saud University
The Vice Rectorate for Educational and Academic Affairs
Center for Excellence in Learning and Teaching

Excellence Grants in Learning & Teaching — Tenth Cycle

Redesigning Learning Experiences by Integrating Artificial Intelligence into Evidence-Based Teaching Practices

The Center for Excellence in Learning and Teaching is pleased to invite faculty members to take part in the tenth cycle of the Excellence Grants. This cycle is dedicated to redesigning the learning experience in university courses in order to improve student learning, by employing evidence-based teaching practices and integrating artificial intelligence into them in ways that deepen student thinking rather than replace it.

The Transformation of Teaching and Learning in the Age of AI

The spread of generative AI has brought rapid change to the classroom. These tools can now complete much of what students were once asked to do, which makes it necessary to reconsider what students learn and how their learning is verified. Faculty members are observing the following in this context:

- **Polished outputs that do not reflect learning:** refined assignments that make it hard to verify the student's understanding and own effort.
- **Use that replaces thinking:** students turn to the tool to copy answers instead of testing their understanding and examining the reasoning.
- **Shallow, short-lived understanding:** learning that suffices to pass the exam, then fades.
- **Assessment that has lost some of its meaning:** tasks that once measured thinking can now be completed on the student's behalf.
- **Attendance without engagement:** students are rarely asked to make a decision and defend it before their peers.
- **A wish to improve, constrained by time:** finding a suitable practice and its sources consumes faculty members' effort.

The Idea of the Cycle

The cycle supports projects in which a faculty member applies a teaching practice with a documented scholarly reference in a course they teach, integrates AI where it adds clear educational value, and documents the effect on student learning during the second semester.

> **Guiding Principle**
> Improving student learning is the goal. AI is a means embedded in the structure of learning and assessment within the teaching practice, not an add-on. The impact is documented with evidence, and outstanding experiences are transferred to other courses.

From Using the Tool to Redesigning Learning

The cycle does not fund the use of technology for its own sake, but the shift it brings about in the student's role and in the nature of learning and assessment:

From…	To…
A student who consumes the tool's answer Copies what the tool provides without testing its accuracy or logic	**A student who uses it to learn and verifies its outputs** Practises with it, receives feedback, analyses cases, then makes their own decision
Assessment that can be done on the student's behalf Tasks that measure the final product, which the tool can easily produce	**Assessment that reveals thinking, judgement and justification** Tasks that show how the student reasoned and why they chose, not only what they produced
A lecture that transmits information The student listens and takes notes; their role is limited to receiving	**A learning environment where decisions are made and defended** The student applies knowledge to real situations and discusses decisions with peers
Passing use of a new technology A tool added to the course without changing how learning happens	**Deliberate design: when to use the tool and when to set it aside** Used where it deepens learning, excluded where it weakens independent understanding
An individual experience that ends with the semester Undocumented effort from which colleagues cannot benefit later	**A documented experience transferable to other courses** Evidence-supported impact that continues in the course and benefits colleagues

Approved Practices and the Proposed-Practice Track

Faculty members choose one of nine teaching practices, ranging from integrated methodologies to approaches and strategies, each supported by an Arabic-language reference pack from the Center; or they

propose another practice that meets three criteria: a scholarly reference describing its elements, published studies documenting its impact, and applications in higher education.

Active & Collaborative Learning	Problem, Project & Design	Applied & Experiential Learning
▪ Team-Based Learning (TBL) ▪ Process Oriented Guided Inquiry Learning (POGIL) ▪ Peer Instruction	▪ Problem-Based Learning ▪ Project-Based Learning ▪ Conceive–Design–Implement–Operate (CDIO)	▪ Simulation-Based Education ▪ The Case Method ▪ Course-Based Research Experiences

> Proposed-practice track: for faculty members who use an evidence-based practice in their discipline that is not on the list, and who wish to integrate AI into it in a way that adds clear educational value.

Project Elements in a Worked Example

Learning problem	Many students in a statistics course choose the wrong test for the data, as last year's results show.
Learning outcome	The student selects the appropriate statistical test and justifies the choice.
Practice	Team-Based Learning (TBL).
Role of AI	Generates analyses of real data containing realistic, ever-changing errors, providing practice cases the textbook cannot offer.
Student activity	Teams examine the analysis, uncover its errors, and announce and defend their decision before other teams.
Assessment	A controlled individual question without the tool, and a rubric for the quality of teams' justifications.
Documenting impact	Comparison with the previous cohort on the same question, plus a brief indicator from the students' perspective.

How Projects Are Judged

Projects are judged against three complementary criteria; their indicators and weights are detailed in the Guidelines and Procedures.

Criterion	What it means
Fidelity of implementation	Adherence to the practice's essential elements as set out in its scholarly reference
Value of integration	Linked to a specific outcome, changes what the student does, and assesses what the student learned, not what the tool produced
Educational impact	Evidence-supported improvement in learning: a defined outcome, a baseline, and a measurement tool

Support Provided and Expected Benefits

What the Center provides	What participants gain
▪ Financial support for the project ▪ An Arabic-language reference pack for each practice ▪ Guidance proposal templates with worked examples ▪ Three scheduled advisory sessions: practice design, AI integration, and measurement ▪ Help in obtaining comparison data within approved permissions	▪ Mastery of an evidence-based practice transferable to other courses ▪ Documented evidence for the teaching portfolio ▪ Publishable material in the scholarship of teaching and learning, with the Center's support ▪ Recognition of outstanding experiences and nomination for awards

From Application to Transfer

Participation passes through six stages, with the Center providing scholarly and advisory support at each one.

Stage	Description
1. Initial application	A brief proposal: the learning problem and its indicator, the practice, and the role and value of AI
2. Completion & plan approval	Completing the implementation and measurement plan with templates and scheduled sessions, then approval
3. Implementation	Running the project in the course during the second semester according to the approved plan
4. Mid-term report	A mid-semester review: what has been done, and what needs improvement?
5. Final report	What changed in student learning? Results and their evidence, including unexpected results
6. Showcase & transfer	Presenting the experiences and supporting the transfer of outstanding ones to other courses in the department and college

Application period	Initial application	Center support
1 November – 14 November 2026	Using the form on the Center's website	Funding, reference packs and scheduled advisory sessions

> For more information, please visit the website of the Center for Excellence in Learning and Teaching: celt.ksu.edu.sa