

Use of AI by teachers

Pedagogical practices and limitations

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Biography



Associate professor with « Habilitation à Diriger des Recherches » (HDR) Sousse University

Tunisia, A graduate of the University of Braunschweig in Germany

PhD was realized in collaboration with the University of Hannover in Germany.

Member of the International Scientific Council of Francophone Universities Agency

Head of the regional committee of scientific and socio economic experts North Africa AUF.

Two awards: First National Prize for Academic Excellence of the President of the Tunisian Republic (July 1998), Graduate Merit Award TU Braunschweig, Germany (October 1997).

Coauthor of the first Computer Sciences MOOC in Tunisia , deployed on FUN in 2015

Head of Pedagogical Innovation and digital learning Unit : [AUF Institutional Award for Pedagogical Innovation](#)

Vice President (for higher Education) of International Network for pedagogical innovation and Training of trainers

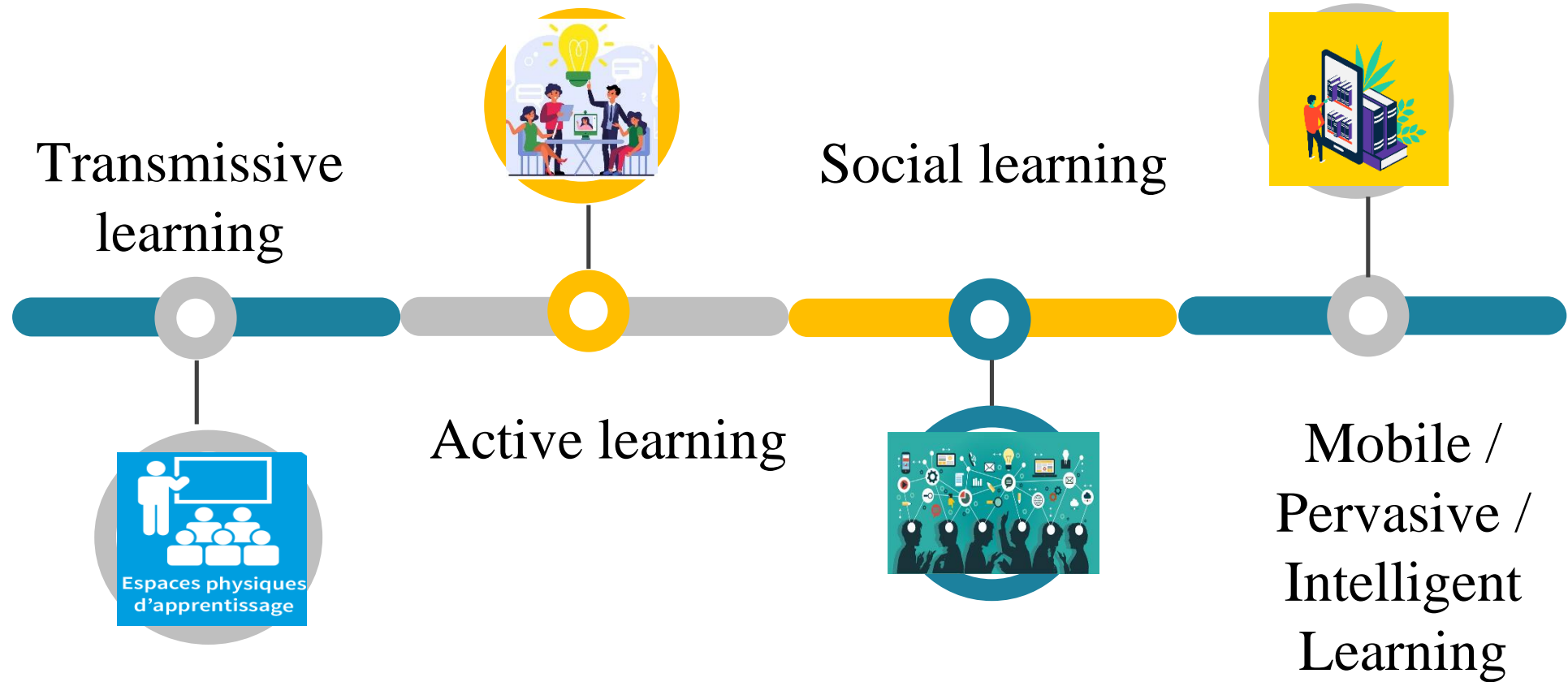
[UNESCO Chair : OPEN EDUCATION : INNOVATION INCLUSIVE INTELLIGENT LEARNING](#)

Outline

- 1. General Context**
- 2. AI in Digital education**
- 3. Results of Research projects**
- 4. Challenges for AI in Learning & Assessment**

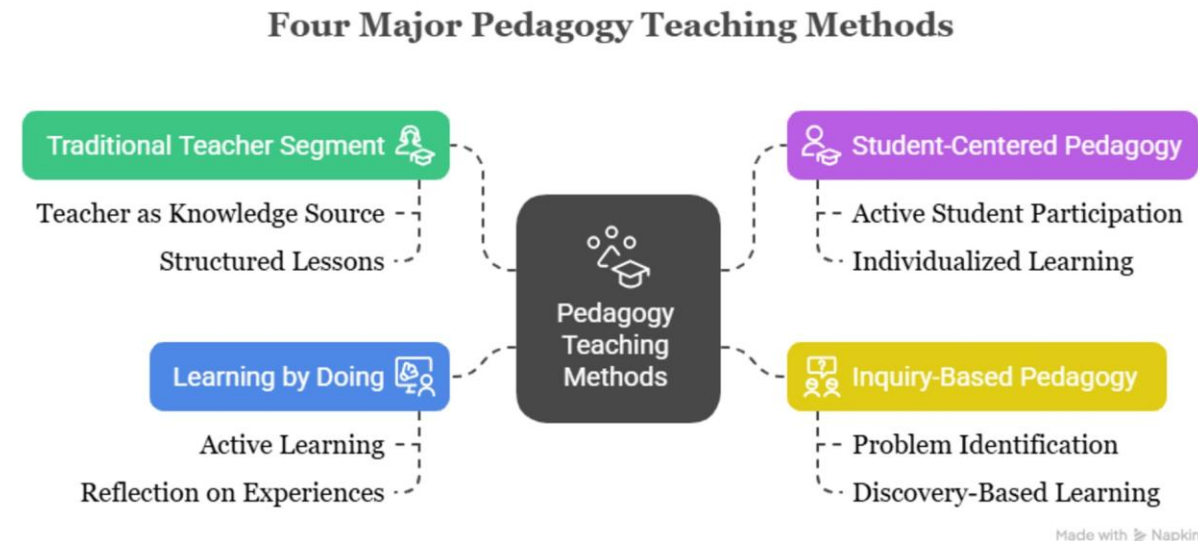
General context

Evolution of Learning



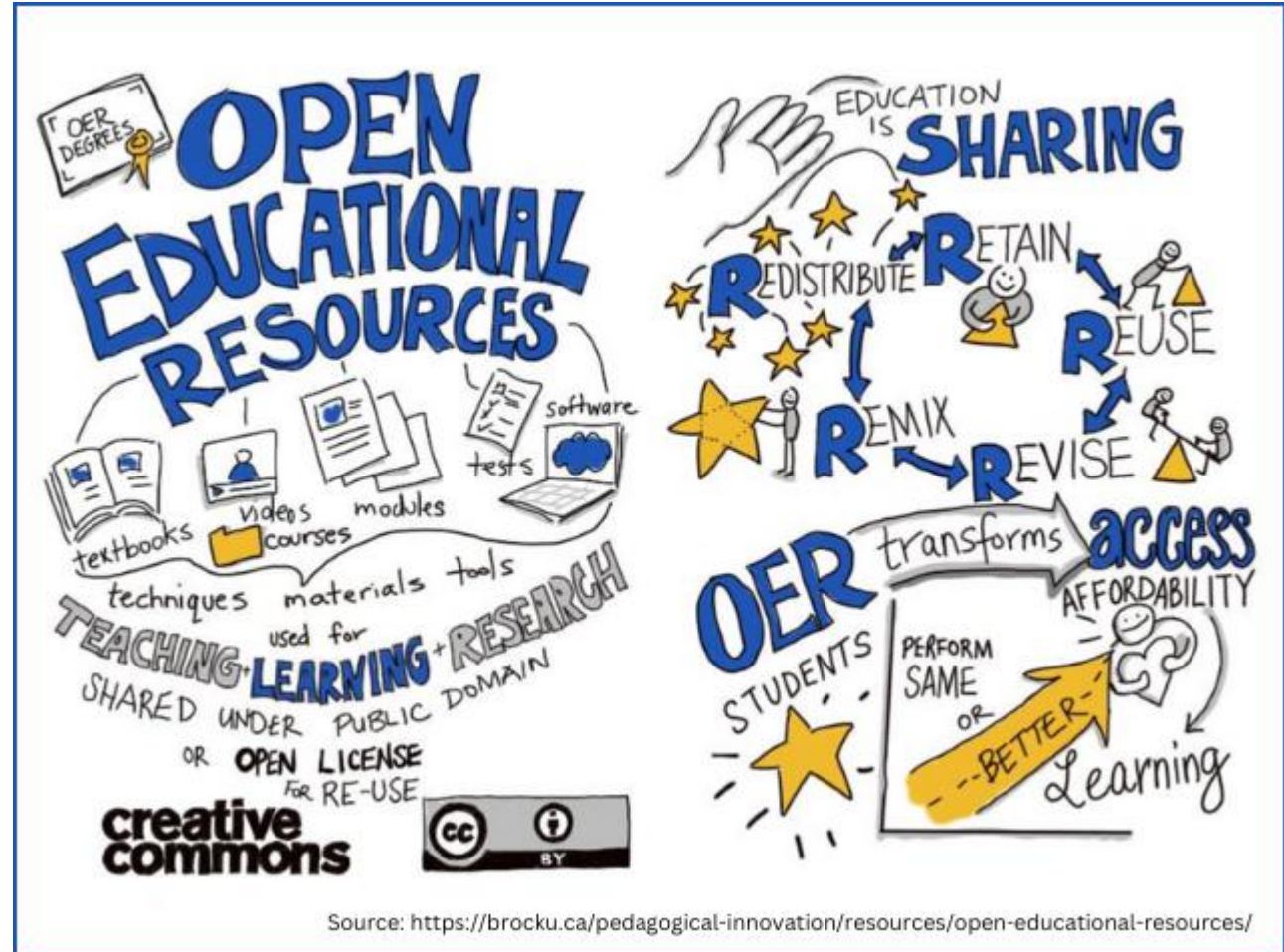
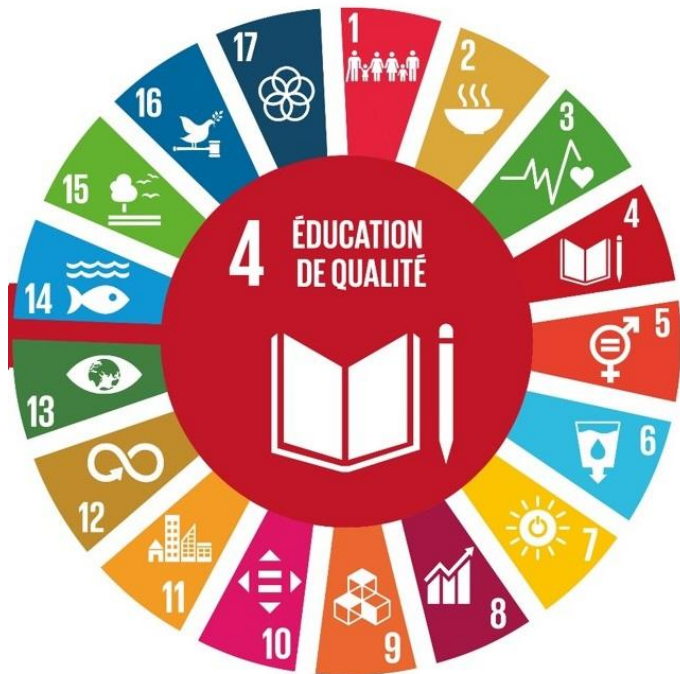
Innovative education

- Education is the **transmission of knowledge between generations**
- **Two major issues:** Knowledge and its transmission
- Today the teacher is supposed **to be competent on both aspects** but for the university for a long time only the first issue was important



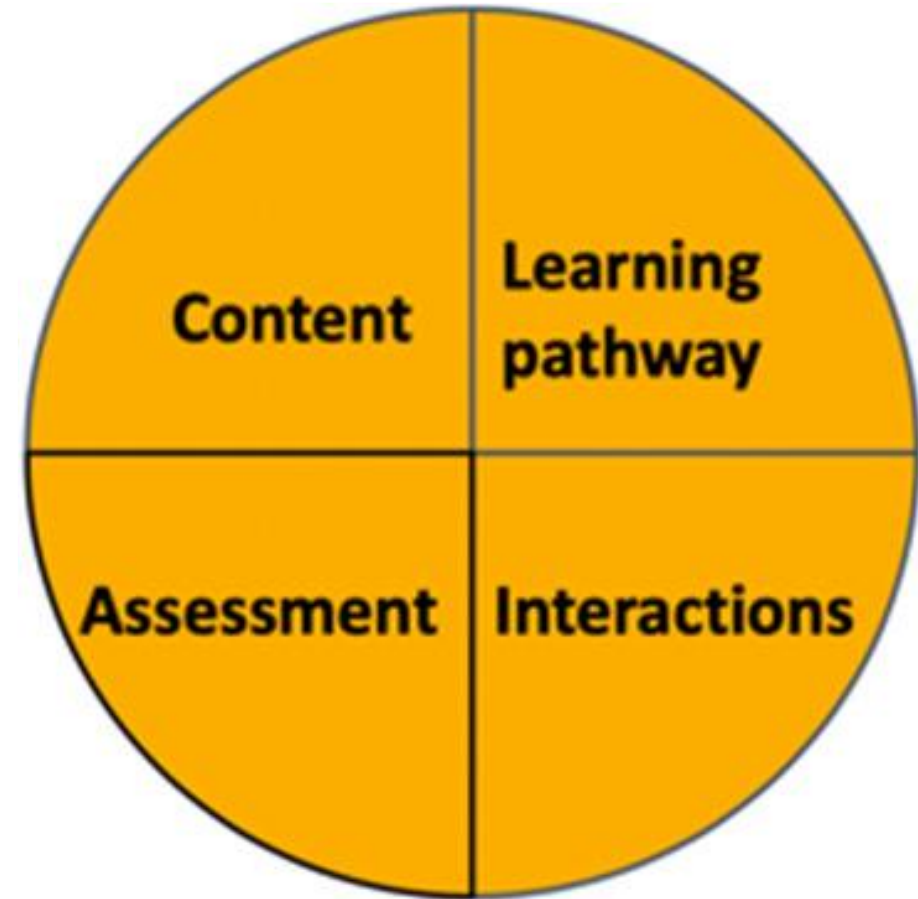
SDG4 & Open Education

Ensure **inclusive** and **equitable** quality education and promote lifelong learning opportunities for all.



Source: <https://brocku.ca/pedagogical-innovation/resources/open-educational-resources/>

Orientations

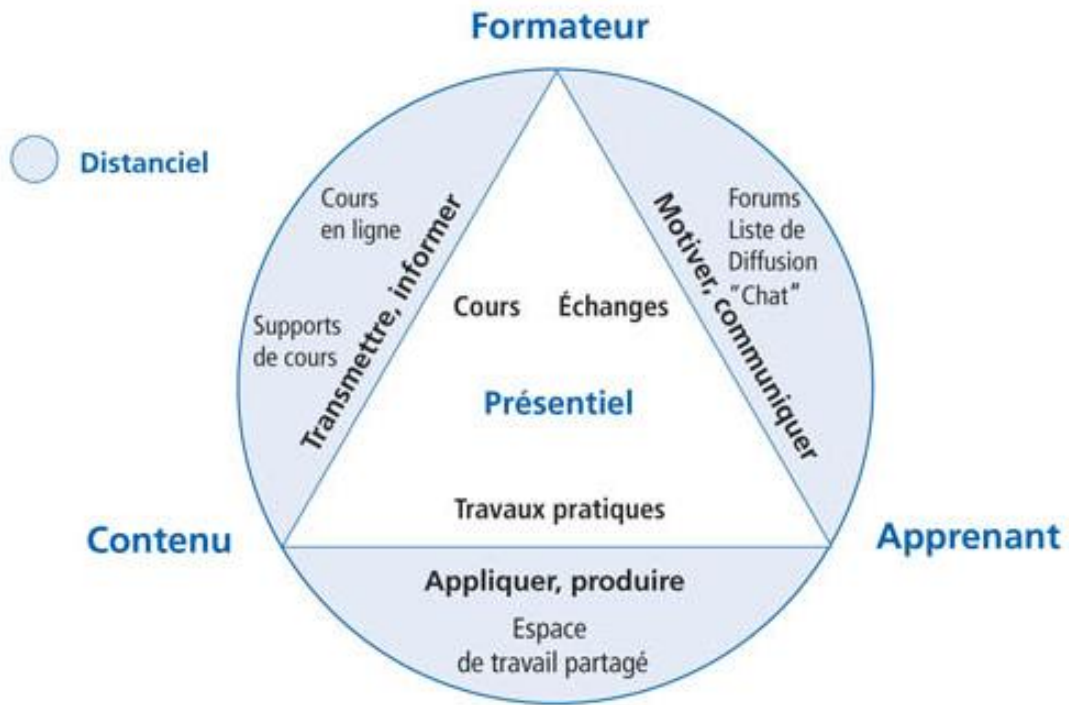


Jacqmot, C., DEVILLE, Y., & DOCQ, F. (2020). A Framework to Understand, Analyse and Describe Online and Open Education in Higher Education.

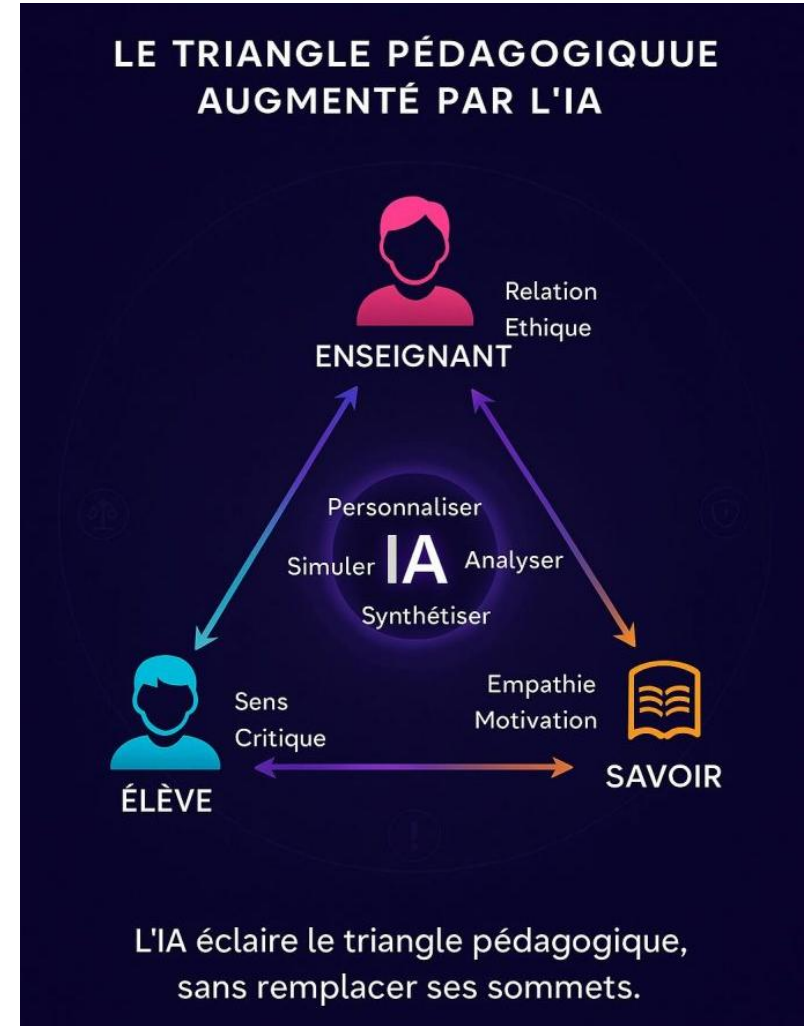
AI & Digital Education

Didactic Triangle

Modalités pédagogiques en présentiel et à distance

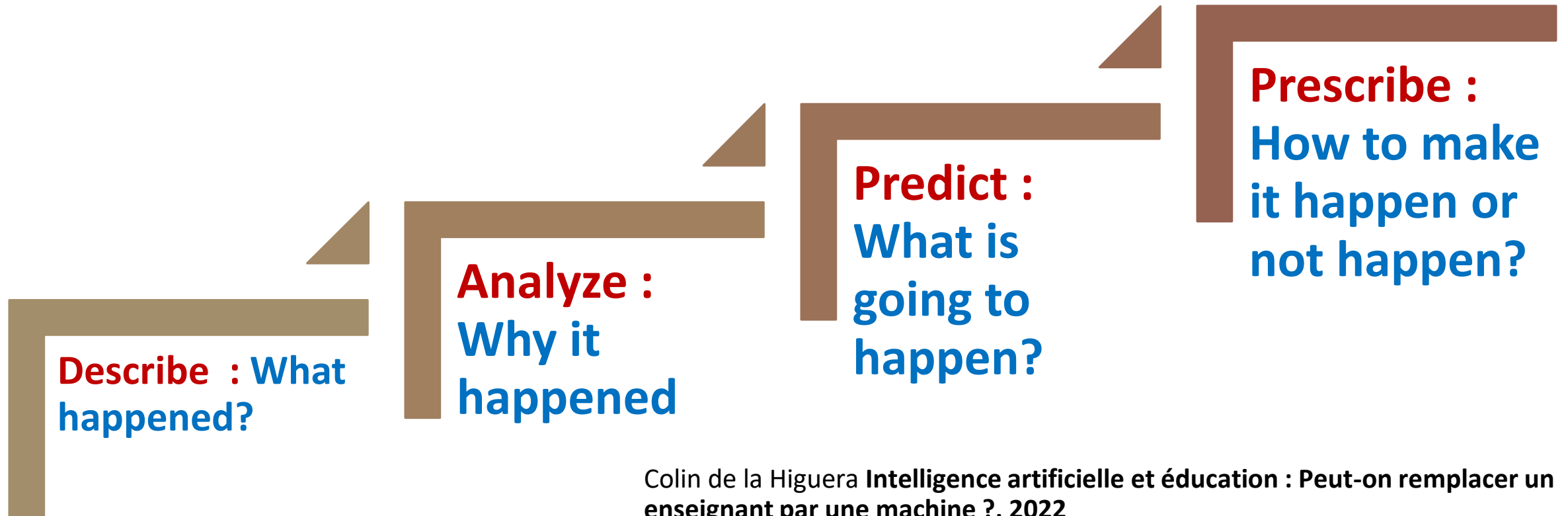


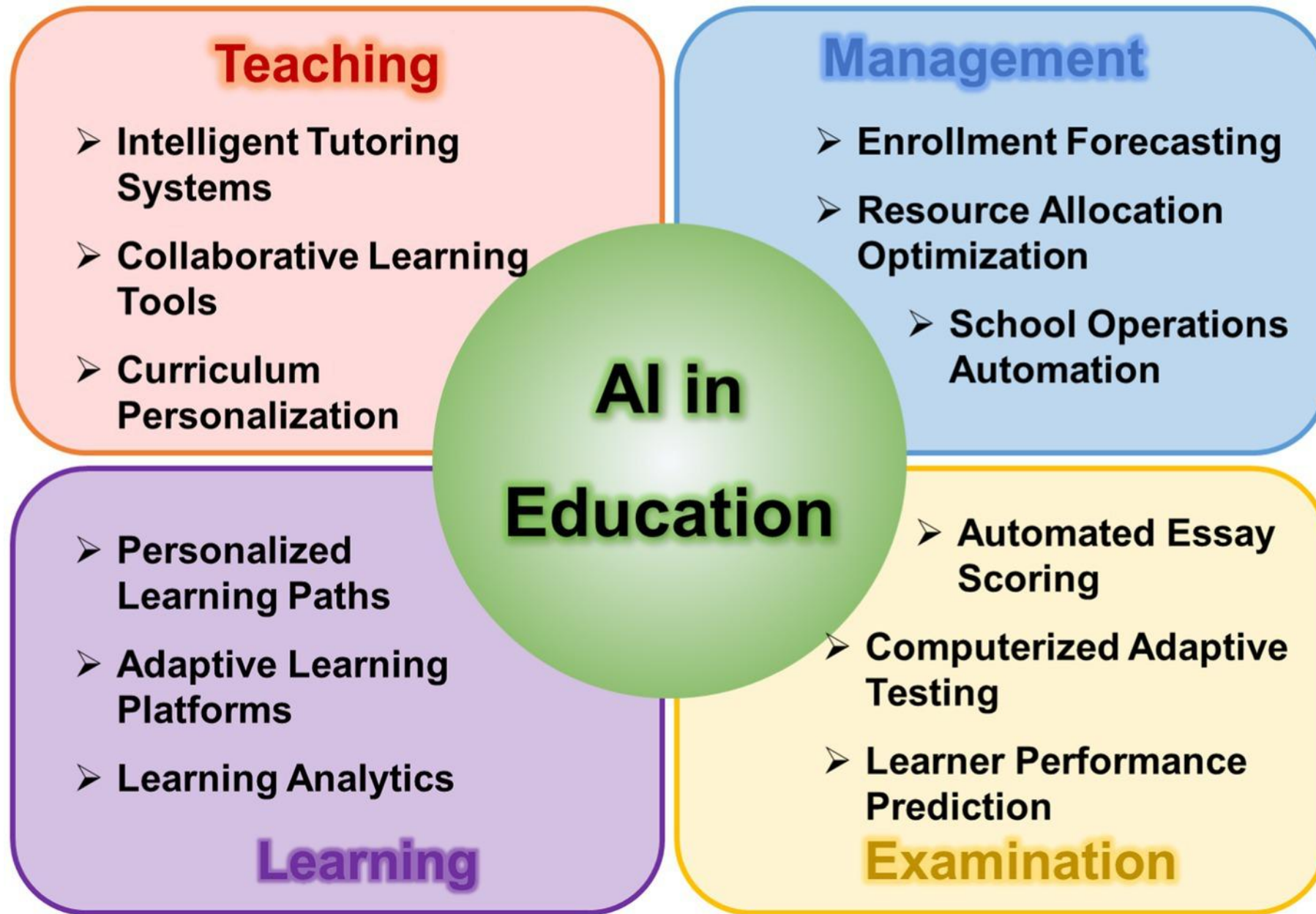
* D'après M. Follet, F. Muet, M.-F. Peyrelong, Communication au congrès satellite de l'Iflla, juillet 2003.



AI becomes a **fourth actor** and acts as a central prism that filters, enriches, accelerates, and personalizes pedagogical interactions.”

Use of AI in Education





AI & Assessment

- AI is transforming education → **reshaping teaching & assessment**
- **Assessment is a critical but challenging component.**
- **Traditional assessment limitations** → lack of adaptivity, fairness, personalization
- **Complexities in Evaluating Student Work in AI Era:**
 - **Differentiation Issues:** Difficulty in distinguishing between student-generated content and AI-generated content
 - **Lack of Process Evaluation:** Traditional methods focus **primarily on final outputs**, often **missing insights into students' problem-solving** and decision-making processes





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GUIDES D'ACHAT

Aspirateurs
balais sans fil



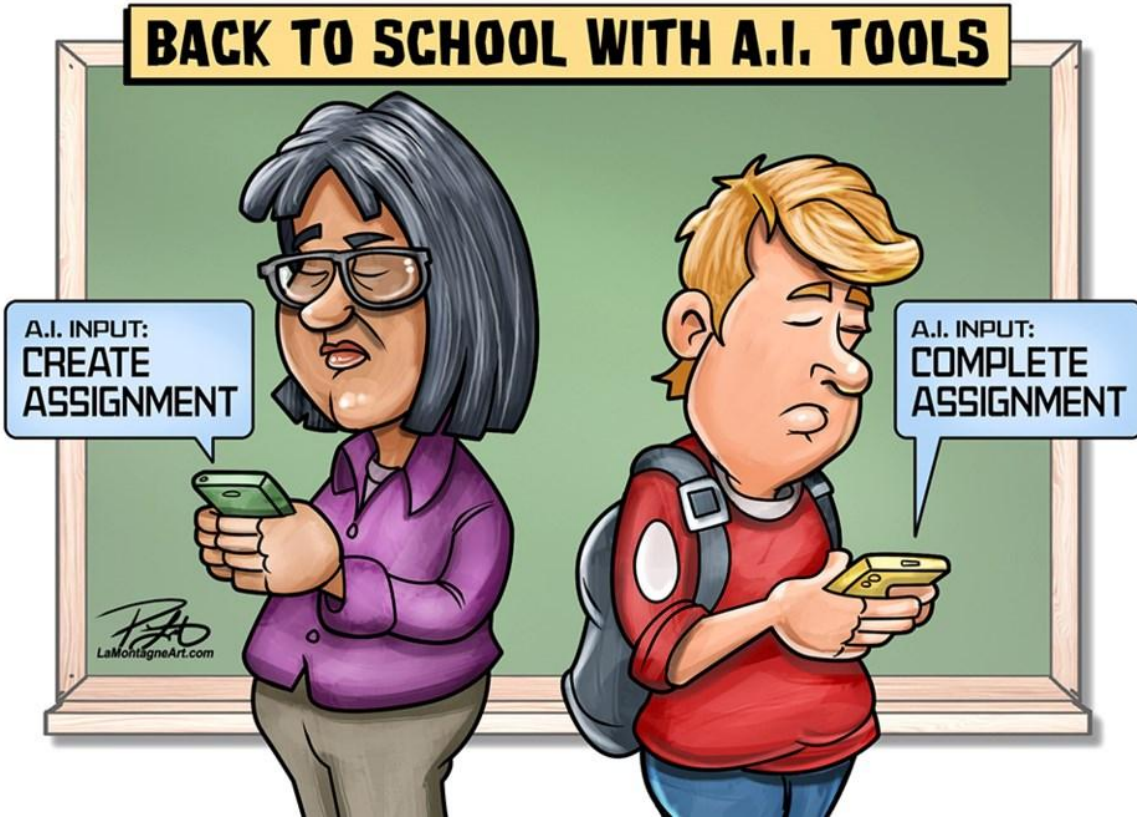
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 **CAMPUS** INTELLIGENCE ARTIFICIELLE

A l'heure des IA, la révolution silencieuse des examens : « La question n'est plus de savoir s'il faut s'opposer, mais comment on va vivre avec »

Les enseignants du supérieur réinventent leurs méthodes d'évaluation. L'oral prend désormais plus de place et les établissements passent de la simple détection à l'intégration de ces outils d'intelligence artificielle.

New needs



Need for new environments:

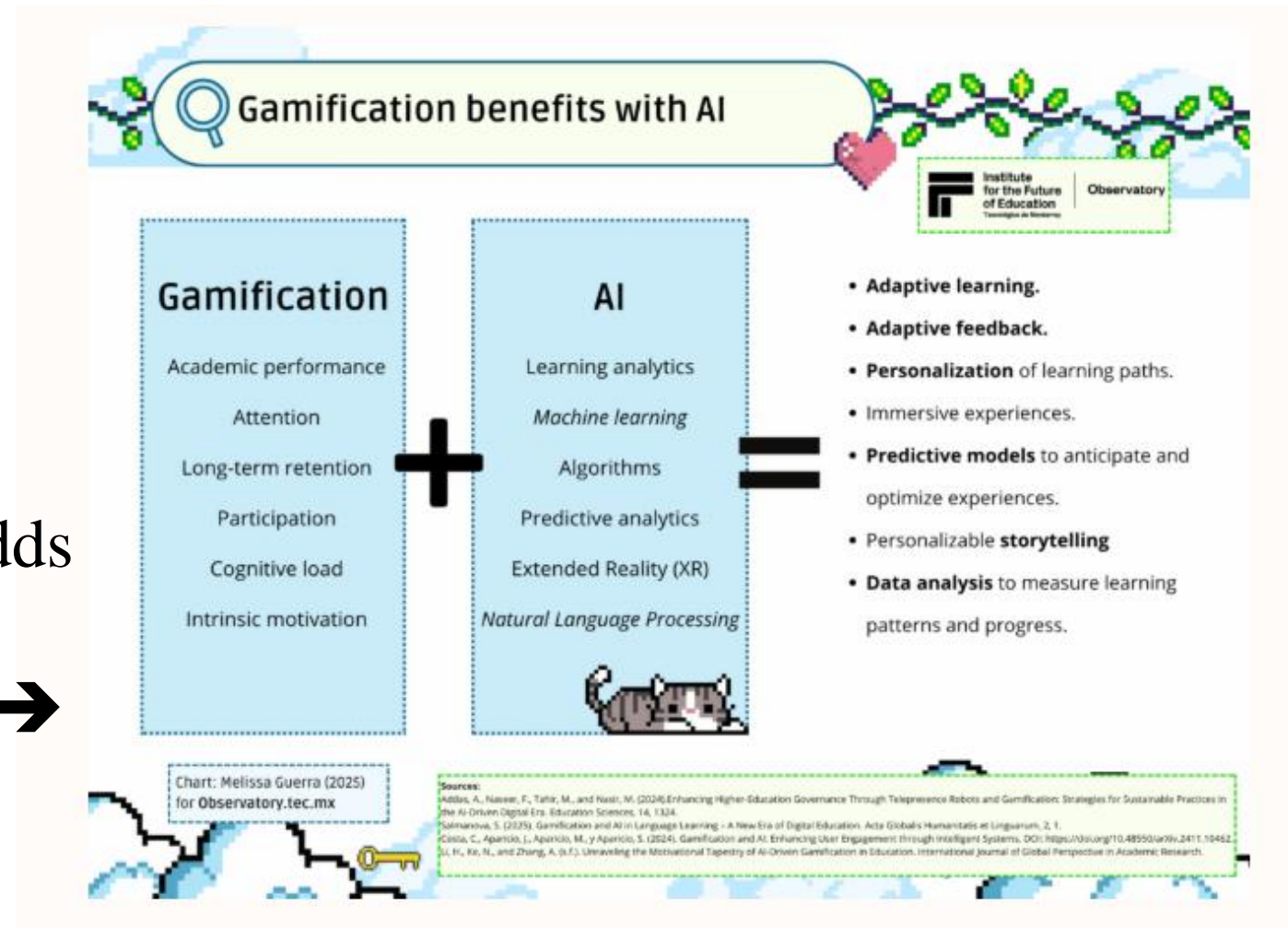
- **Rethinking** the relationships between teachers and students.
- **Supporting** teachers & learners to use AI
- **Designing** innovative scenarios using AI

Results of projects

AI in Gamified Environments

Gamification & AI

- **Effective assessment** plays an important role in **assessing knowledge acquisition and fostering skill development**.
- The integration of Gamification adds an **interactive and engaging dimension** to these environments → **Opportunities for immersive learning experiences**.



Erasmus EduGAME

Goal : To train prospective school-teachers in social sciences, humanities, and IT to utilize educational technologies, AI and Serious games for Teaching.

November 2023-October 2026

edugame-project.eu

HOME ABOUT PROJECT ▼ NEWS ▼ EVENTS CONTACTS

**EDU
GAME** SERIOUS GAMES FOR CREATIVITY AND SOCIAL COHESION IN TEACHER EDUCATION (EDUGAME)

The goal of the project is to train highly qualified prospective school teachers in social sciences, humanities and IT in pedagogical technologies using serious games to promote human rights, democracy, and social cohesion in two neighbouring regions with cultures and history of mutual influence.



OBJECTIVES

- To modernize teacher training curricula by incorporating a focus on serious games (SG) and game-based learning, to elaborate high-quality learning materials, and to equip EduGame labs by relying on innovative pedagogical approaches and advanced educational technologies
- To improve the competences of university staff, establish sustainable interdisciplinary and inter-curricula links, and promote collaboration of pedagogues and computer scientists;
- To prepare the first graduates future-oriented curricula with focus on serious games (SG) design and use who are able to apply new digital and game-based learning technologies implementing the principles of social cohesion, inclusion and equality.

Project Consortium

The EduGame project is implemented by a consortium of **nine universities** from **Europe, the Western Balkans, and the South-Mediterranean**:

European Higher Education Institutions (HEIs):

- **Vytautas Magnus University (VMU)** – Coordinator, Lithuania
- **Universitat Politècnica de València (UPV)** – Spain
- **Università degli Studi di Salerno (UNISA)** – Italy

South-Mediterranean HEIs:

- **University of Sousse (US)** – Tunisia
- **University of Jendouba (UJ)** – Tunisia

Western Balkans HEIs:

- **Džemal Bijedić University of Mostar (UNMO)** – Bosnia and Herzegovina
- **University of Bihać (UNBI)** – Bosnia and Herzegovina
- **University of Tirana (UT)** – Albania
- **University of Elbasan 'Aleksandër Xhuvani' (UNIEL)** – Albania

EDU GAME  Co-funded by the European Union  **UNIVERSITY OF SOUSSE**  **CIPEN**

**ENHANCING EDUCATION
THROUGH GAMIFICATION & AI**

ERASMUS+ CBHE project
**Serious Games for Creativity
and Social Cohesion in
Teacher Education**
EduGame No. 101128757

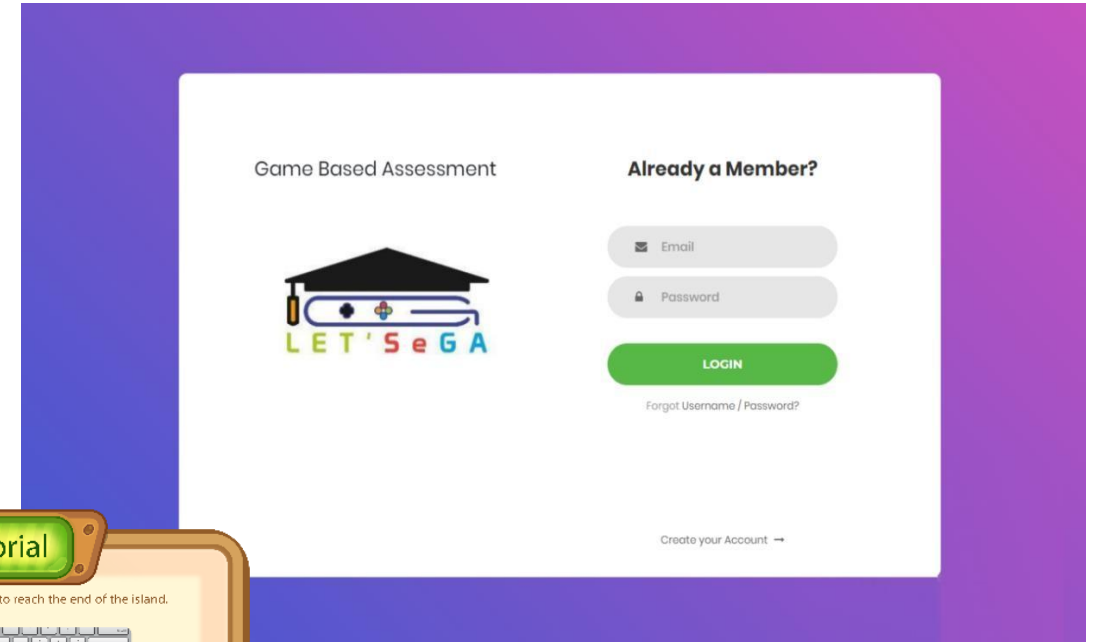
**SUMMER
SCHOOL**

22-26 SEPTEMBER 2025

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LET'SEGA Project

- **LET'SEGA** : Lebanon, Egypt Tunisia Serious Games for Assessment
- **Partners**
 - Alexandria University Egypt
 - AUL University Lebanon
 - Sousse University Tunisia
- **June 2018 – June 2020**



LET'S EGA Framework

Gehad Gaber

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ICT track

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What will be tested?

Cognitive skills

Soft skills

Technical Skills

Track Requirments

Cognitive Skills80%

Soft Skills75%

Technical Skills70%

Skill

Progress

Play/Retake

Cognitive Skills

Game One

90%

Retake

Game Two

30%

Continue

Game Three

0%

Play

Soft Skills

Game One

0%

Play

Game Two

0%

Play

Technical Skills

Game One

0%

Play

Game Two

0%

Play

GAME BASED ASSESSMENT

Tracks

USEFUL LINKS

CONTACT

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Get Started!

CIS Track

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Categories: Computer Math Arts

Start

Recommendations

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Law

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New Tracks!

Science

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Categories: Computer Math Arts

Start

GAME BASED ASSESSMENT

Tracks

USEFUL LINKS

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ICT Track Report

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Track Requirements

Overall Score

Performance Compared to others

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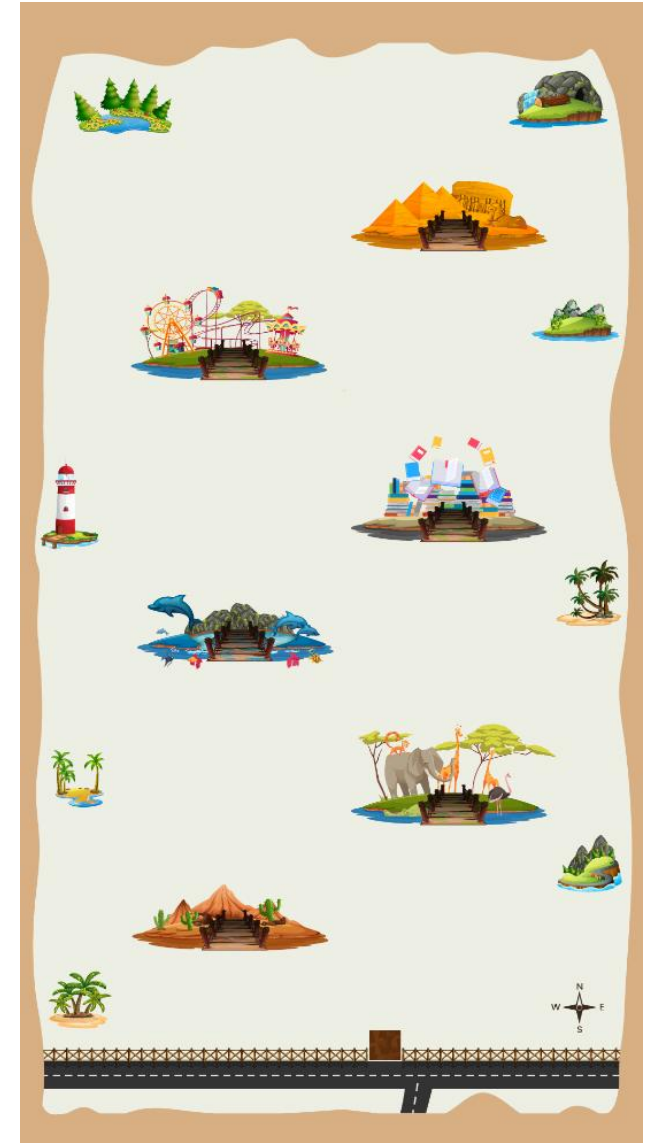
Tutorial

Tip Click on a rock to open the gate game.

Next

Results LET'S EGA

- Co-supervision and defenses of Master's research theses in Computer Science for **11 students from three countries**
- Development of an **intelligent, game-based framework** for competency assessment to support academic pathway selection
- **10 scientific publications**
- Organization of 3 special sessions in International Conferences
 - IEEE AIKE conference (Artificial Intelligence and Knowledge Engineering) 2019
 - IEEE AMCAI 2025 & 2023
- Scientific visits and mobility opportunities for students and researchers in partner countries



Game Based Learning & Stealth Assessment



Embedded and invisible

Assessment happens naturally inside digital and collaborative eLearning activities.



Authentic evidence

Captures what learners do (skills, decisions, interactions) rather than only test answers.



Continuous process

Evaluation occurs throughout learning without interrupting progress.



Lower stress

Reduces test anxiety and supports more natural engagement in collaborative tasks.

Steps & Indicators

- **Mapping to indicators & competencies:** Actions are transformed into meaningful measures of learning. This process ensures assessment is **continuous**, **invisible**, and **tied directly to authentic learning activities**.
- Indicators = measurable patterns in learner actions that provide evidence of skills and behaviors.



Examples :

- **Number of retries (Nombre de tentatives)** → persistence
- **Turn-taking frequency** → teamwork
- **Hint usage** → self-regulation
- **Error correction speed** → problem-solving
- **Navigation choices** → strategy and planning
- **Time on task** → engagement

Adaptive Difficulty in collaborative Game Based Learning

- Application of **reinforcement learning-based dynamic difficulty adjustment (DDA)** algorithms in collaborative game-based learning environments
- **Adaptation in gaming environments is essential for providing personalized learning experiences** that adapt to a wide range of learner needs.
- DDA algorithms are **commonly** used to adjust game difficulty for individual performance, **Research on their effectiveness in collaborative settings remains limited.**

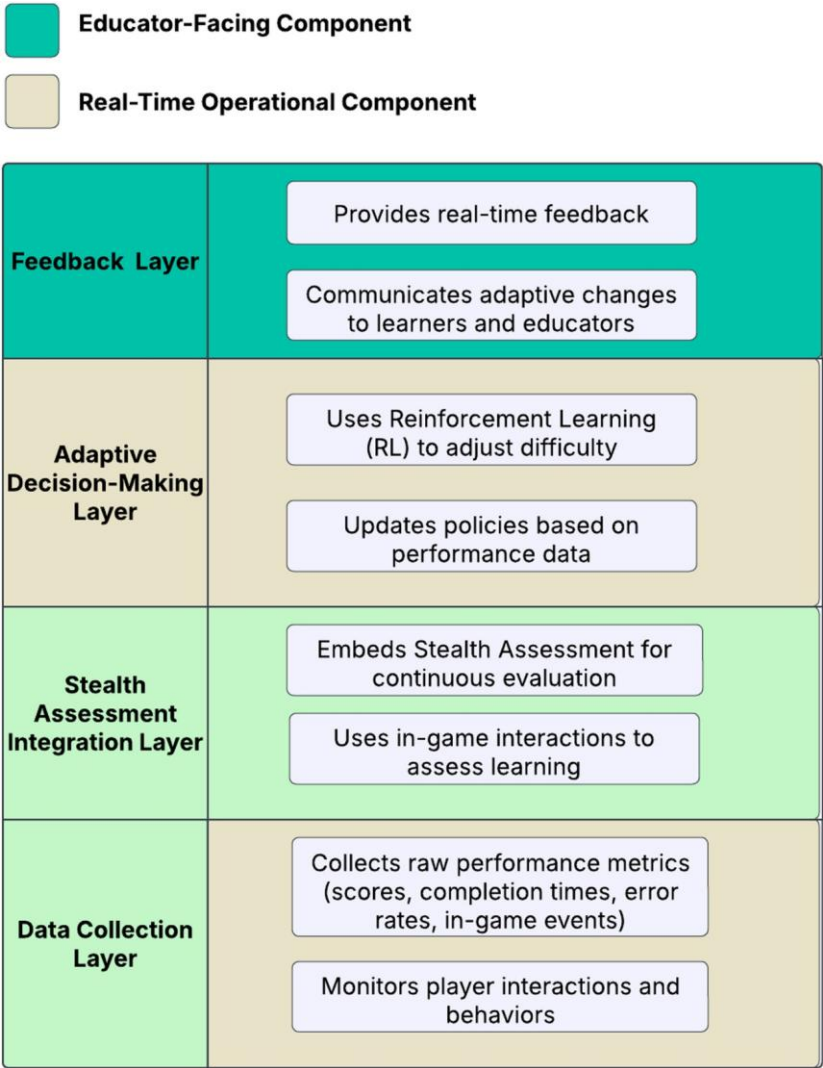
Computer Applications in Engineering Education

RESEARCH ARTICLE |  Open Access | 

Adaptive Difficulty and Stealth Assessment in Collaborative Game-Based Learning

[Ameny Rjiba](#) ✉ [Lilia Cheniti-Belcadhi](#), [Judita Kasperuniene](#)

First published: 06 November 2025 | <https://doi.org/10.1002/cae.70102> | [VIEW METRICS](#)



AI Based Open Assessment

Project : OpenMed Scholars

Title : Building on Open Science and Open Education Capacities across the Mediterranean to Support the Emergence of Open Scholars

2022 - 2024

<https://tecfa.unige.ch/proj/OpenScholars/>

Intelligent Environment for Competencies



Start Su

Reading: Towards a Competence Framework for Open Scholars:
Acknowledging the Dearth of Epistemic Competences

Research articles

Towards a Competence Framework for Open Scholars:
Acknowledging the Dearth of Epistemic Competences

Barbara Class ✉, Dalila Bebbouchi, Alexandra Fedorova, Lilia Cheniti,
Ghada El Khayat, Souhad Shlaka

Consortium	Geneva University, Switzerland
	Sousse University, Tunisia
	Research center for scientific Information, Alger, Algeria
	Mohammed 5 University Rabat, Morocco
	Alexandria University, Egypt

Open Med Atelier

Open Scholar Atelier

Dashboard

Open science

Open education

Open community

Your result

Recommendation

Open science

A way of carrying out research, often using digital technologies.

+ start

Open education

a way of carrying out education, often using digital technologies.

+ start

Open community

A way of engaging as a citizen for the citizens, often using digital technologies.

+ start



Open Scholar Atelier

Dashboard

Open science

Open education

Open community

Your result

Open science

Open education

Open community

Your result

In the following table you can see your positions with respect to Open Education in different areas: Open Learning Design, Open Content, Open Teaching and Open evaluation. The higher in each column, the more "open" you are. By clicking on the button "Show recommendation" under the table, you will receive tailored suggestions on readings, resources and courses that can help you further develop your open teaching capacities.

Historical

Apr 30, 2024

Open Scientific Knowledge	Open Science Infrastructures	Open Research
Advanced	Advanced	Advanced
Intermediate	Intermediate	Intermediate
Beginner	Beginner	Beginner

Show recommendations

Open Scholar Atelier

Dashboard

Open science

Open education

Open community

Your result

Recommendation

Open science

Open education

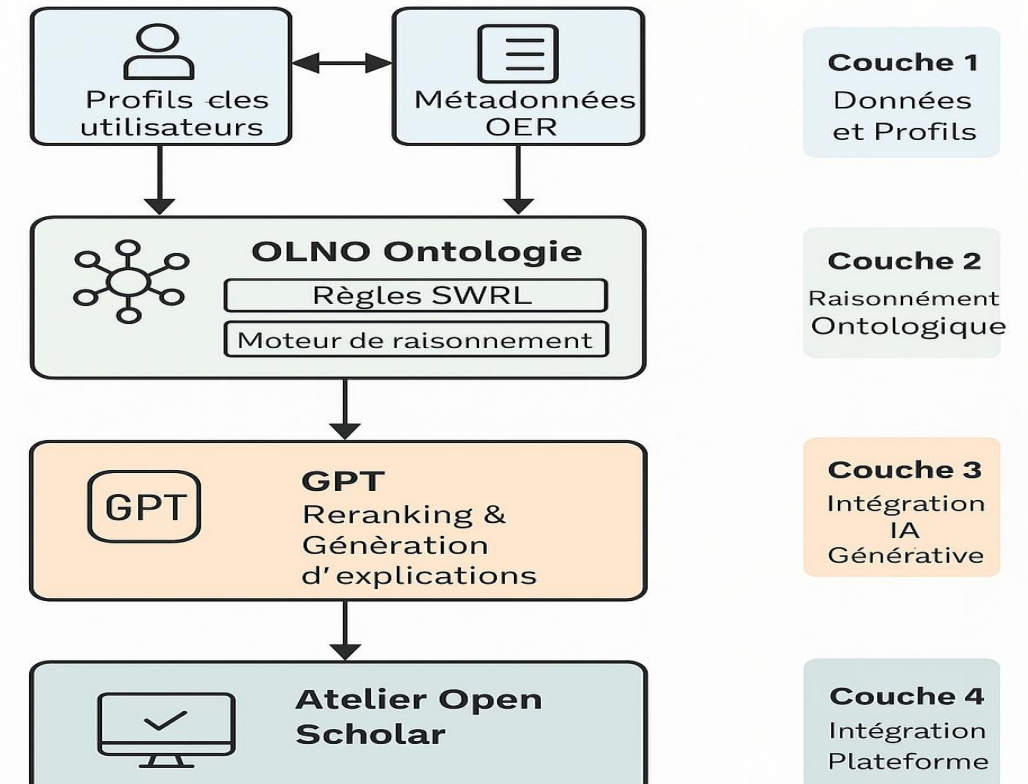
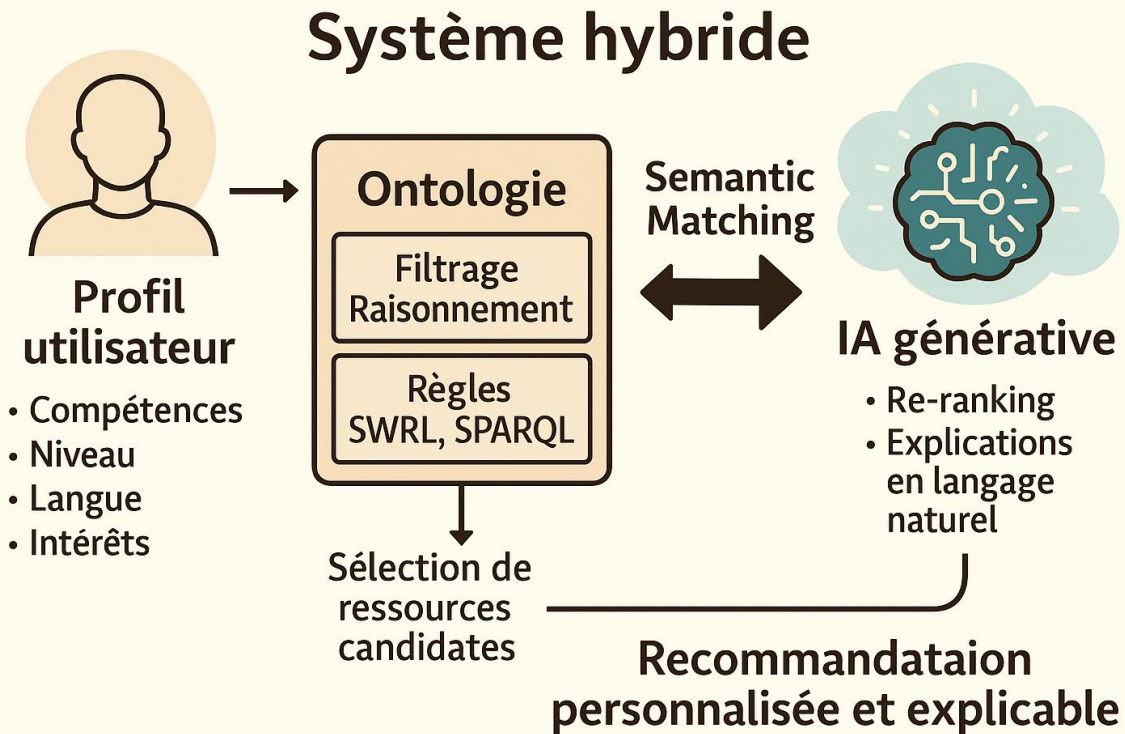
Recommendations

Explore our carefully curated selection of readings, educational resources, and courses designed to meet your specific needs. Whether you're looking to deepen your knowledge in specific areas or simply stay up-to-date with the latest advancements in the field, our recommendations are here to help you achieve your goals.

Apr 30, 2024

Open Scientific Knowledge	Open Science Infrastructures	Open Research
Intermediate	Intermediate	Beginner
We suggest you use specialized, institutional archives for ease of retrieval. For instance, you may explore the following archives and their specificities to choose the one that fits best: Zenodo, OLOS, Yareta, FORS.	Paying APC refers to a given economic model which is not optimal in terms of access. We suggest you get interested in Diamond Open Access publishing and suggest you become familiar through the Action Plan for Diamond Open Access, link	We suggest you introduce yourself to persistent identifiers by reading this page by CERN

Framework for Open Recommendation



IEEE AMCAI 2025

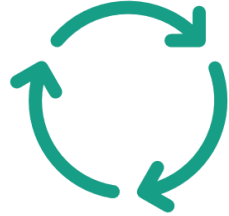
14-16 October 2025

ID_104: Ontology-Driven Personalized Recommendation of Open Educational Resources: Modeling User Profiles and Learning Needs [Online]

Nermine Janfeoui, Asma Haydaoui and Lilia Cheniti

AI-Based Assessment in Collaborative Learning

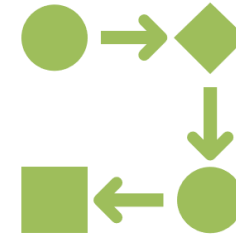
Challenges and the Need for a Comprehensive AI-Driven Assessment



Challenges with Current Assessment Systems

Traditional methods focus only on final outputs, missing **critical aspects like cognitive processes and creativity**

Automated Grading Systems: Efficient but struggle to evaluate creativity and adaptability in AI-enhanced tasks.



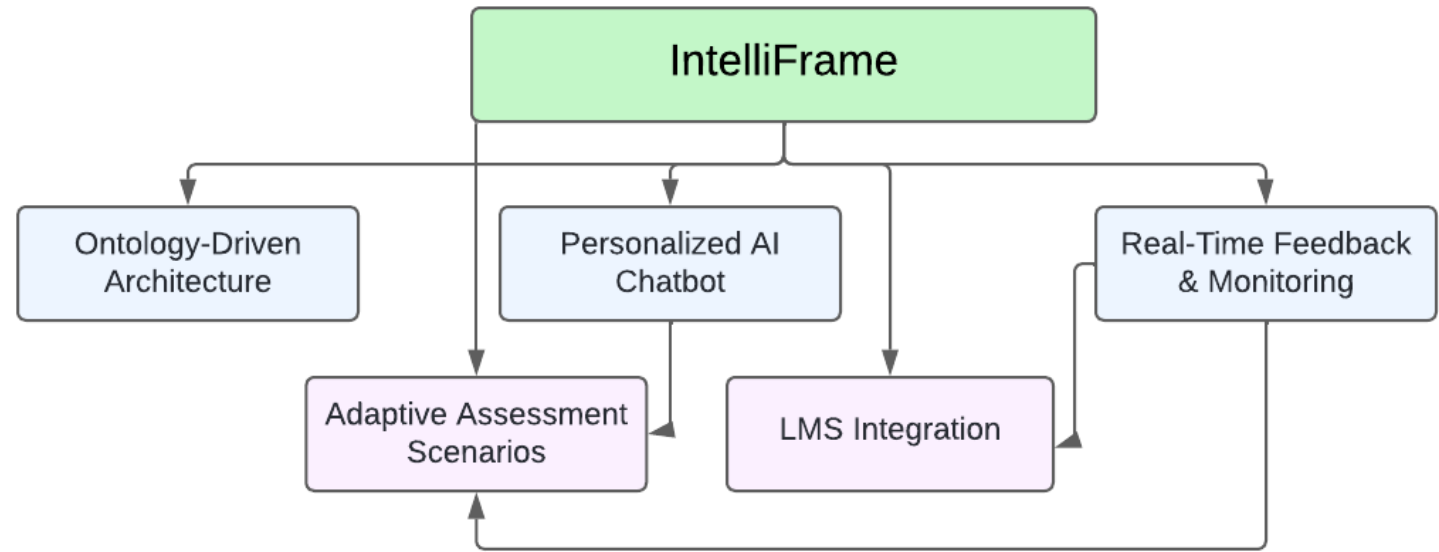
Need for a New Approach

IntelliFrame: A solution that integrates **ontology-driven evaluation and adaptive, real-time feedback.**

Addresses limitations by **assessing both the product and the process**, enabling a deeper understanding of student learning.

IntelliFrame Components

- IntelliFrame Framework
 - **Process and Product Evaluation:** Captures cognitive processes and creativity.
 - **Ontology-Driven Approach:** Maps student interactions with semantic technologies.
 - **Dynamic Adaptation:** Provides real-time feedback and personalized scenarios.



Personalized AI Chatbot Integration

IntelliFrame AI Chatbot

Welcome to your personalized AI chatbot. Ask questions, request code generation, or get explanations on any topic related to your current task. The AI chatbot is aware of your progress and can provide personalized suggestions based on the code you're working on.

Chat History

User: How do I implement a binary search algorithm?
AI: Here's a Python example of binary search...

Your Query:

Send

IntelliFrame Code Editor

Below is your code editor, integrated with AI suggestions. Critical sections are highlighted, and the AI chatbot can automatically generate code snippets and offer real time suggestions.

```
# Critical section 1: Initializing the search range
def binary_search(arr, target):
    low, high = 0, len(arr) - 1
    while low <= high:
        mid = (low + high) // 2
        # Critical section 2: Checking the middle element
        if arr[mid] == target:
            return mid
        elif arr[mid] < target:
            low = mid + 1
        else:
            high = mid - 1
    return -1

# AI Suggestion: Consider adding edge case handling
# Critical section 3: Example usage
result = binary_search([1, 3, 5, 7, 9], 7)
if result != -1:
    print(f"Element found at index {result}")
else:
    print("Element not found in the array")
```

IntelliFrame includes a domain-specific AI chatbot that provides tailored assistance directly to students.

- Unlike generic tools like ChatGPT, this chatbot is **context-aware and aligned with educational objectives**.
- Chatbot Capabilities:
- **Offers real-time feedback, hints, and corrections** based on the student's current progress.
- **Enhances engagement by providing meaningful, personalized interactions.**

Pilot Study and Key Assessment Scenarios

Pilot Study Setup:

- Conducted in a Python programming course with 250 first-year students.
- Two groups:
- **Experimental Group:** Utilized IntelliFrame for assessments.
- **Control Group:** Used traditional assessment methods.

Key Assessment Scenarios Implemented:

- **Adaptive Testing:** Questions adjusted in real-time based on student performance.
- **Personalized Feedback:** Instant, tailored feedback using AI-powered analysis.
- **Creative Assignments:** Encouraged innovative use of AI tools for problem-solving tasks.
- **Automated Grading:** Provided consistent evaluation, reducing manual grading efforts.

Results and Evaluation



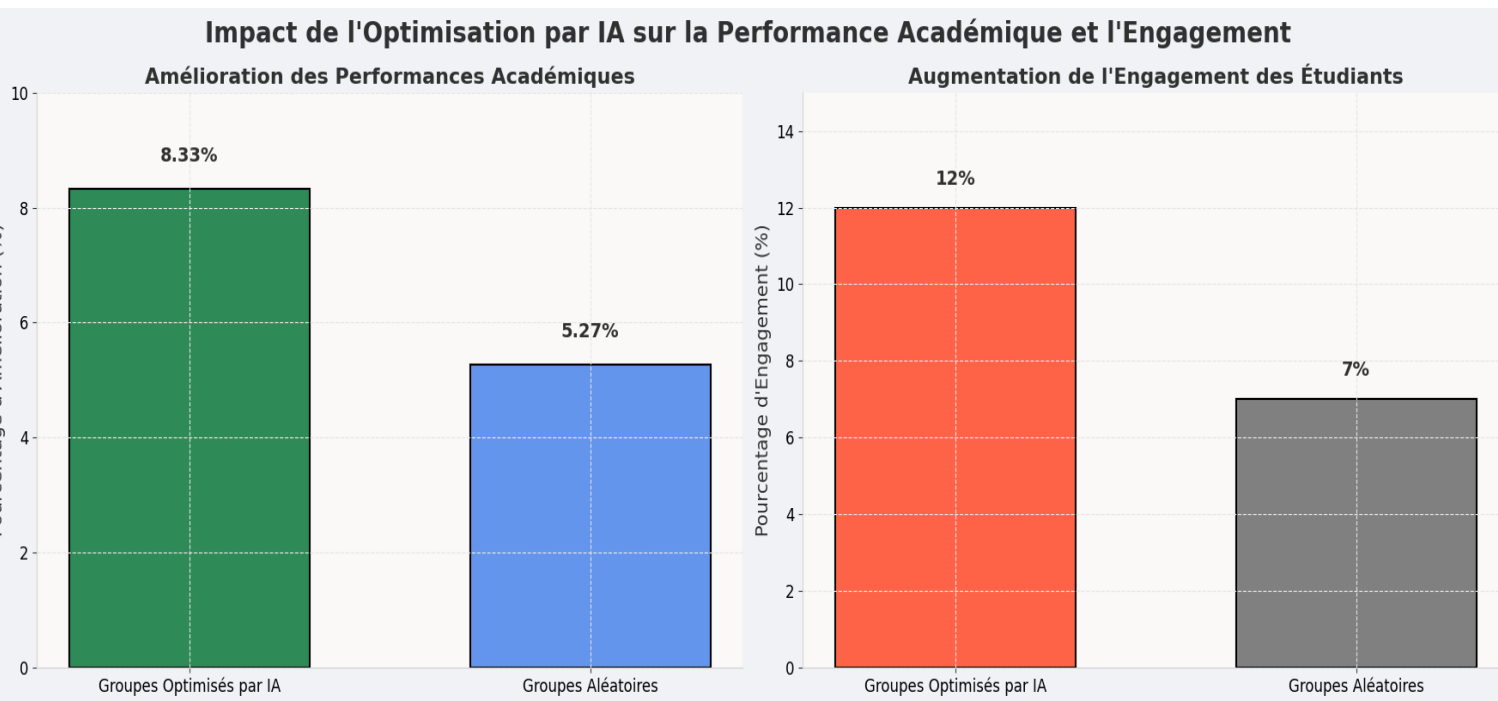
Key Findings:

- **30% Increase in Grading Accuracy:** More precise evaluation of code quality and adherence to best practices.
- **25% Improvement in Critical Thinking and Problem-Solving Skills:** Enhanced **iterative feedback** led to better decision-making.
- **35% Increase in Student Engagement:** Higher participation rates due to dynamic task adjustments and real-time feedback.

Student Feedback:

- High satisfaction with personalized feedback and adaptive challenges.

Other Results



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Open Assessment Framework for Intelligent Peer Feedback in the Project-Based Collaborative Learning Environment

Original Research | Published: 26 July 2025

Volume 6, article number 687, (2025) [Cite this article](#)



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Asma Hadyaoui & Lilia Cheniti-Belcadhi

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JCAL
Journal of Computer Assisted Learning

ORIGINAL ARTICLE

Exploring the effects of gender in skills acquisition in collaborative learning based on the ontological clustering model

Asma Hadyaoui & Lilia Cheniti-Belcadhi

First published: 23 July 2023 | <https://doi.org/10.1111/jcal.12852>

Results with 312 students for Intelligent Group Forming effects of Gender on skills acquisition

AI-Based Inclusive Assessment : Framework for Children with Cerebral Palsy

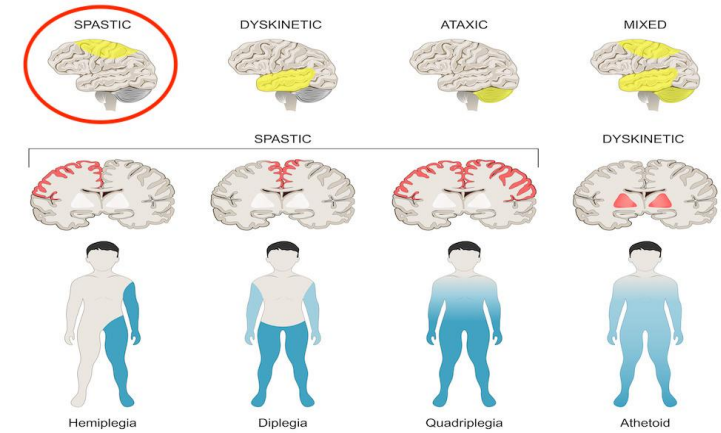
Cerebral Palsy

Cerebral palsy (CP) affects movement and coordination.

Early diagnosis

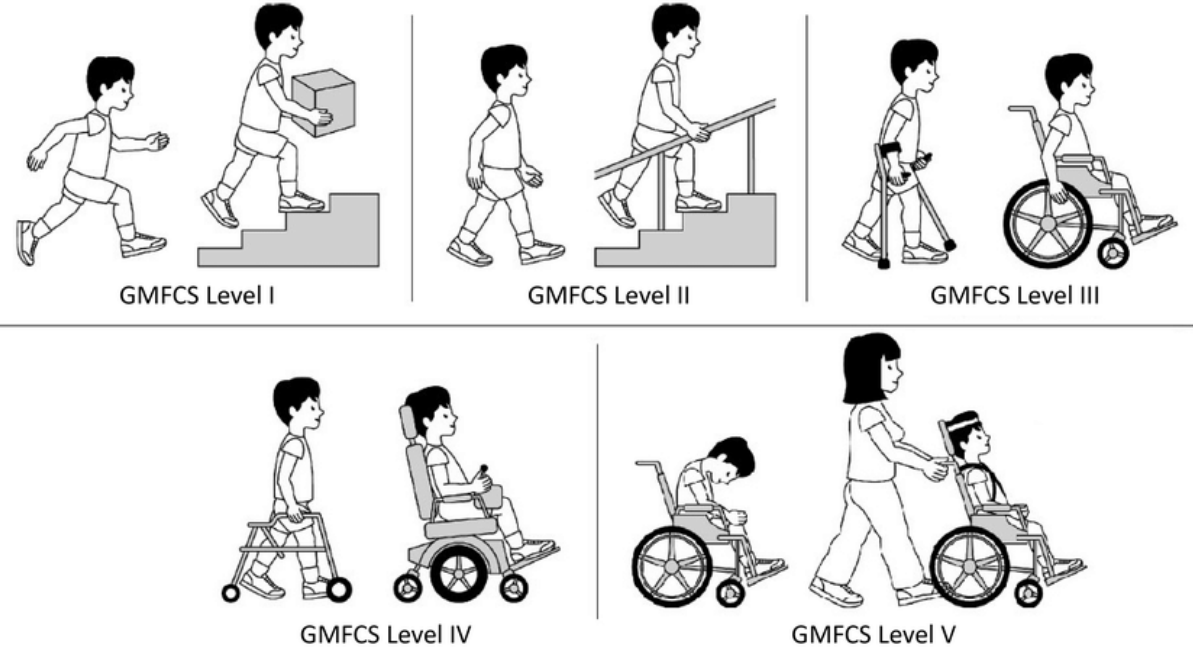
- Enables prompt interventions and rehabilitation.
- Optimizes resources and reduces costs.
- Improves long-term quality of life.

Cerebral palsy



GMFCS

- GMFCS is an essential tool to evaluate severity, classify motor function, and guide personalized treatment plans.
- GMFCS enables targeted interventions, improves motor development, and enhances quality of life.



A Data-Driven Machine Learning Framework for Predicting Disabilities in Cerebral Palsy

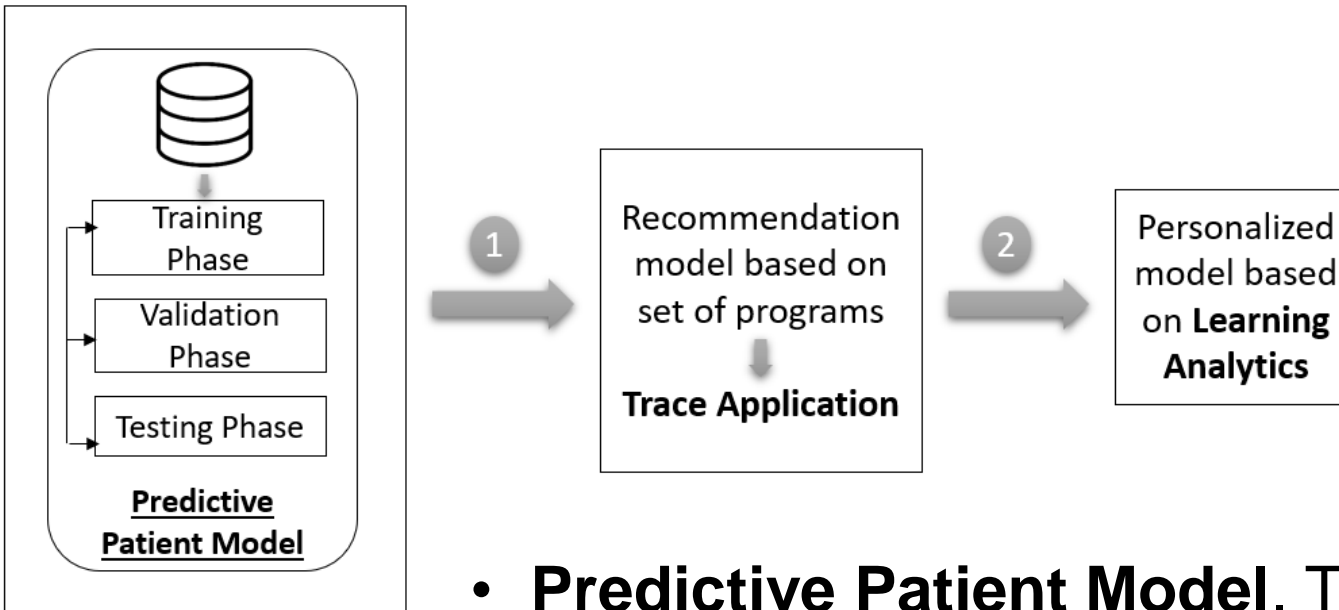
Rahma Haouas Zahwanie ^a, Lilia Cheniti-Belcadhi ^a, Saoussen Layouni ^b

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<https://doi.org/10.1016/j.procs.2025.09.487>

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- **Predictive Patient Model.** This model predicts the GMFCS level of each patient based on their medical data.
- **Recommendation Model,** which uses the predictions to suggest suitable rehabilitation programs (videos).
- **Personalized Model** based on learning analytics, which continuously adapts treatment plans to each patient's progress

Challenges & Transformation for AI Based assessment and learning

Ethical Considerations in AI-Powered Education

Challenges	Measures
Bias and Fairness	Ensuring AI systems are designed and implemented to avoid discriminatory practices and promote equity . Check for Bias and Accuracy
Privacy and Data Security	Safeguarding student data and respecting individual privacy in the collection and use of educational information. Protect Privacy
Transparency and Accountability	Establishing clear guidelines and processes for the responsible development and deployment of AI in educational settings.
Human-AI Collaboration	Foster a collaborative approach where AI assists and augments human instructional designers , rather than replacing them entirely.

Shifting to a
humanistic
approach

Elevating the
educational
challenges

Teacher's role in the AI era

Fostering students'
21st-century skills

Leveraging AI
opportunities



4 Key Elements of a Microlearning Module



①



Microlearning Objectives (MLO)

With specific titles and micro learning objectives, you can help distracted learners focus in time-compressed workplaces. You can also accurately index microlearning topics for future on-demand training.



②



Microlearning Content (MLC)

Microlearning content (MLC) contains the core training information and activities. Try to focus on one key idea plus three supporting subtopics for each micro unit.



③



Microlearning Delivery (MLD)

Different content commands different formats of media. Infographics and videos are two of the most popular delivery methods. Infographics in particular can enhance appeal, comprehension and learning retention.



④



Microlearning Evaluation (MLE)

The ultimate goal for a microlearning unit is behavioral change. Activity, context and feedback are key for this purpose.



VENNGAGE

Read the full blog post: venngage.com/blog/microlearning

Create infographics at venngage.com

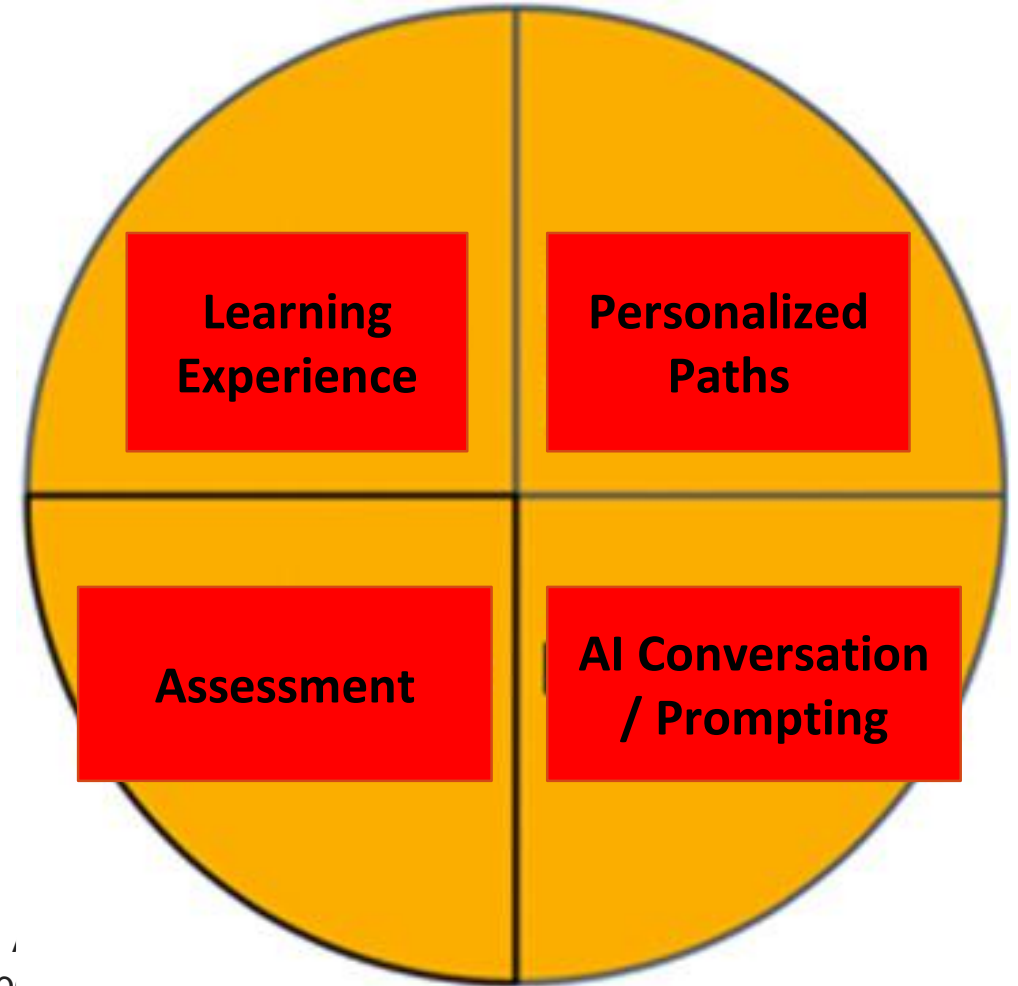
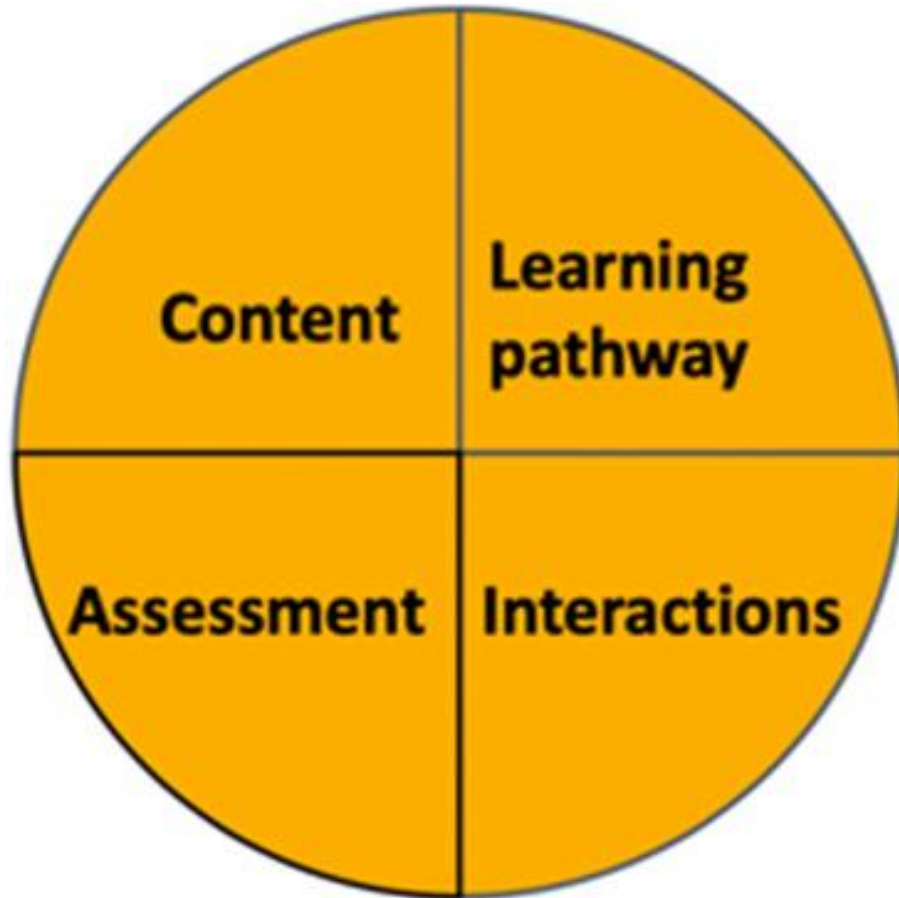
Teachers & Learners

Fonctions	Plan cognitif	Plan Socio-affectif	Plan motivationnel	Plan métacognitif
Accueil et orientation	Informar sur le dispositif de formation	Initier la construction d'un sentiment d'appartenance	Faire émerger les objectifs personnels de l'apprenant	Inciter l'apprenant à faire le point sur ses stratégies cognitives
Organisation	Présenter les méthodologies appropriées	Réguler la dynamique de groupe	Accompagner le processus d'autonomie	Faciliter la planification de l'apprentissage
Pédagogie	Apporter des réponses ou les susciter. Remédier	Faciliter la collaboration des apprenants	Proposer des activités signifiantes	Susciter l'expression critique sur le dispositif
Socio-affectif Motivation	Personnaliser le soutien à l'apprentissage	Rompre l'isolement de l'apprenant	Lutter contre l'abandon	Faire prendre conscience de ses habiletés à collaborer
Technique	Aider à maîtriser l'environnement d'apprentissage	Susciter l'entraide technique entre apprenants	Encourager l'utilisation des outils	Susciter la prise de distance réflexive sur les usages des outils
Métacognition	Faire conscientiser ses préférences cognitives	Faciliter la prise de conscience des états affectifs / tâches	Faire identifier les motivations intrinsèques	Inciter l'apprenant à apprendre à apprendre
Evaluation	Annoncer clairement les critères d'évaluation	Produire des rétroactions à portée formative	Encourager et féliciter	Aider à s'autoévaluer

En gris les interventions pouvant être confiées à un robot ayant été préalablement formé
 En bleu, les interventions partagées par un robot et les tuteurs humains
 En vert, les interventions ne pouvant être confiées qu'à des tuteurs humains



Transformation

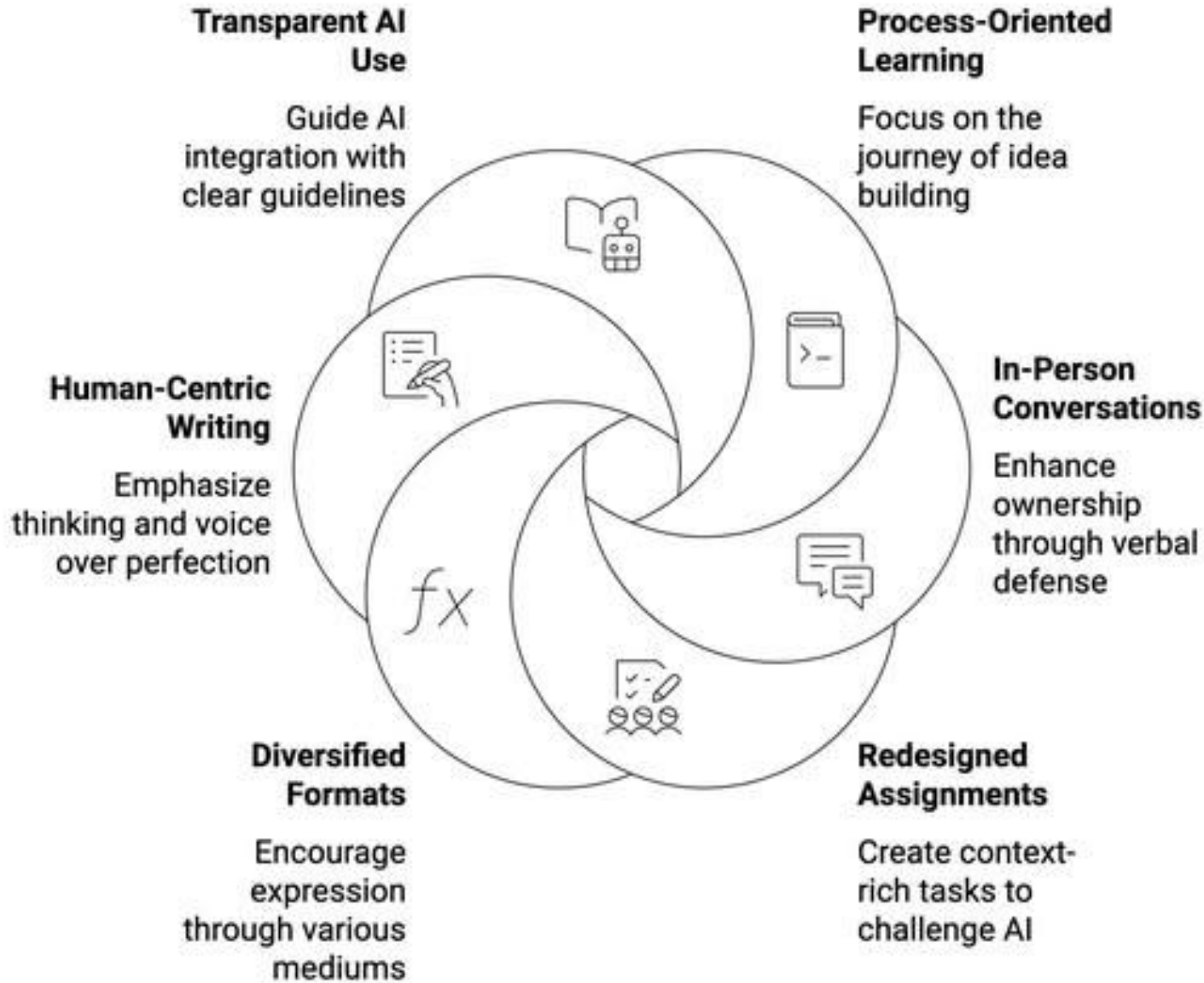


Jacqmot, C., DEVILLE, Y., & DOCQ, F. (2020).
Framework to Understand, Analyse and Describe Learning
and Open Education in Higher Education.

The AI Assessment Scale

1	NO AI	<p>The assessment is completed entirely without AI assistance in a controlled environment, ensuring that students rely solely on their existing knowledge, understanding, and skills</p> <p>You must not use AI at any point during the assessment. You must demonstrate your core skills and knowledge.</p>
2	AI PLANNING	<p>AI may be used for pre-task activities such as brainstorming, outlining and initial research. This level focuses on the effective use of AI for planning, synthesis, and ideation, but assessments should emphasise the ability to develop and refine these ideas independently.</p> <p>You may use AI for planning, idea development, and research. Your final submission should show how you have developed and refined these ideas.</p>
3	AI COLLABORATION	<p>AI may be used to help complete the task, including idea generation, drafting, feedback, and refinement. Students should critically evaluate and modify the AI suggested outputs, demonstrating their understanding.</p> <p>You may use AI to assist with specific tasks such as drafting text, refining and evaluating your work. You must critically evaluate and modify any AI-generated content you use.</p>
4	FULL AI	<p>AI may be used to complete any elements of the task, with students directing AI to achieve the assessment goals. Assessments at this level may also require engagement with AI to achieve goals and solve problems.</p> <p>You may use AI extensively throughout your work either as you wish, or as specifically directed in your assessment. Focus on directing AI to achieve your goals while demonstrating your critical thinking.</p>
5	AI EXPLORATION	<p>AI is used creatively to enhance problem-solving, generate novel insights, or develop innovative solutions to solve problems. Students and educators co-design assessments to explore unique AI applications within the field of study.</p> <p>You should use AI creatively to solve the task, potentially co-designing new approaches with your instructor.</p>

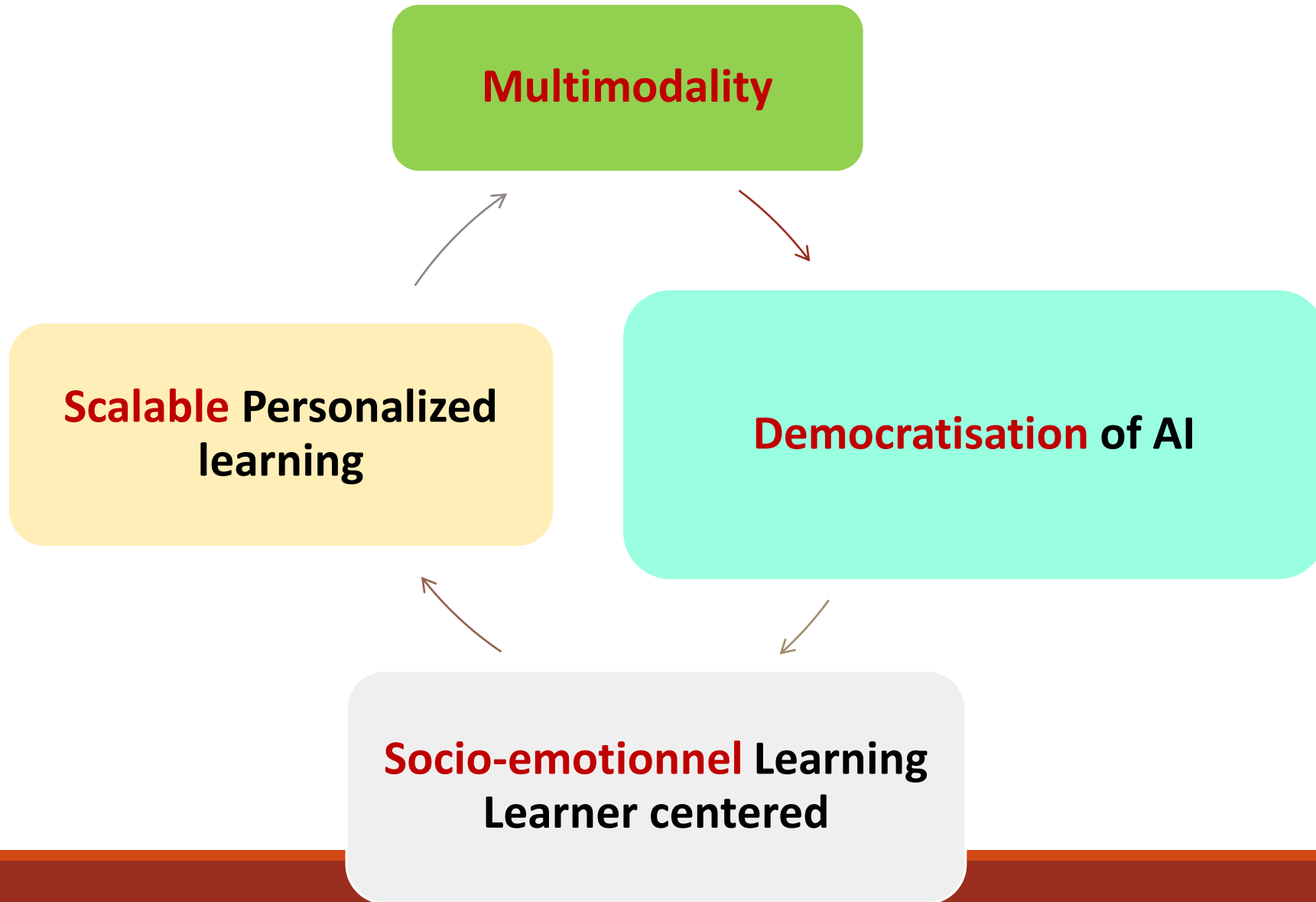
Strategies for AI-Resilient Assessment



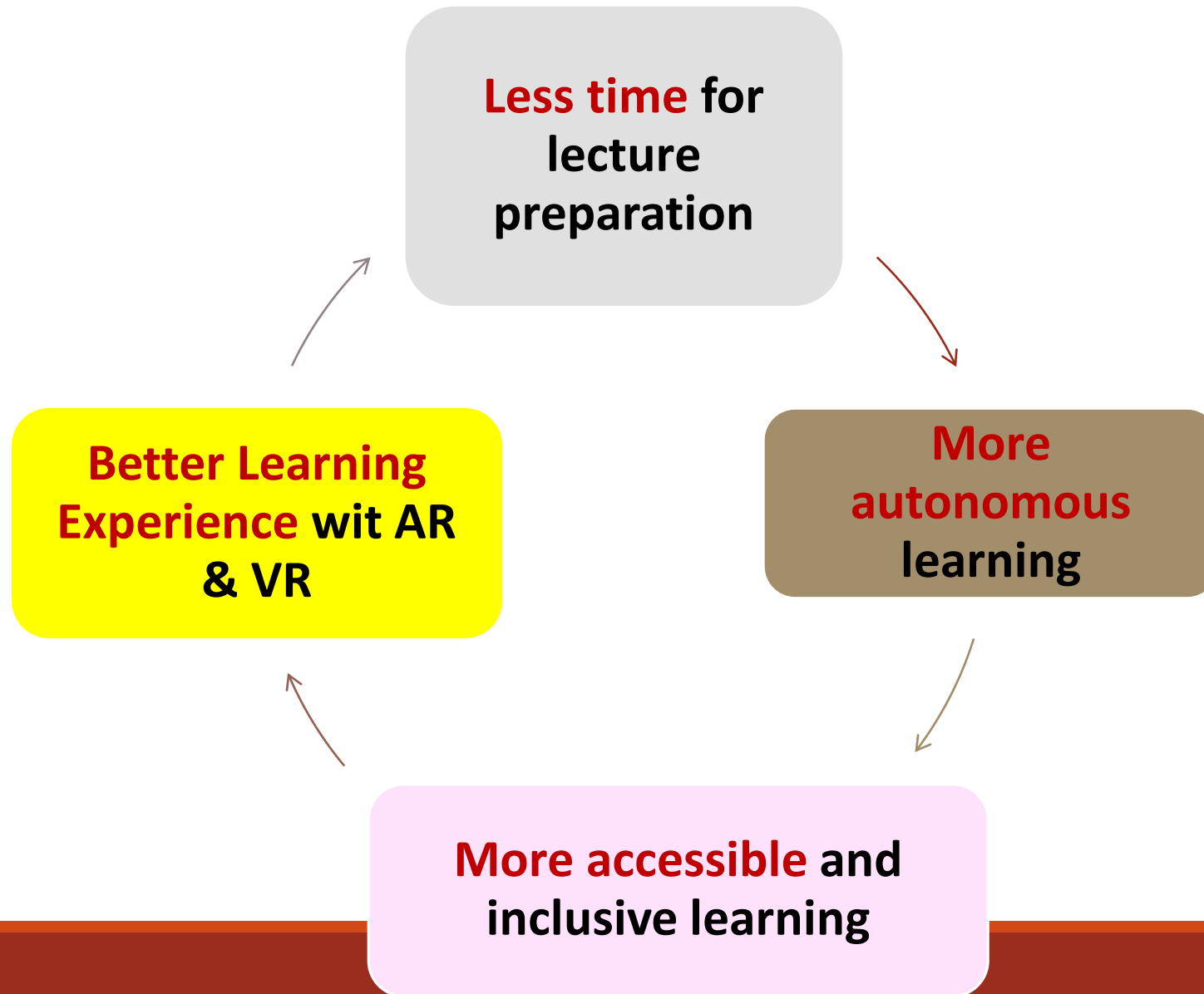
These strategies don't eliminate AI !

They simply help us ensure learning stays alive in the middle of it

Predictions for the future of AI in Education (1/2)



Predictions for the future of AI in Education (2/2)

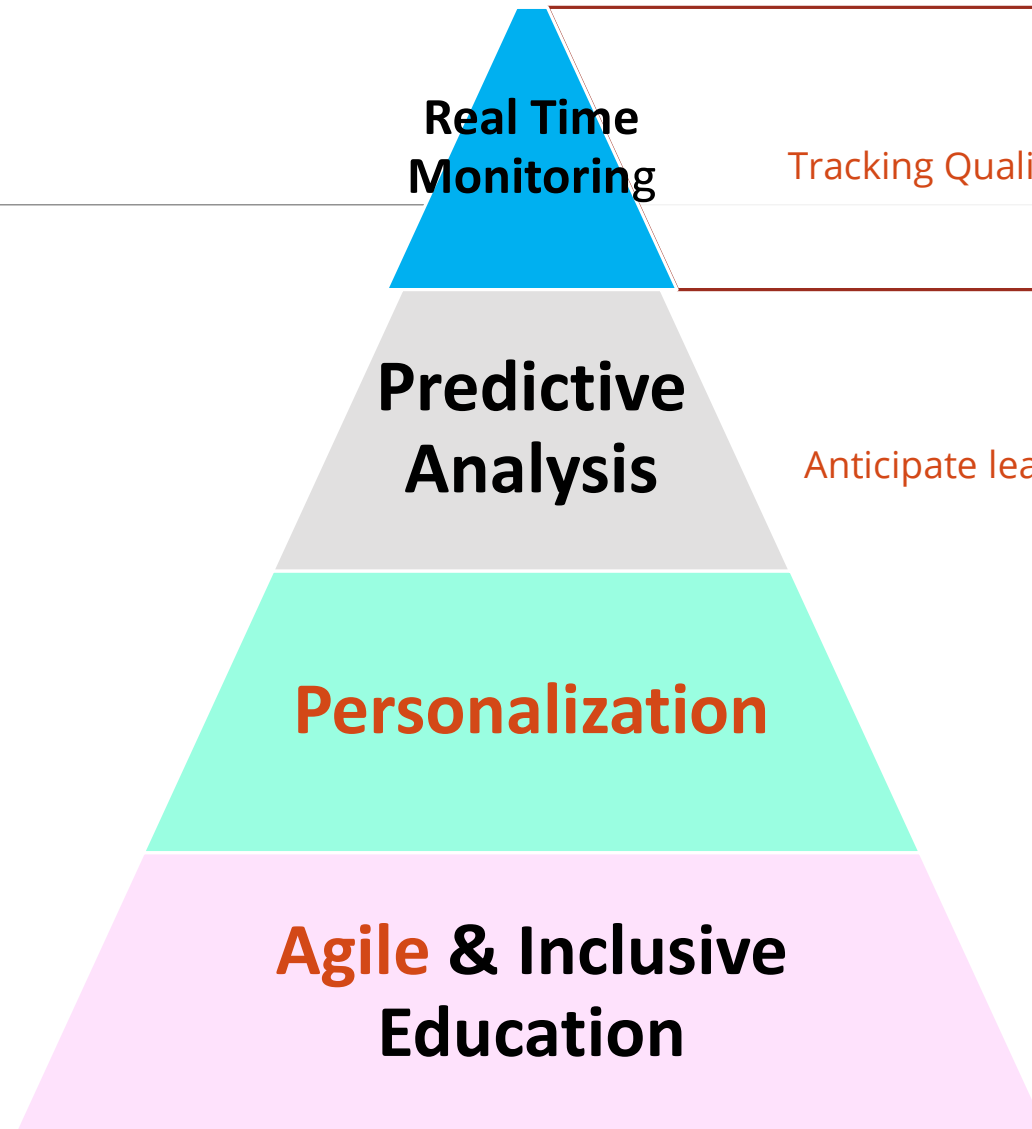


AI & Quality Assurance

AI is transforming quality assurance into a proactive and personalized approach, paving the way for more responsive and student-centered education.

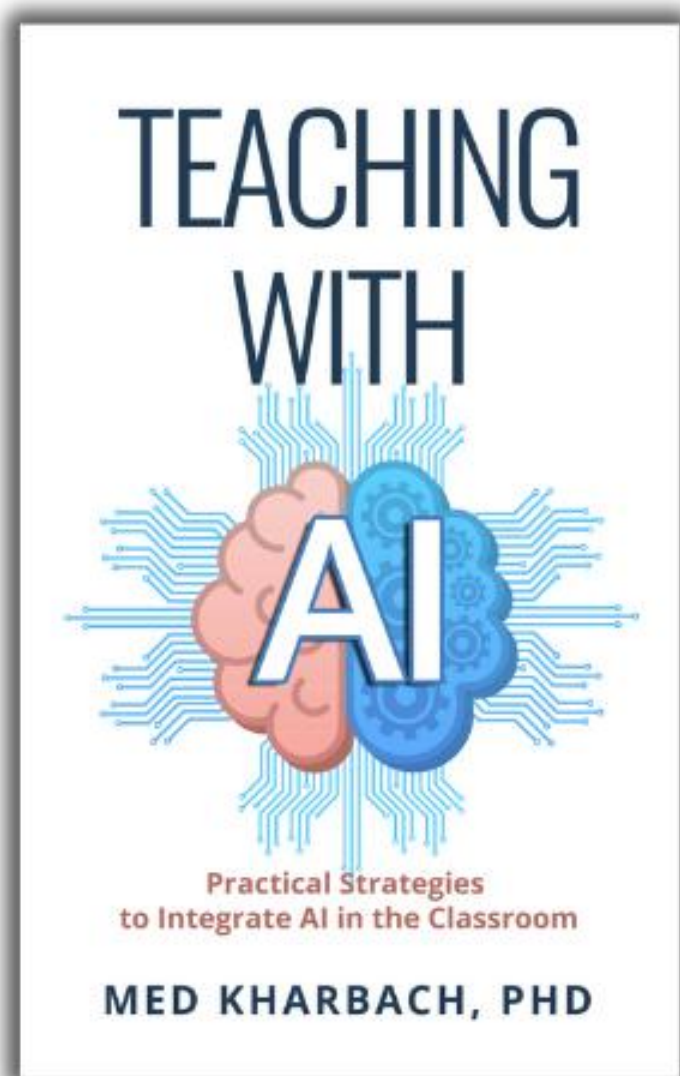
Learning paths Personalized with automated feedbacks

More flexible educational System

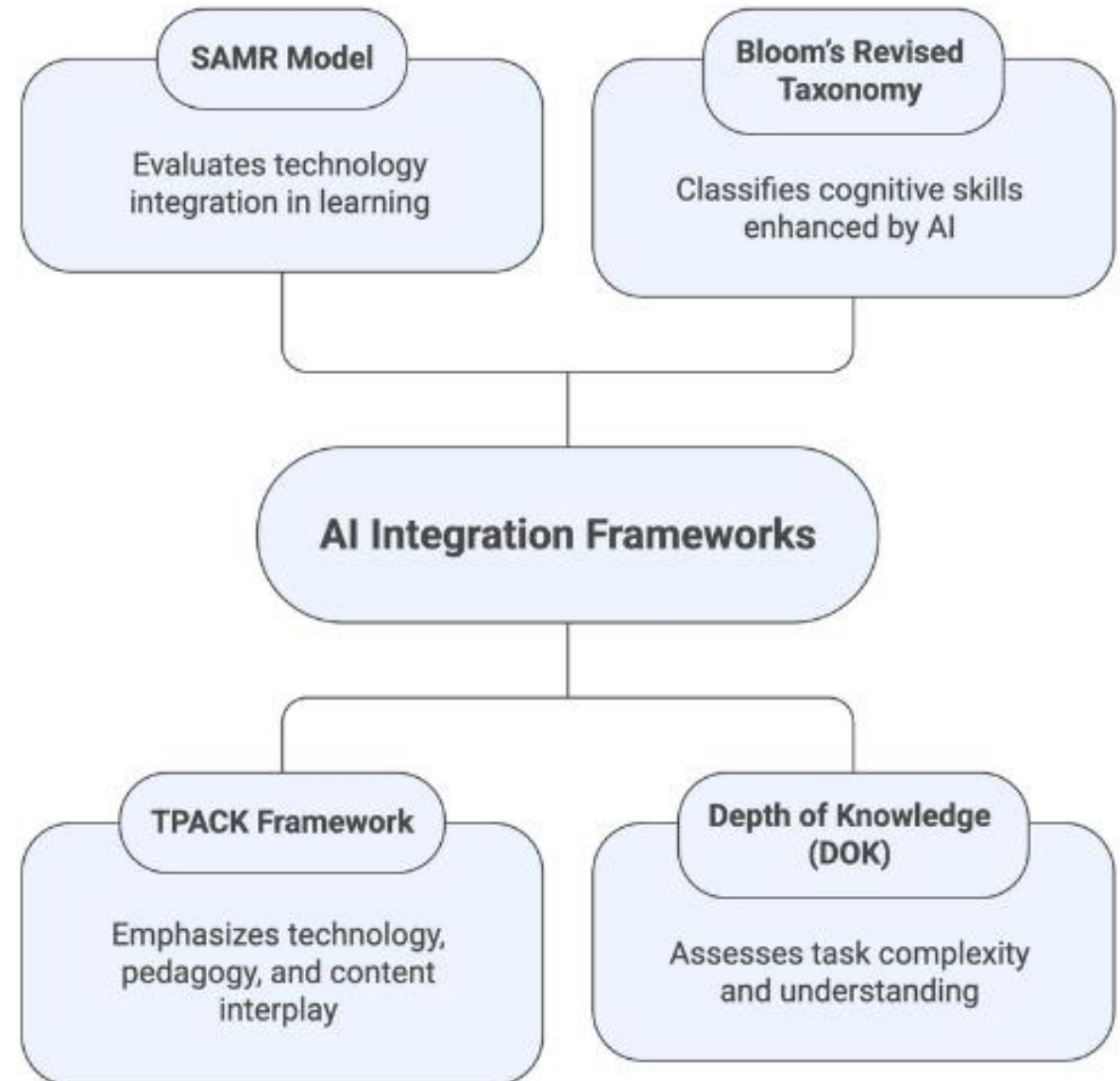


Tracking Quality Indicators

Anticipate learners needs.



AI Integration Frameworks in Education

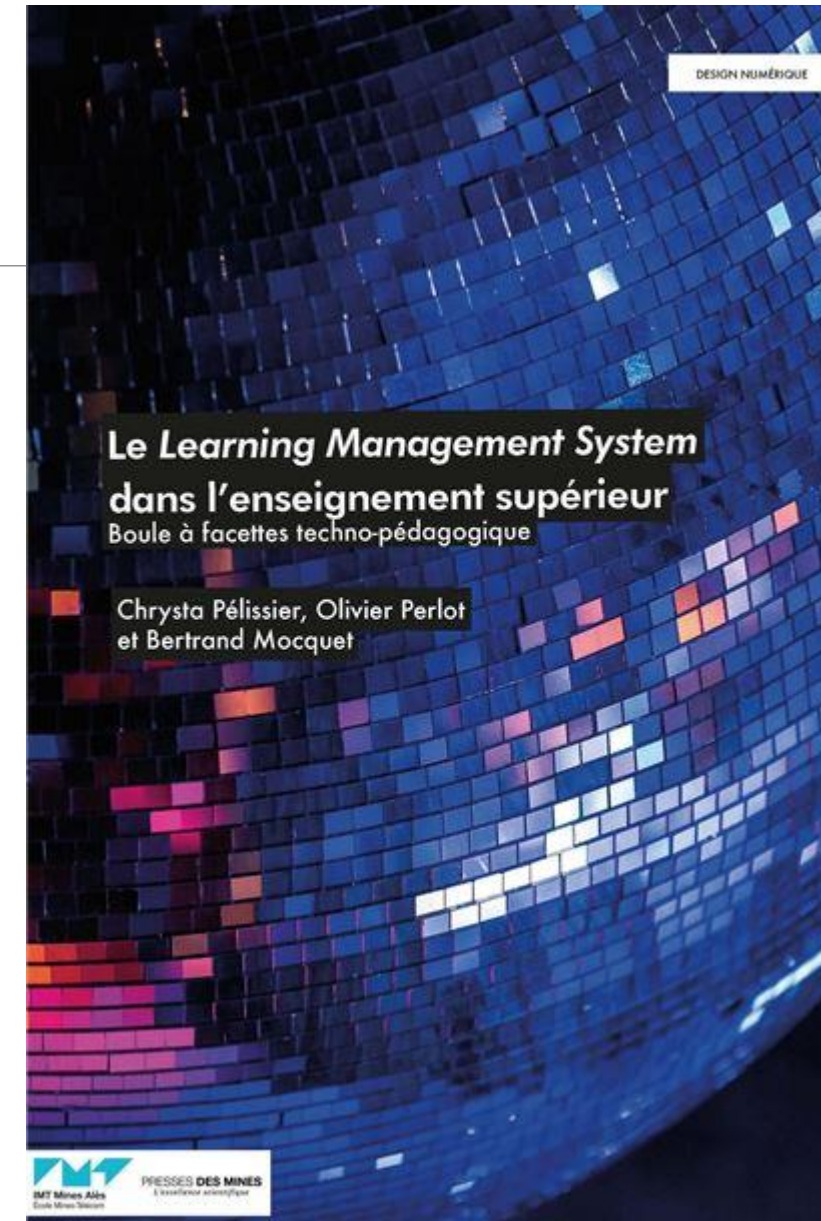


Recent publications

Cheniti-Belcadhi, L., Hadyaoui, A. **Février 2025 : Vers des environnements d'apprentissage intelligents, ouverts et innovants.** Dans Péliisser, C., Perlot, O. et Mocquet, B. Le Learning Management System dans l'enseignement supérieur : Boule à facettes technopédagogiques. Paris, Presses des Mines.

Hadyaoui, A., Cheniti-Belcadhi, L., & Mitwally, M. A. (2024). **Cognitive AI's Transformative Impact on Self-Regulated Learning in eLearning Environments.** In Adarkwah, M. A., Amponsah, S., Schneider, K., Huang, R., & Thomas, M. (Eds.), Artificial Intelligence and Human Agency in Education: Perspectives on Cognitive, Social, and Psychological Contexts. Springer.

Cheniti-Belcadhi, L., Mitwally, M. A. A., & Hadyaoui, A. (2025). **Intelligent Frameworks for Assessment in AI-Enhanced Learning Environments.** In Artificial Intelligence Transforming Higher Education. Springer



**LAURENT ALEXANDRE
OLIVIER BABEAU**

NE FAITES PLUS D'ÉTUDES

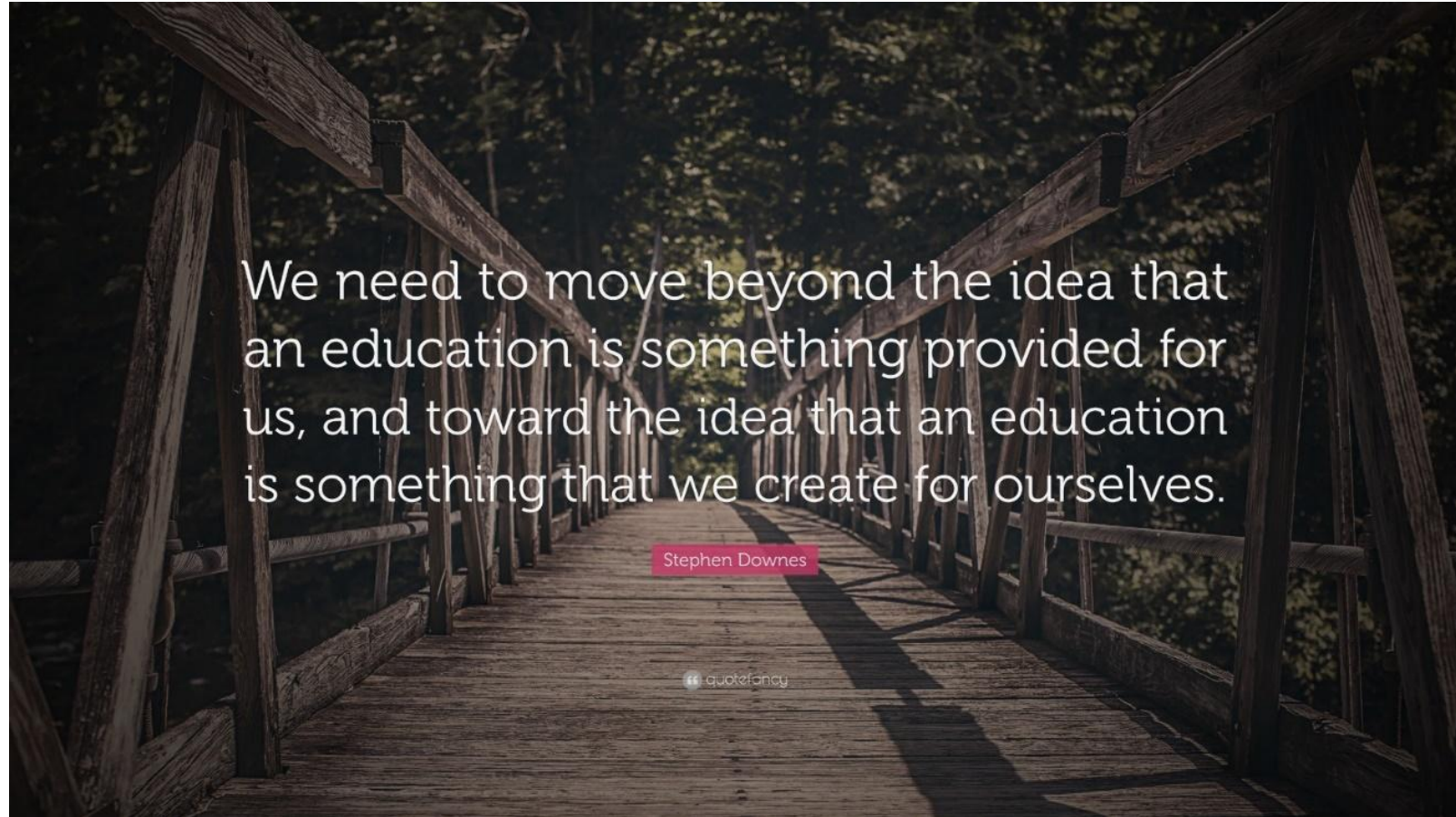
**APPRENDRE AUTREMENT
À L'ÈRE DE L'IA**

BUCHET • CHASTEL

- **Cognitive glaciation:** AI is gradually inducing a "slow cognitive glaciation": **the overtaking of the human brain by AI, once anticipated for 2100, has just been pushed back to... 2031**
- **Impact on the job market:** **Robots replacing employees with certain skills**
- **Solution:**
- **Embrace AI :** Stop thinking in terms of "academic degrees," which quickly become obsolete, but in terms of "skills," which will need to be updated throughout life, keeping pace with technological advancements.

Ne faites plus d'études : apprendre autrement à l'ère de l'IA, de Laurent Alexandre et Olivier Babeau, éditions Buchet-Chastel. Sortie le 16 octobre 2025

**AI isn't replacing
teachers, it's
redefining what
great teaching can
look like**



We need to move beyond the idea that an education is something provided for us, and toward the idea that an education is something that we create for ourselves.

Stephen Downes

quotefancy

Use of AI by teachers

Pedagogical practices and limitations

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