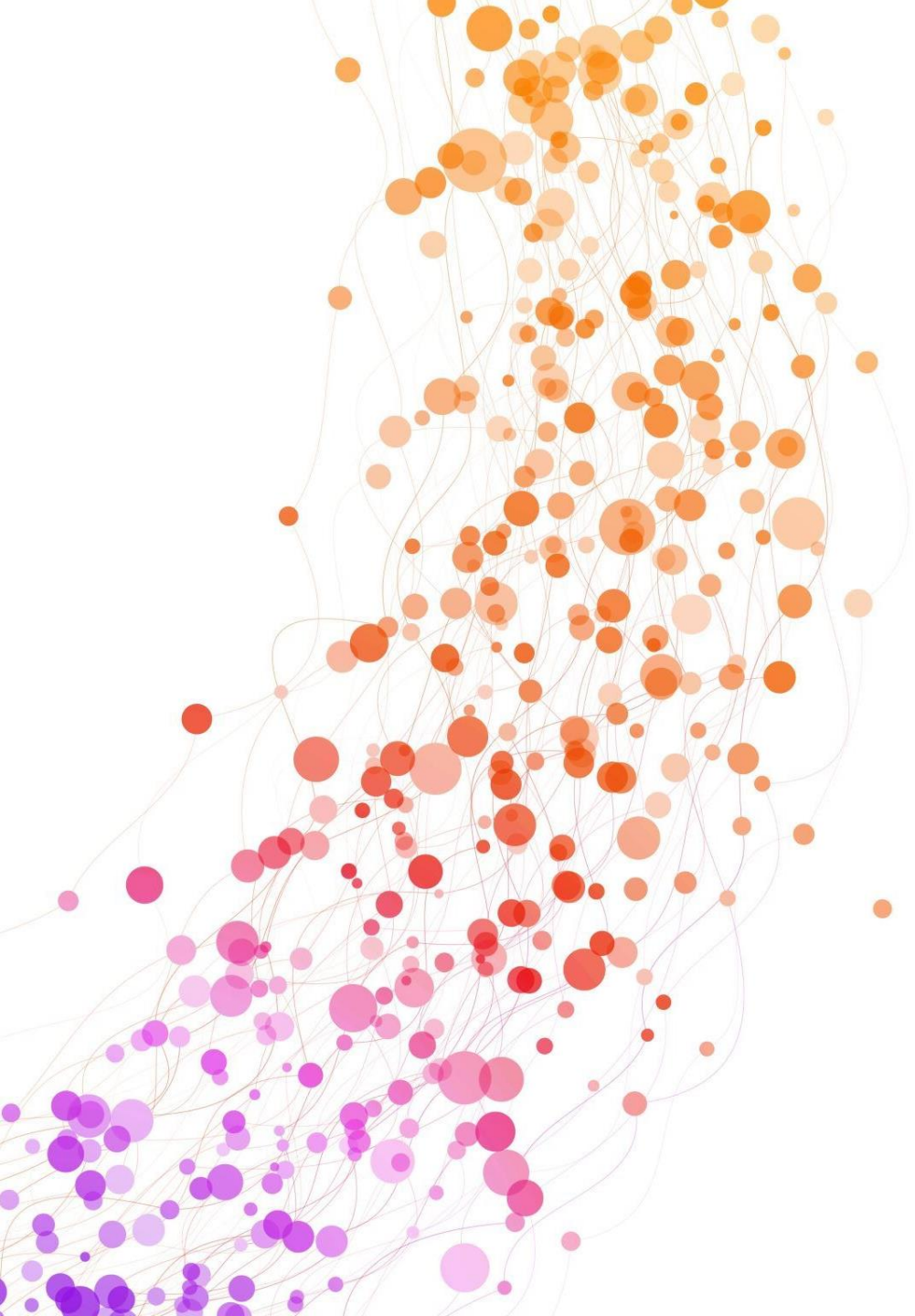

UNLOCKING ETHICAL AI: A GAMIFIED ESCAPE-ROOM WORKSHOP

ACADEMIC TUTORING TEAM

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Pioneering Futures since 1898

OUTLINE

- Real workshop experience
- Rationale and aims
- Context
- Learning design inspiration
- Workshop design
- Learning objectives and gamification elements
- Facilitation
- Observations and student feedback
- Alignment with research and learning theories
- Conclusions
- References

RATIONALE AND AIMS

Rapid growth of Artificial Intelligence (AI)

Students' digital literacy and awareness of responsible AI use

Ethical AI engagement

Traditional teaching methods -> limited interaction and participation

CONTEXT

Mixed group of students

Face-to-face workshop delivered twice

Group activity based (2-3 per team)

Embedded within academic skills

FROM GUIDELINES TO GAME-BASED LEARNING

ALDcon25: Xiaowen Liu (University of York) and Jiani Liu (University of Leeds)- Enhancing Active Learning through Gamification: Developing Research Skills with an Escape Room Experience

Based on UEL's Academic Tutoring Team AI guidance

Learning tasks aligned with gamification

Engaging three learning preferences and technology to enhance learning (Laura-De La Cruz, 2023)

WORKSHOP DESIGN OVERVIEW

Escape room structure with sequential puzzles

Narrative guidance through a virtual character

Four exercises focused on ethical AI themes→ four numeric codes → four locked boxes

Easier assessment of task understanding (“547” - “567”)

WORKSHOP DESIGN OVERVIEW

Tasks aligned with ethical AI principles

All exercises: 2 layers (enjoyment of learning and academic performance) (Nicholson and Cable, 2021)

The emphasis is on learning, not winning → all teams can progress

AI handout

EXAMPLE OF LAYERS

Key to decode: 1 2 3 4

What the student did	What could go wrong
Used references from ChatGPT without checking if they exist.	The sources might be fake (AI "hallucination") → plagiarism if cited.
Copied an AI-written paragraph directly into their essay.	The writing isn't their own → plagiarism, even if AI wrote it.
Asked AI to "summarise" an article but didn't read the real article.	The summary may be inaccurate or fabricated.
Used AI to check grammar and phrasing but didn't mention it in their reflection.	Breaking university rules on AI disclosure → academic misconduct.

Code of AI conduct

Great job! Keep the AI ethical principles in mind as you continue exploring responsible AI use in the next task.

In front of you there is a set of student actions and the possible risks that could result from them.

Your task: *match each student action to the risk it might cause. The colour associated with each correct match will reveal the final code to complete the challenge.*

* *Dr. Quinn's tip:* the box lock has 3 digits, but your code has 4. Add the two middle digits of your 4-digit code and use the result as the middle number of the 3-digit code to unlock your final box. Check the walls for more help.

THE PUZZLES COVER

- Ethical decision-making (ranking student–AI interactions)
- AI best practices (matching situations with correct behaviours)
- Recognising misconduct risks (understanding plagiarism and hallucinations)
- Using UEL's library to find academic sources

END OF THE WORKSHOP

- Once teams open the final box, they receive a message from Dr. Quinn congratulating them for demonstrating responsible, critical, ethical AI use.

Congratulations!

You've completed all the challenges and successfully matched the student actions to their risks. You've escaped the AI trap, proving that verifying sources, thinking critically, and declaring your AI tools can overcome any challenge.

Message from Dr. Quinn: "Remember, the challenge was not just to finish first, but to learn how to use AI responsibly and think critically in your work. Well done, team!"

- The workshop ends with a brief reflection and short survey, allowing students to think about their own AI habits and what they have learned.

FACILITATION

Teaching team ensured flow and clarified instructions

Facilitators rather than instructors

Reduced impulsive guessing and encouraged active involvement

LEARNING OBJECTIVES

GAMIFICATION ELEMENTS

"The term gamification refers to the use of elements of games in non-recreational situations, such as in a classroom" (Dugnol-Menéndez et al., 2021, p. 1).

Physical locked boxes and codes

Time-bound challenges

Sequential challenges and progression

Narrative framing via AI-generated intro video (escape-room scenario)

OBSERVATIONS AND STUDENT FEEDBACK

High engagement throughout sessions

Sustained focus across all activities

Strong collaboration and communication

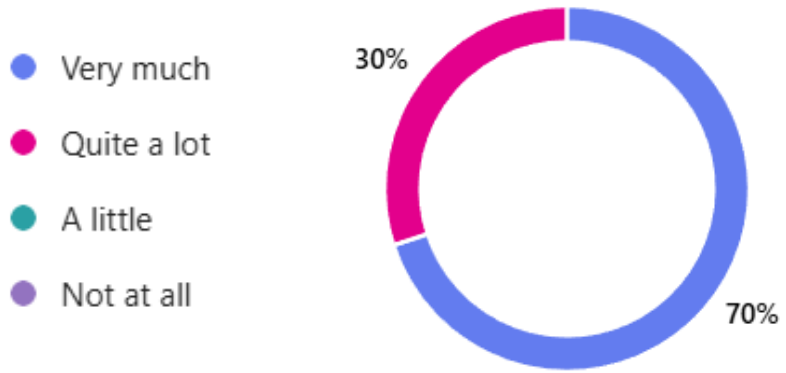
OBSERVATIONS AND STUDENT FEEDBACK

"All students participated and were actively taking part in one of the groups. They seemed engaged in discussions to find the correct answers and were queueing up to try and open the relevant box!"

"This was a great session - a perfect mix of fun and learning about the use of AI in assignments with helpful support if needed."

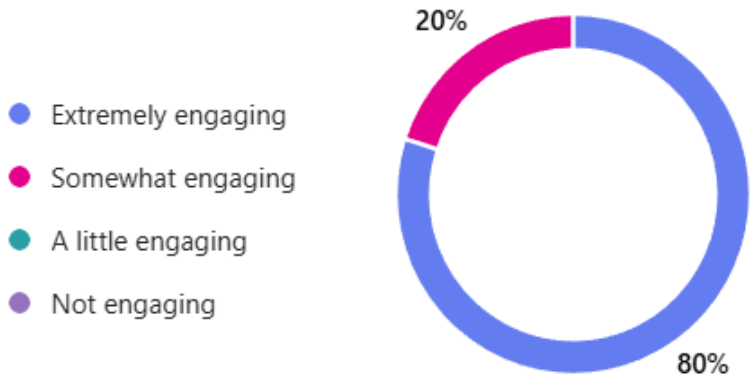
"Even though some groups solved the clues and progressed through the escape room more quickly than others, no one felt discouraged by finishing later. Every student remained engaged and determined."

"This was a really effective way of getting people to learn more about AI. The students worked so well in teams and the way the escape room was set up with the clever visuals and the boxes really added to the experience. "

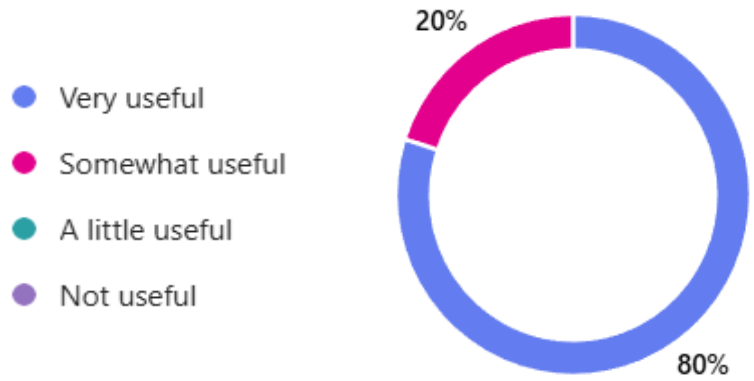


1. How much did you enjoy the workshop?

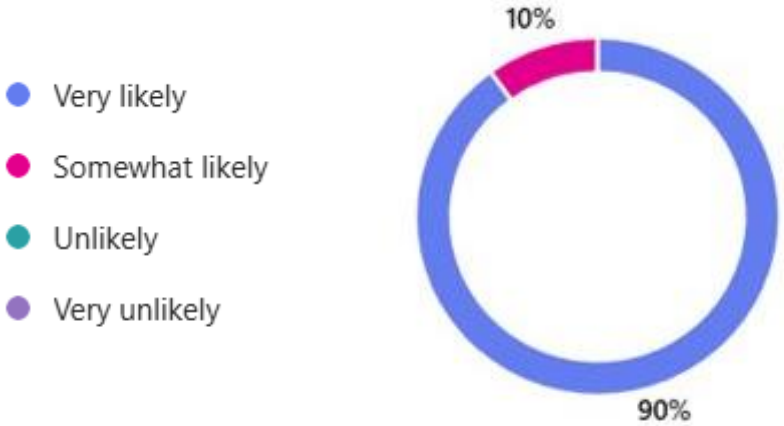
2. To what extend did the workshop encourage you to communicate with your peer students?



4. How engaging were the escape-room style exercises?

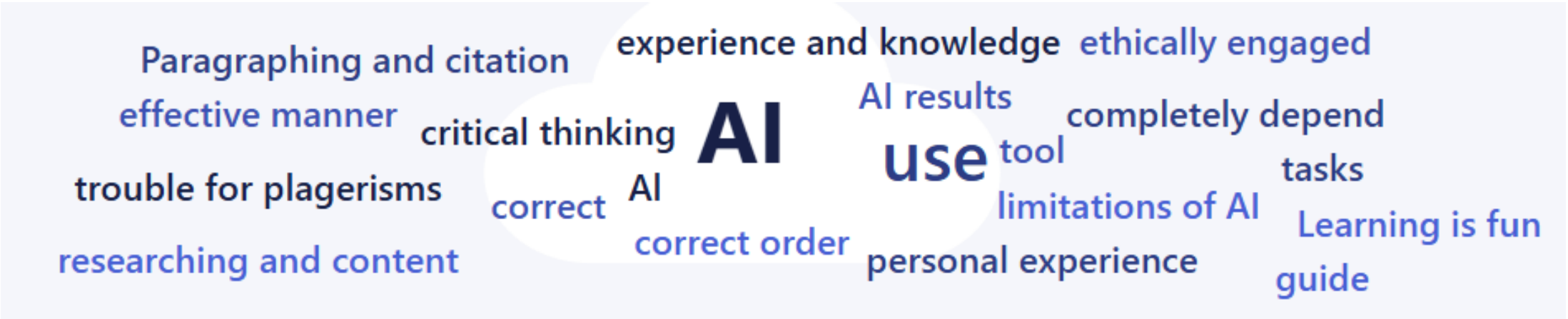


5. How useful were the activities in helping you understand ethical AI use?



7. How likely are you to apply what you learned in your own work?

8. What is one thing you learned today about using AI responsibly that you will apply in your own academic work?



ALIGNMENT WITH RESEARCH

Confirms benefits of gamified learning environments (López-Belmonte, 2020)

Supports motivational impact of escape rooms (Dugnol-Menéndez et al., 2021)

Reduced anxiety during academic tasks (López-Belmonte, 2020; Laura-De La Cruz, 2023)

"Gamified activities aim to influence student behaviour while increasing concurrent enjoyment of learning, and consequently, the academic performance and motivation of the students" (Dugnol-Menéndez et al., 2021, p. 1).

"Motivation is an important predictor to improve the academic performance of students and influences the effort and time they spend in the study" (Dugnol-Menéndez et al., 2021, p. 11).

LEARNING THEORIES

Behaviourism: progression of tasks ("reward") vs. wrong numeric codes ("punishment")

Social learning: adopting effective puzzle-solving behaviours

Cognitivism: building on previous knowledge for puzzle solving

Constructivism: students develop their knowledge in real time as they progress through the puzzles

(Zhang et al., 2018)

CONCLUSIONS

Non-traditional teaching experience: physical movement, friendly competition, puzzle-solving (Dicheva et al., 2015)

Critical approach to AI guidelines vs. passive reading

Gamified learning -> enhanced engagement and reduced anxiety

Potential for wider adoption across disciplines

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