



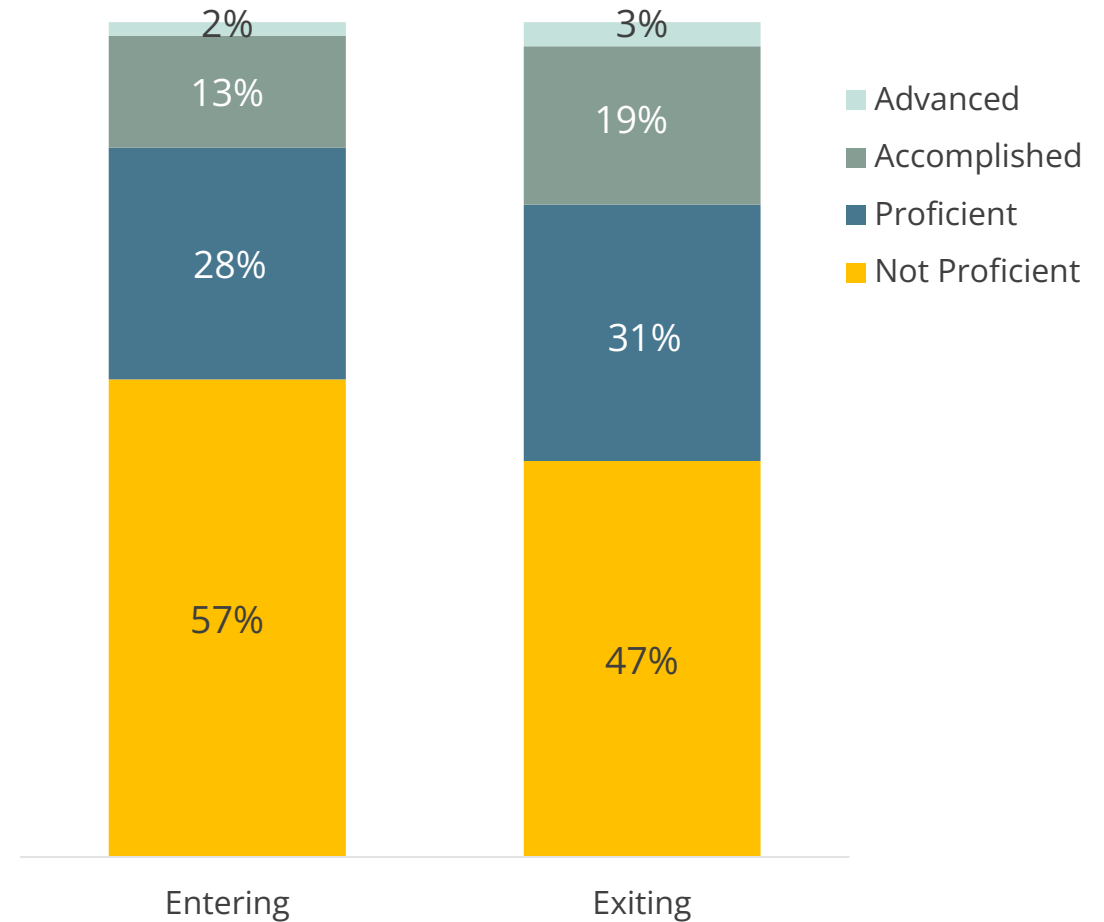
Critical Thinking Skills International Perspectives

Doris Zahner, PhD
20 May 2026 | Helsinki, Finland
KAPPAS2 Final Seminar

Proficiency In Critical Thinking Skills Is Lacking

57% of students **entering** higher education internationally are **not proficient** in critical thinking, problem solving, and written communication.

47% of **exiting** students are **STILL not proficient** in these skills.



Van Damme, D., & Zahner, D. (Eds.). (2022). *Does higher education teach students to think critically?* OECD Publishing. <https://doi.org/10.1787/cc9fa6aa-en>

Critical Thinking in the AI Age

Artificial Intelligence (AI) has profoundly transformed industries and everyday life, highlighting the importance of critical thinking skills.

While AI can process vast amounts of data and perform complex calculations, it **fundamentally lacks human judgment, nuanced understanding, and the ability to question its own assumptions or detect biases.**



Critical thinking is indispensable for:

- Evaluating AI Output
- Effective AI Interaction (Prompt Engineering)
- Problem-Solving Beyond Automation
- Avoiding Cognitive Offloading and "Digital Amnesia"
- Persuasive Writing
- Ethical Considerations and Responsible AI Development

A Comprehensive Program to Build Future-Readiness

A simple, scalable model designed for seamless integration and broad impact to:

- Enhance your institution's existing curriculum
- Create a robust system for skill development and measurement

"The experience was very positive and engaging for both students and myself. It was really rewarding to see the students start to actively incorporate the notion of critical thinking and its characteristics."

~ Faculty Member



The Critical Thinking Skills Program

Professional Development

Performance Task Instructional Materials

Performance-Based Skills Assessment

Reports and Insights

Day 1 Agenda

Time	Topic
8:00 – 8:30	Welcome and Introductions
8:30 – 10:30	Importance of Critical Thinking Skills
10:30 – 11:00	Local Thinking in the AI Age
11:00 – 11:45	Break
11:45 – 12:00	Measuring Critical Thinking Skills: CLA+
12:00 – 12:45	Critical Thinking Skills Program
12:45 – 1:30	Wrap-up Day 1



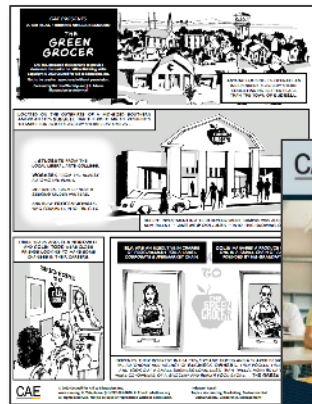
Day 2 Agenda

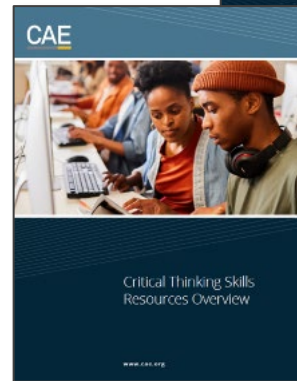
Time	Topic
8:00 – 8:15	Recap from Day 1
8:15 – 11:00	The 7 Steps for Effective Critical Thinking
11:00 – 11:15	Break
11:15 – 12:00	Introduction to Module Framework
12:00 – 12:45	Classroom Module Issues
12:45 – 1:00	Wrap-up Day 2

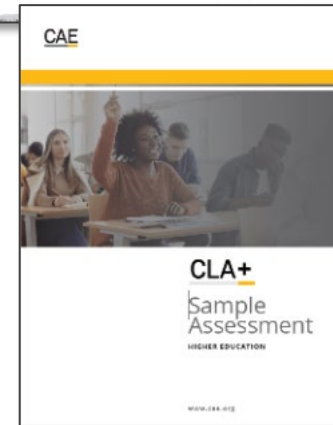


Day 3 Agenda

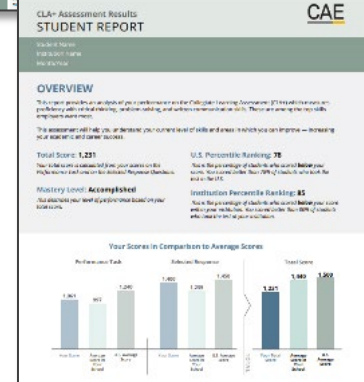
Time	Topic
8:00 – 8:15	Recap of Day 2
8:15 – 10:00	Share Module Framework (small group)
10:00 – 11:30	Share Module Framework (1 from each group)
11:30 – 11:45	Break
11:45 – 12:15	Program Implementation
12:15 – 12:45	Reflections and Feedback
12:45 – 1:30	Wrap-up Day 3





	1	2	3	4	5	6
Analysis and Problem Solving	Identify the main purpose of the text and the author's point of view.	Identify the main purpose of the text and the author's point of view.	Identify the main purpose of the text and the author's point of view.	Identify the main purpose of the text and the author's point of view.	Identify the main purpose of the text and the author's point of view.	Identify the main purpose of the text and the author's point of view.
Writing Effectiveness	Identify the main purpose of the text and the author's point of view.	Identify the main purpose of the text and the author's point of view.	Identify the main purpose of the text and the author's point of view.	Identify the main purpose of the text and the author's point of view.	Identify the main purpose of the text and the author's point of view.	Identify the main purpose of the text and the author's point of view.
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Overview

Total Score: 1,251

U.S. Percentile Ranking: 78

Proficiency Level: **Accomplished**

Institution Percentile Ranking: 85

Performance Task	Score	Average Score
Task 1	1,800	1,600
Task 2	1,600	1,400
Task 3	1,400	1,200
Task 4	1,200	1,000
Task 5	1,000	800
Task 6	800	600

10 April 2026 | Mays MBA | Critical Thinking Skills Workshop

~~How long~~ do we shut this thing down?
Completely or partially?

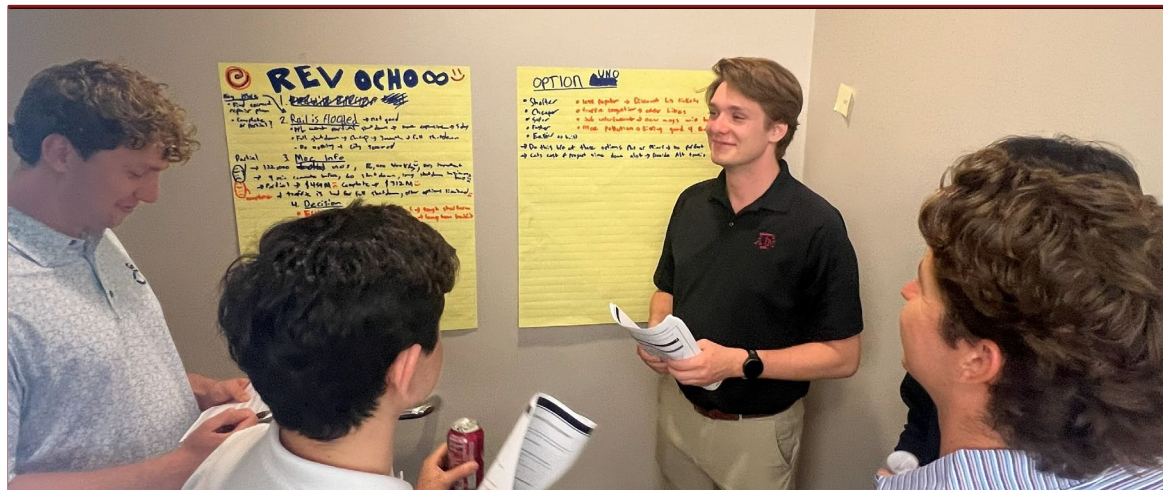
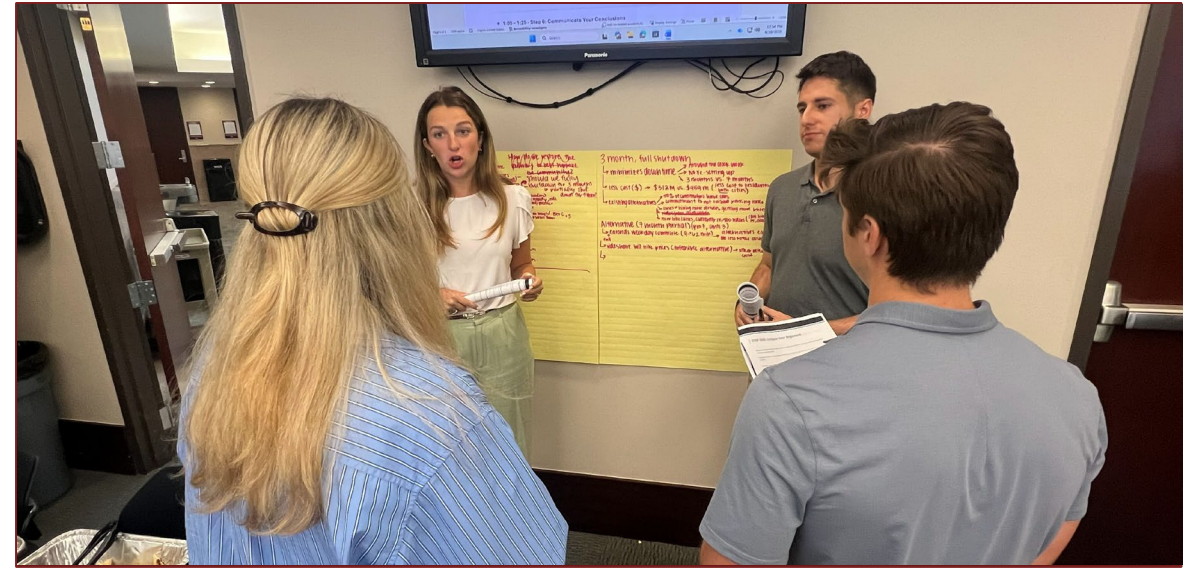
Organize Data

Bayville	Carston	Option 1
127,500 commuters	86,100 weekday	- 3 months
36,400 weekend	15,267 commuters	- \$312 mil
		- Complete Shutdown

Option 2

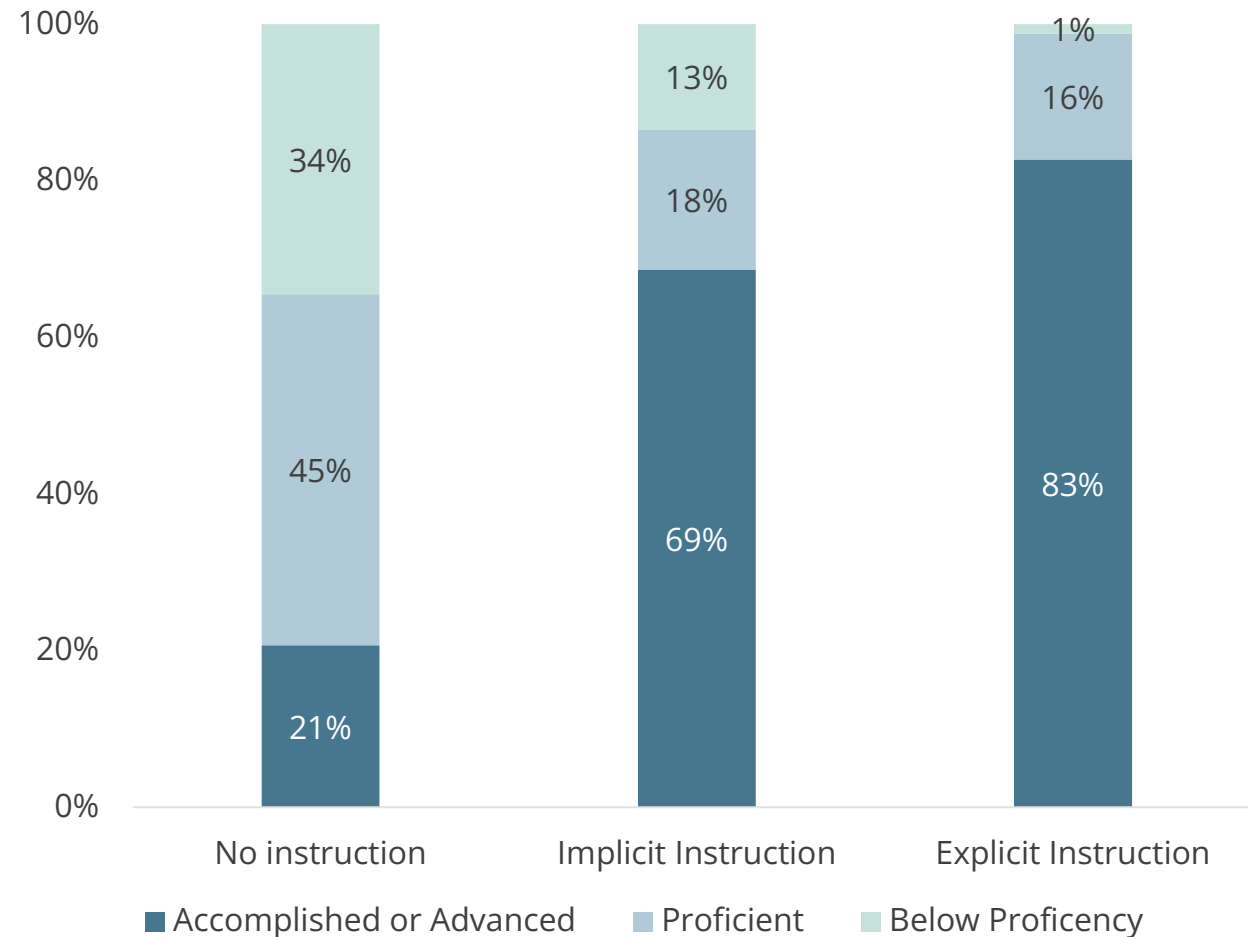
- 7 months
- \$459 mil
- Night/wknd

- 50% wkdy commuters own cars
- < 50% wknd commuters own cars



Case Study: MBA Program

- Analyses of CLA+ scores for a cohort of higher education students¹, showed that by increasing the level of curricular instruction, students statistically significantly increased their CLA+ Total Score.
- Proportionally more students were in the top two Mastery levels as their curricular instruction increased with fewer Below Proficiency.



¹ Zahner, D., Alexander, M., & Provines, L. (2026). Measuring the Efficacy of a Critical-Thinking Skills Program. Paper presented at the 2026 Conference of the American Educational Research Association.

No instruction: Students received **neither implicit nor explicit instruction** on Critical Thinking.

Implicit Instruction: Faculty were trained on CAE's Seven Steps for Effective Critical Thinking and incorporated the concepts into their teaching **but did not explicitly teach** the Seven Steps.

Explicit Instruction: Faculty were trained on CAE's Seven Steps for Effective Critical Thinking and **explicitly taught the steps** using CAE provided student and instructor materials.

Immediate Impact



Krisztina E. Lengyel Almos • 2nd
TEC de Monterrey, Campus Querétaro PhD in Economics from UAQ
1w • Edited •

+ Follow

Grateful to have participated in the @International Conference on Human Interaction & Emerging Technologies (IHiet) 2026 at the [Universitat Politècnica de València \(UPV\)](#).

A special thank you to [Tecnológico de Monterrey](#) and to the Dean's Office for Research of the School of Social Sciences and Government for supporting my attendance at this inspiring event.

I had the opportunity to present our work titled "Thinking with AI: Human-AI Interaction and Critical Thinking in Scenario-Based Learning," based on classroom research designed using the [Council for Aid to Education, Inc. \(CAE\) Critical Thinking Framework](#) and implemented with my colleague [Joel Bravo](#), where students compared human- and AI-generated future space exploration scenarios.

Our findings showed that human-created scenarios were stronger in creativity and depth, while AI-generated ones were more fact-based and conservative. Here is the link to our published article: https://lnkd.in/e9Pv_FBi

The conference also demonstrated fascinating AI applications across diverse disciplines—from social sciences to biomedical and automotive engineering—offering valuable new insights into how AI is being applied in real-world contexts from all over the world.

An exciting step in understanding how AI can best support learning and teaching while preserving human creativity. Thanks for the all students who have participated!!! 🍌🍌🍌

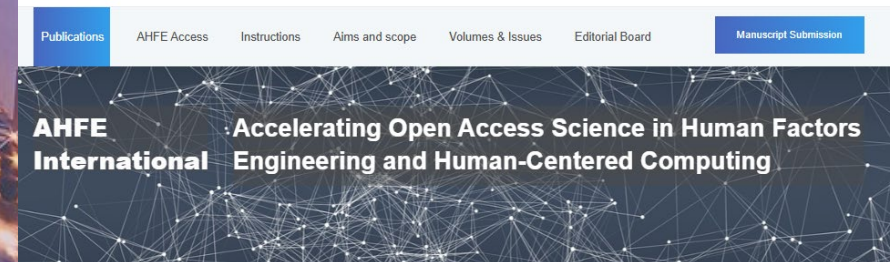
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Luis Fernando Flores Chávez and 75 others



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Books > Human Interaction and Emerging Technologies (IHiet-AI 2026): Artificial Intelligence and Future Applications > Thinking With AI: Human-AI Interaction and Critical Thinking in Scenario-Based Learning

Thinking With AI: Human-AI Interaction and Critical Thinking in Scenario-Based Learning

Open Access Article Conference Proceedings

Authors: [Krisztina Eva Lengyel-Almos](#), [Joel Angel Bravo-Anduaga](#)

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