



# Using AI in Teaching, Learning, and Grading

## Integrating Artificial Intelligence in General Education

**26 April 2025**

Chafic Mokbel  
American University of Technology

*How AI is present in Education?*

# Through AI Tools

- Typically:
  - For professors:
    - lesson planning, rubric generation, material generation, quiz generation, paraphrasing, summarising, grading, tutoring, plagiarism and AI content checking, ...
  - For learners:
    - Notes taking, organising, text generating, problem solving, coding, ...
  - For administration:
    - Admissions and enrolment, financial aids, scheduling, academic record correctness, retention and engagement, ...
  - ... and more
    - E.g. Individualised Education Program especially for students with difficulties

*Would AI just provide tools?*

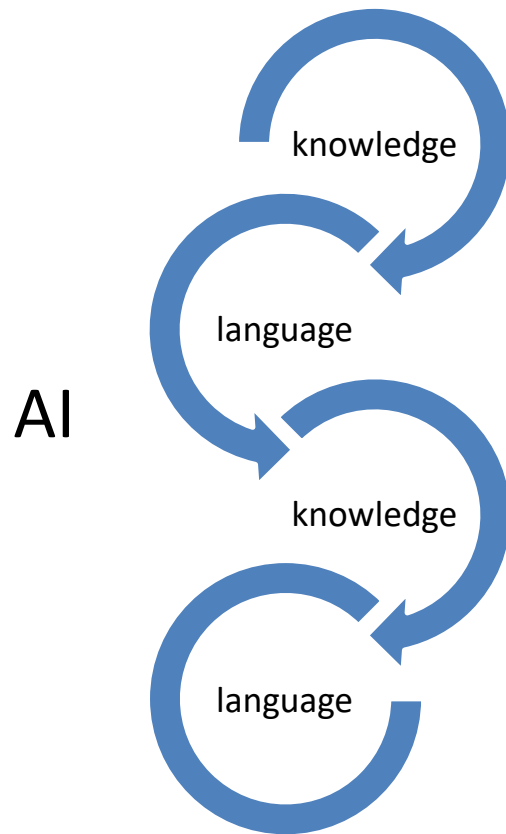
# Communication and Understanding

Understanding

Communication

([natural] language[s])

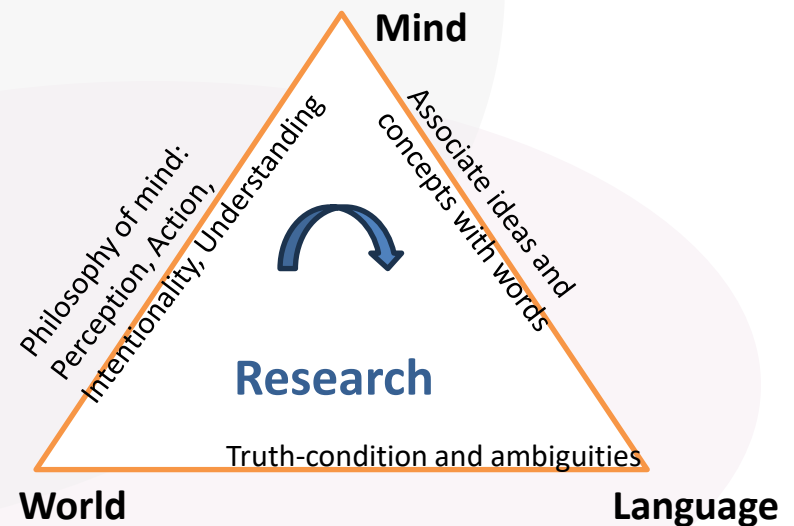
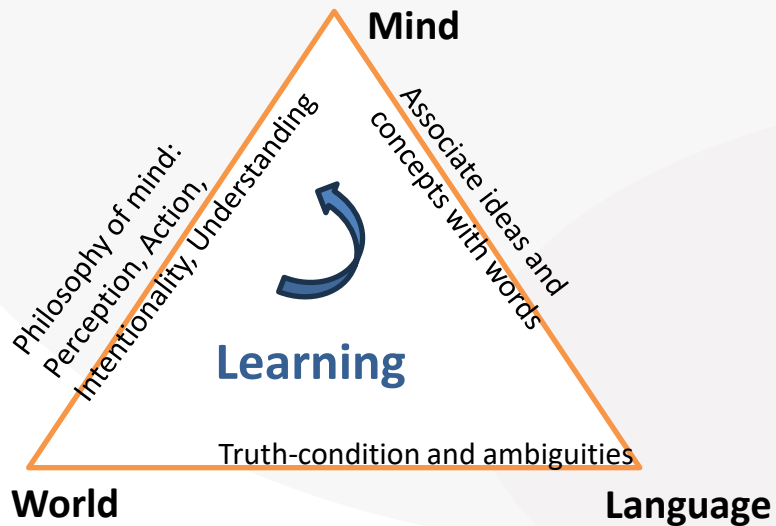
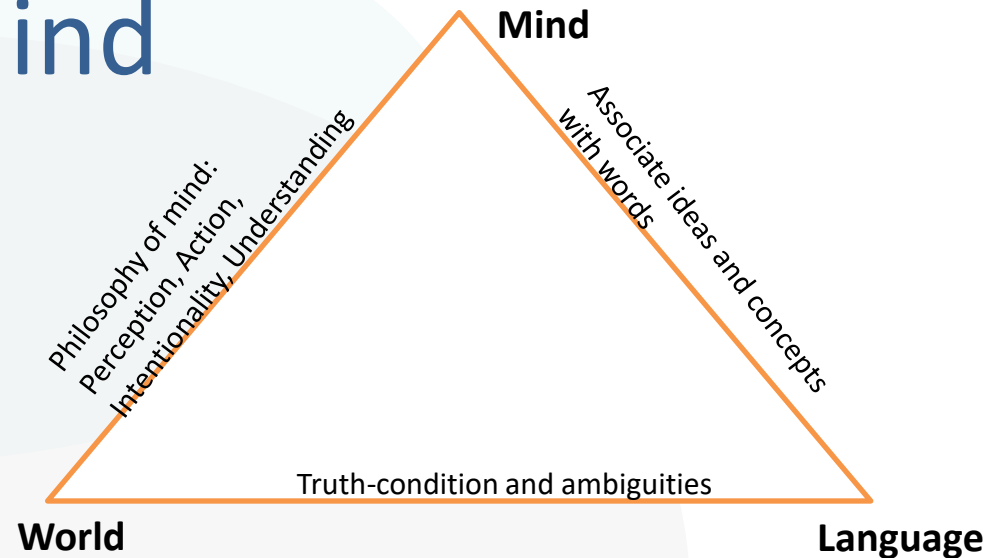
Either Horizontally or  
Vertically



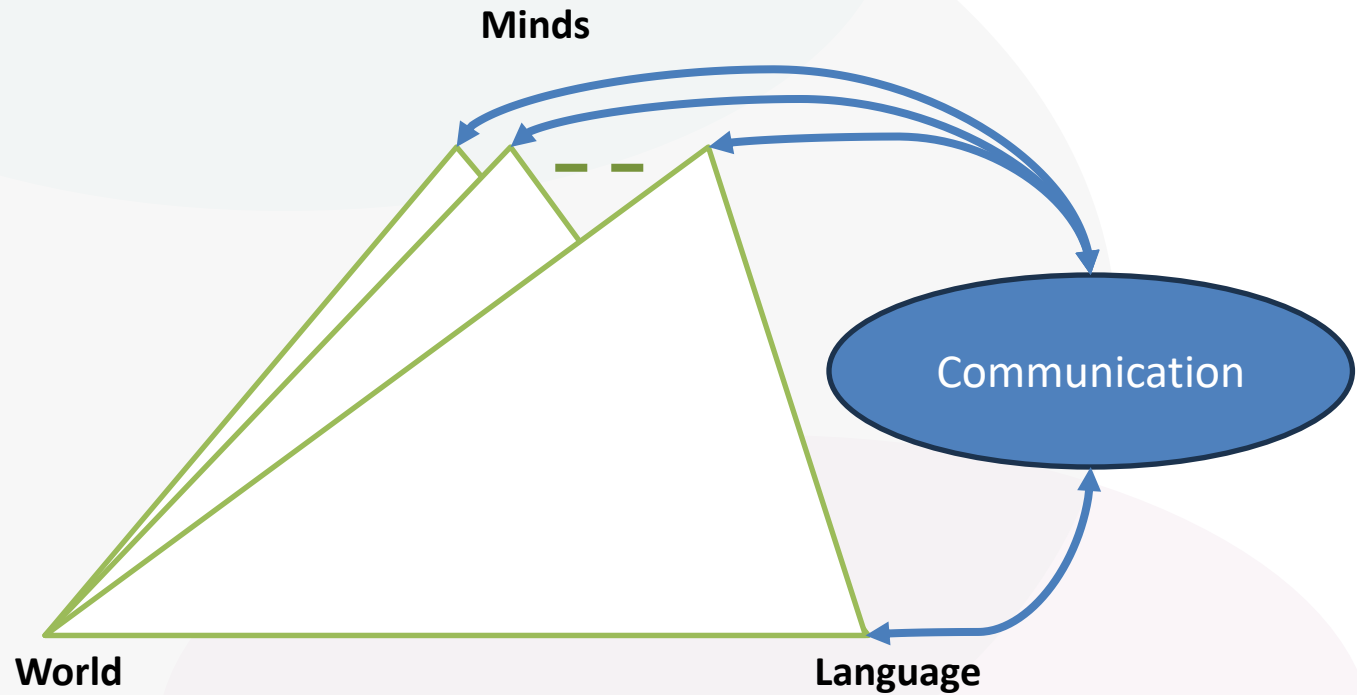
... and the pursuit of truth

# Philosophy of Mind

- Mind, language, and learning

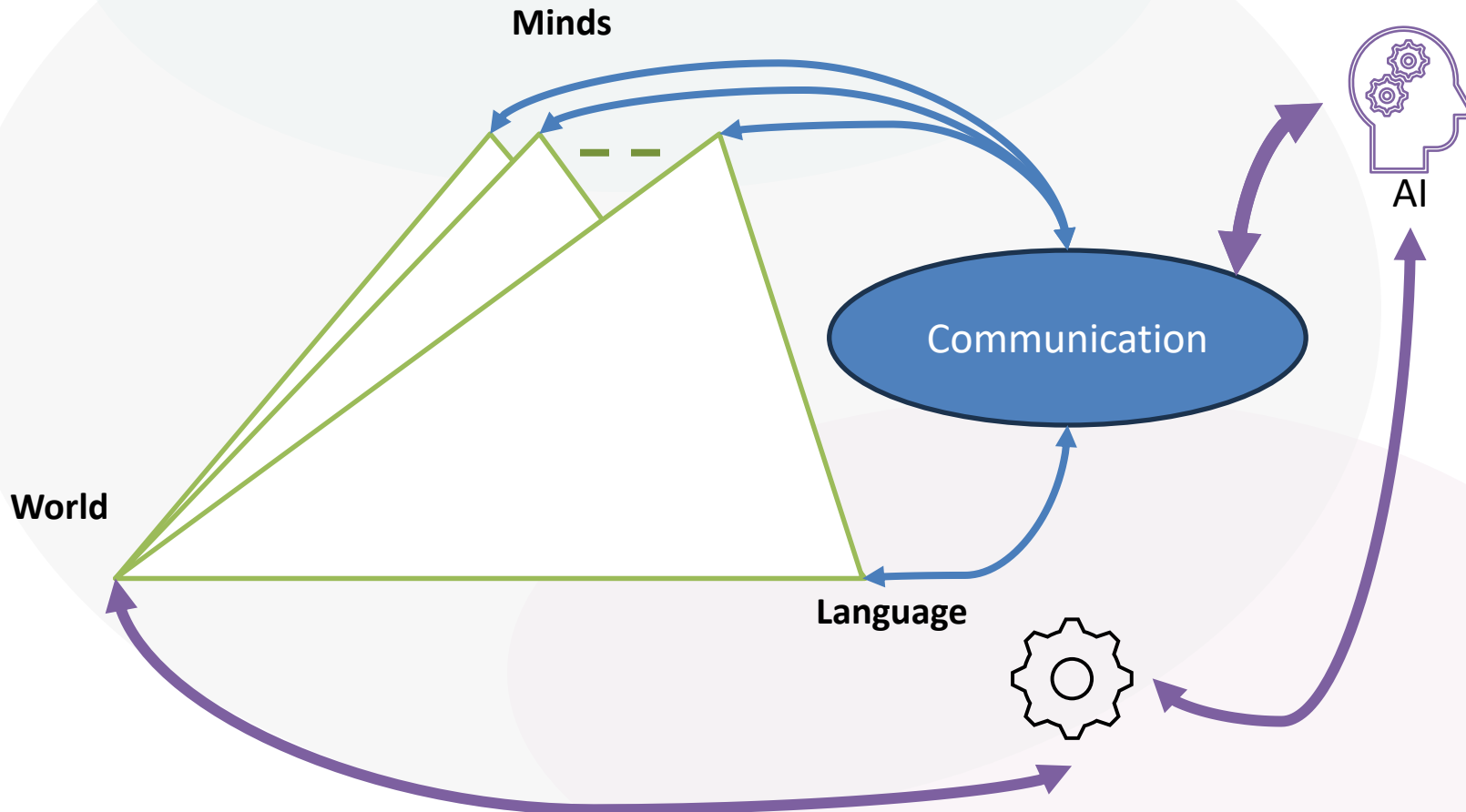


# An updated Philosophical Triangle

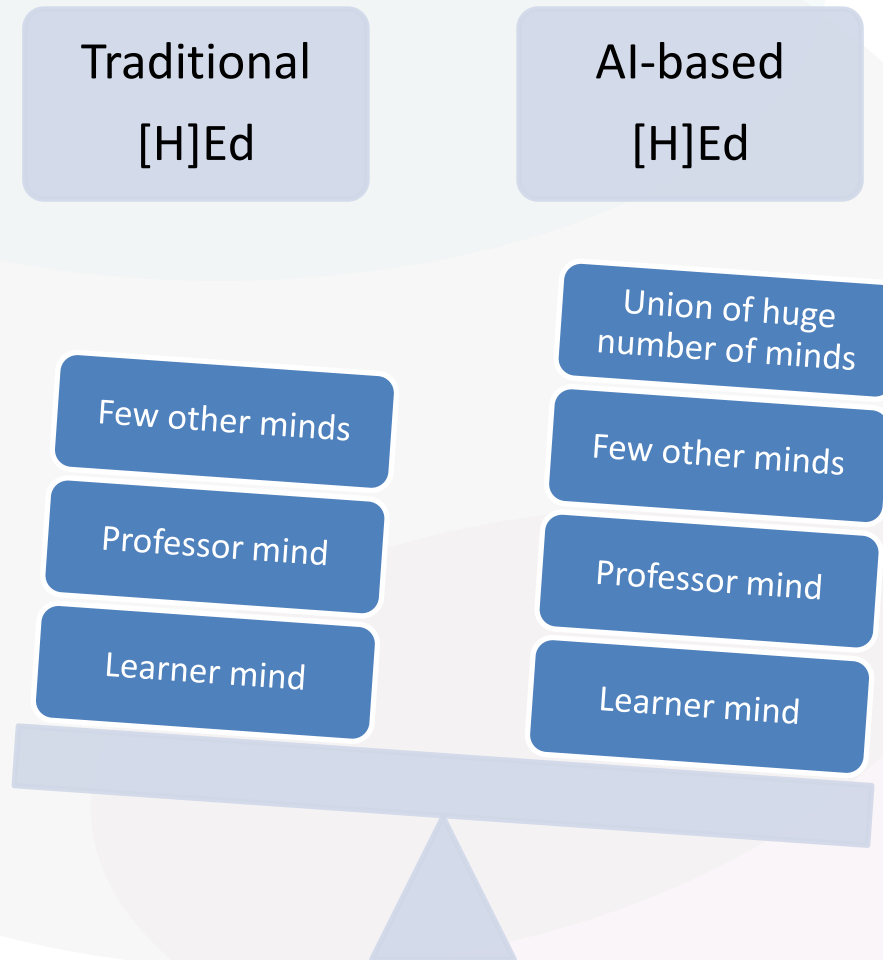




# AI on Philosophical Triangle



# AI-based vs Traditional Education



# *Educational Opportunities, Risks and Challenges?*

... Roughly



Smarter  
Users



Dependent  
Users

# Challenges

- Prepared Teaching Staff for:
  - Profiting from opportunities
  - Avoiding the risks
  - A challenging endeavor
- Working collectively
  - Sharing practices/experiences/pitfalls
  - Locally...
  - Internationally, e.g.:
    - AI Competency Framework for Teachers

# UNESCO AI Competency for Teachers

# AI CFT Key Principles

- Ensuring inclusive digital futures
  - Understanding and assessing AI use threats
  - Ensuring human and social values prevail
  - Steering AI for human capacity development
- A human-centred approach
  - Ethics
  - Impact of AI
- Protect teachers' rights and redefining teachers' roles
- Promoting trustworthy and environmentally sustainable AI for education
- Lifelong professional learning for teachers

# Aspects and Progression Levels

Aspects	Progression		
	Acquire	Deepen	Create
1. Human-centred mindset	Human agency	Human accountability	Social responsibility
2. Ethics of AI	Ethical principles	Safe and responsible use	Co-creating ethical rules
3. AI foundations and applications	Basic AI techniques and applications	Application skills	Creating with AI
4. AI pedagogy	AI-assisted teaching	AI-pedagogy integration	AI-enhanced pedagogical transformation
5. AI for professional development	AI enabling lifelong professional learning	AI to enhance organizational learning	AI to support professional transformation

(UNESCO AI CFT)



*Where we are today?*

# Between *Acquire* and *Deepen*

- Through the introduction of many tools
- Teacher assistant tools:
  - Lesson planning, assessments, grading, content creation, ...
    - EdCafe, MagicSchool
  - Design generation, content creation, workflow integration
    - Canva
  - Real-time writing suggestion, plagiarism detection, ...
    - Grammarly
- General chatbots can also be used in education
  - ChatGPT, ...

*Seizing Opportunities and Navigating Challenges  
... in a transformational period*

*Thank you*