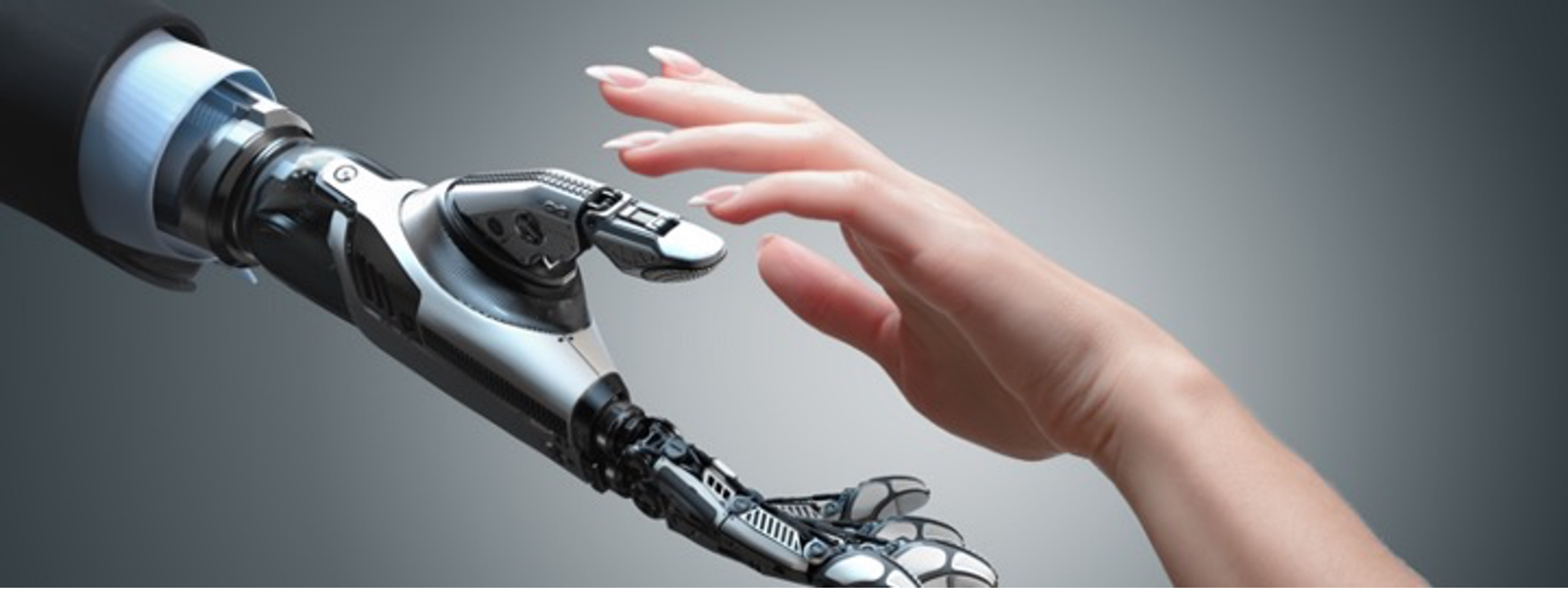




USE OF AI-GENERATIVE TOOLS IN HIGHER EDUCATION

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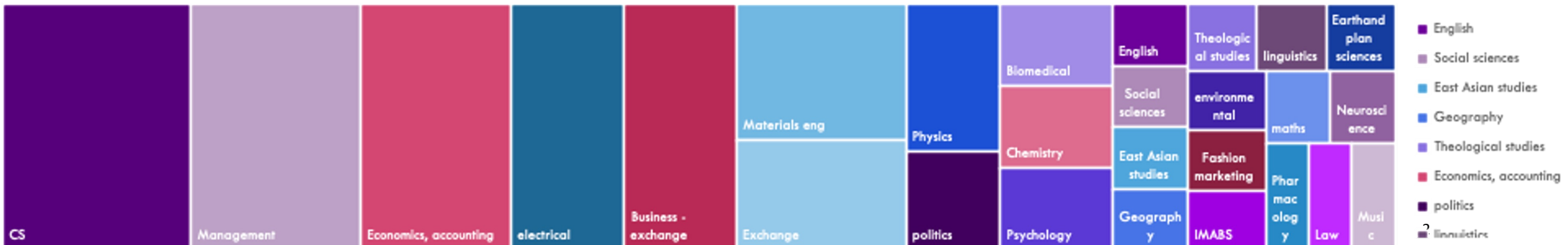
AI: ROBOT OVERLORD, REPLACEMENT OR COLLEAGUE?

An undergraduate unit, **interdisciplinary**, with 91 students of all levels, across schools and faculties.

Aim: Investigate potential applications, limitations, and the impact AI will have on our lives and workforce

Assessment:

- 🔍 Encouraged the students to use AI-gen tools and explore the benefits and limitations
- 🔍 Critical evaluation blog post 'AI and law' (Group case studies - 30%) series of case studies analysing key AI-related topics



AI GEN TOOLS AND THEIR LIMITATIONS

Limitations

- Accuracy and reliability
- Fabricate facts
- Data cut-off (ChatGPT - Sep 2021)
- Create fictional sources and bibliography
- Perpetuate and generate bias and stereotypes
- Favour towards western perspectives
- Misinformation

Challenges to HE

- Hard to detect
- Non-deterministic models
- Triangle structure.
- Varying output.
- Surface and wide coverage of a topic.
- Accessibility
- Tends to provide general answers rather than a focused in-depth coverage of a topic.
- Prone to user ability to form an input

AI CODE OF CONDUCT

If students use AI-generated output (text, images, diagrams and other) in their submissions then the following needs to be included in their submissions and assignments:

- ❓ the text needs to be in **quotes**,
- ❓ properly **referenced**,
- ❓ outputs must be **evaluated** by the students in terms of **accuracy, validity** and **relevance**
- ❓ students should **highlight potential bias**, and **errors** in the produced output (text or otherwise)
- ❓ the student should **critically evaluate** the generated text by **providing their own views** and thoughts on the matter.

If students use ChatGPT or other generative AI to help them generate ideas, images, diagrams or plan your process, you should still acknowledge how you used the tool, even if you don't include any AI generated content in the assignment or submission. Provide a description of the AI tool used, what you did and the date accessed.

****Note****: All above rules are relevant for this particular unit (UCIL20122) and might not be applicable for other units you are enrolled to.

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**+ 2 TUTORIAL
WORKSHOPS**

PROHIBIT OR ENCOURAGE THE USE OF AI-GEN TOOLS IN HIGHER EDUCATION?

ILIADA ELEFThERIOU, AJMAL MUBARIK

Study aims:

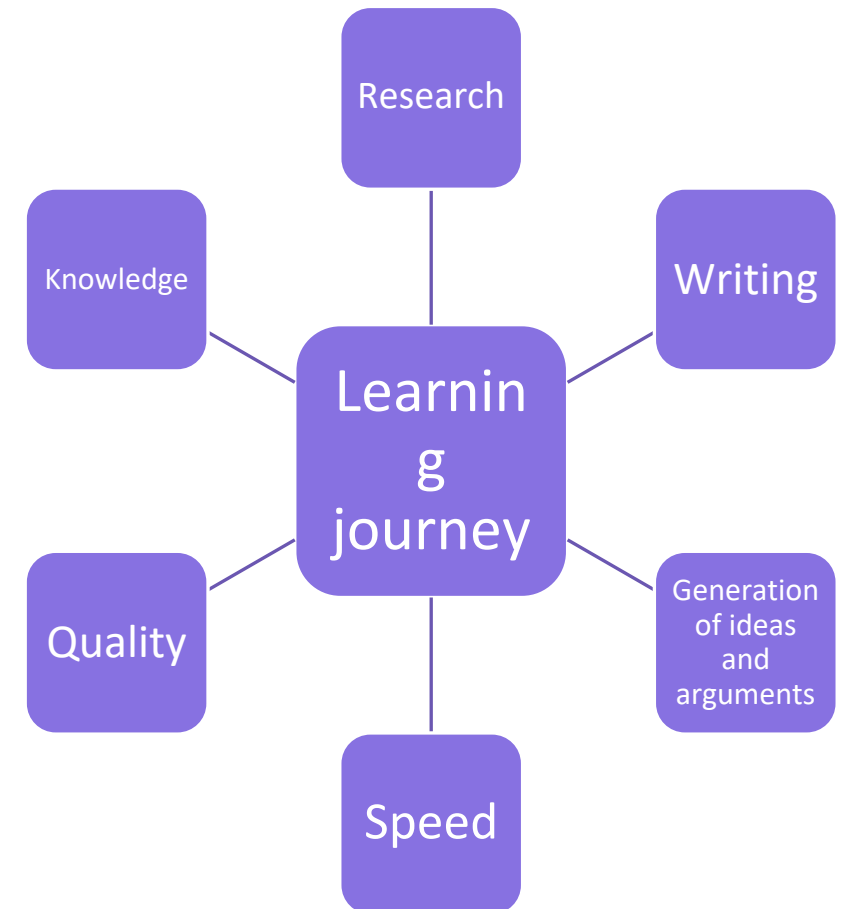
1. evaluate the '**AI Code of Conduct**' as used in the unit,
2. **better understand** the use of AI-generative tools in higher education, and assessment
3. the impact these new tools can have on the learning experience.

Study design: A mixed-methods study has been conducted with students enrolled in this unit. We conducted:

- ❓ a group-based questionnaire to evaluate [1] and
- ❓ an anonymous individual-based survey [2 and 3] with both quantitative and qualitative questions.

Participants:

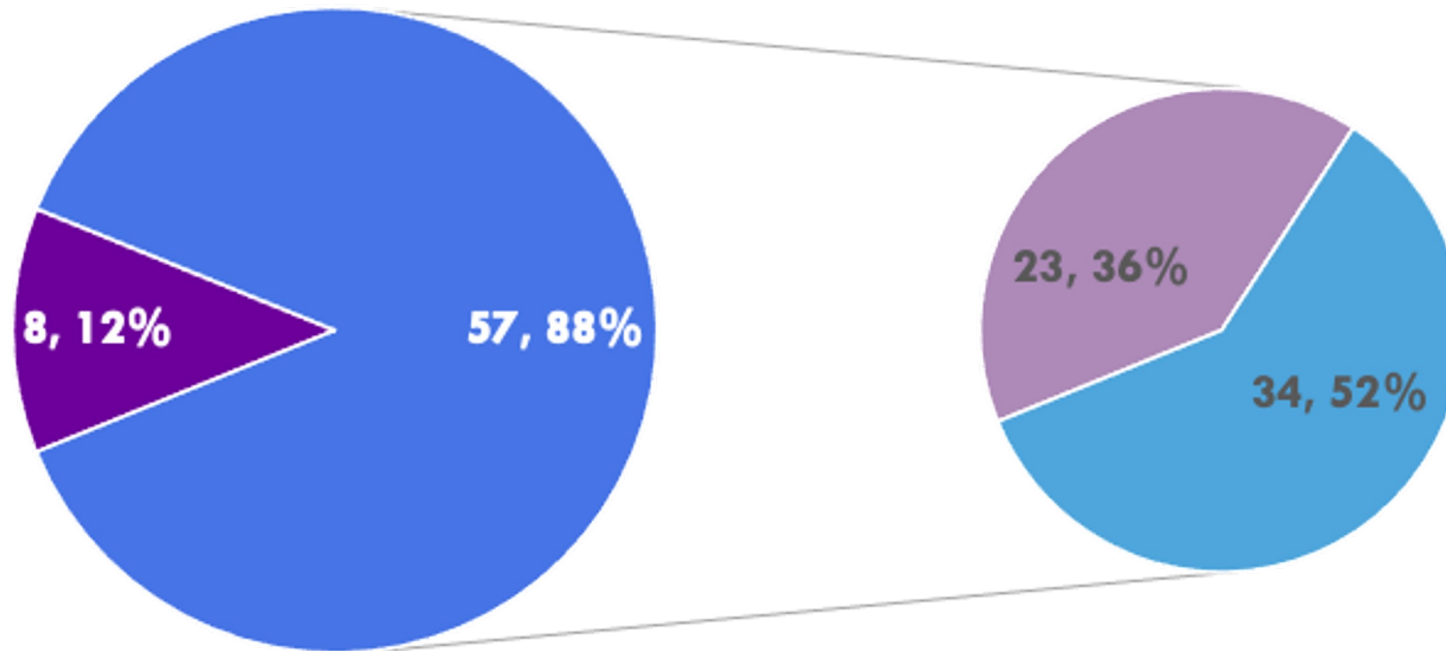
- ❓ 11 out of 15 groups of 6 or 7 students enrolled in the UCIL AI unit
- ❓ 65 (out of 91) anonymous responses from students enrolled in the UCIL AI unit



PRELIMINARY* RESULTS

Have you ever used an AI-generative tool (like ChatGPT)? (65 responses)

■ Not at all ■ Yes but not for assignments ■ Yes and in assignments



ChatGPT

Dall-E mini

explainpaper.com

excelformulabot.com

Siri

Alexa

USE OF AI-GEN TOOLS IN ASSESSMENT

Do you think that the tool increased your knowledge on the assignment's topic?

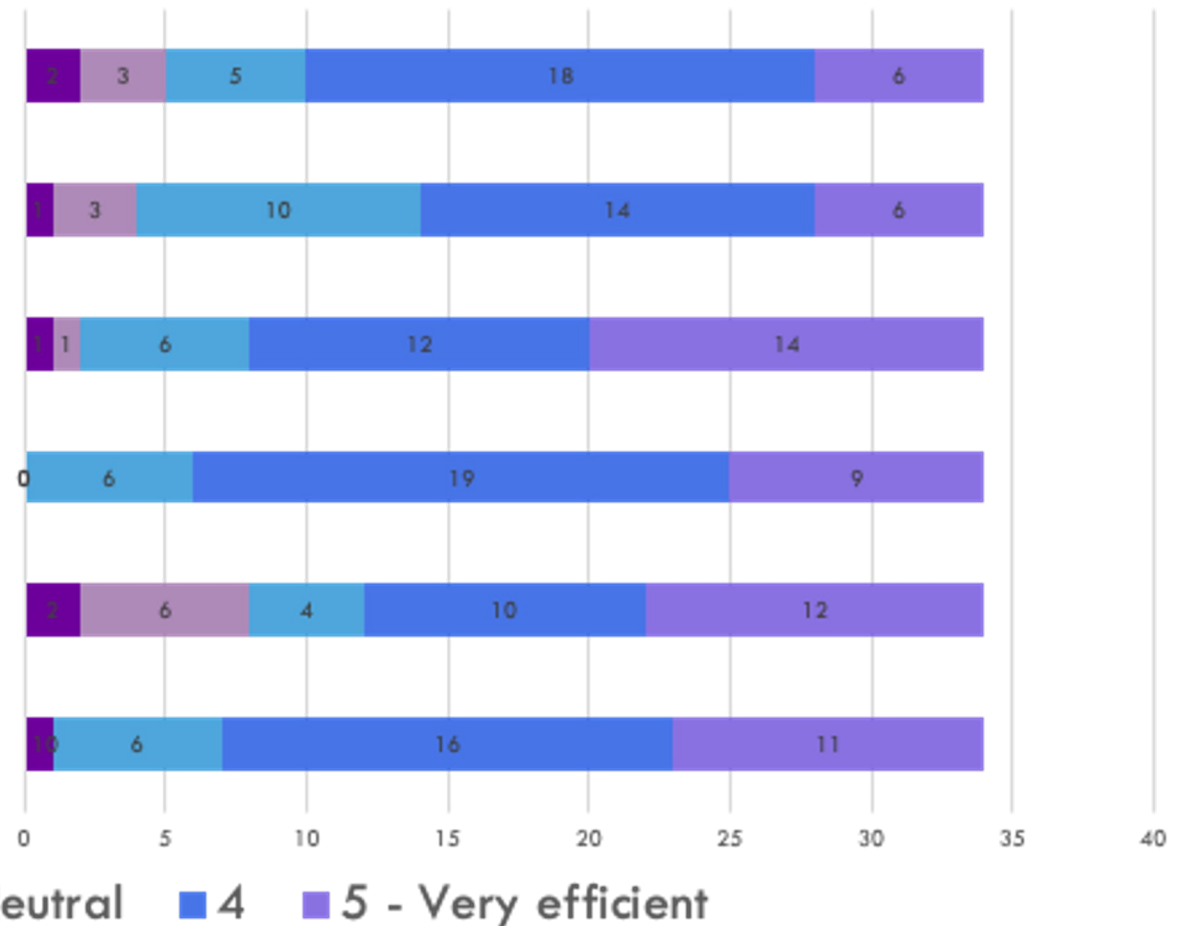
Do you think that the tool increased the overall quality of your assignment submission?

Did the tool speed up the overall learning process?

Did the tool make the generation of ideas/ arguments more efficient?

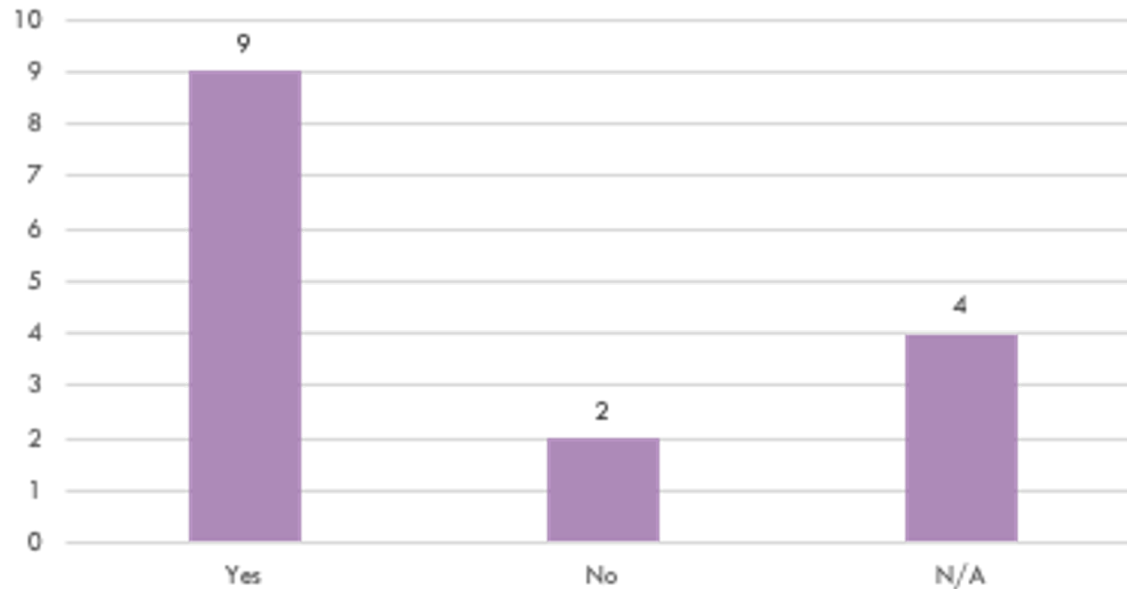
Did the tool help make your writing more efficient?

Did the tool help make your research more efficient?

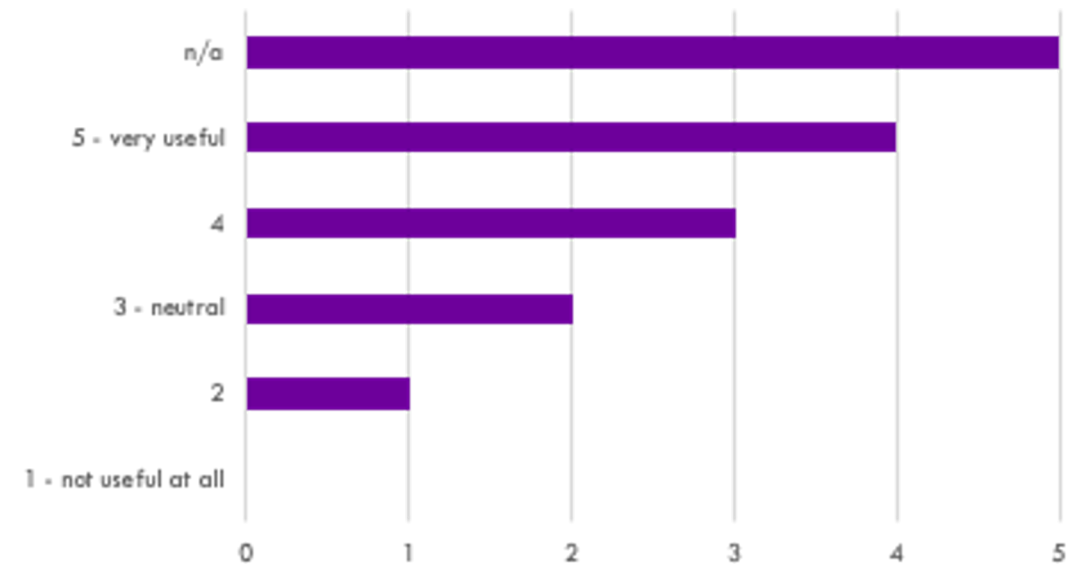


AI CODE OF CONDUCT

Q3: Did you follow the AI Code of Conduct?



Q4: How useful was it 1 to 5?



WHAT DO YOU THINK ABOUT THE CODE OF CONDUCT, WOULD YOU CHANGE ANYTHING AND HOW WOULD YOU IMPROVE IT?

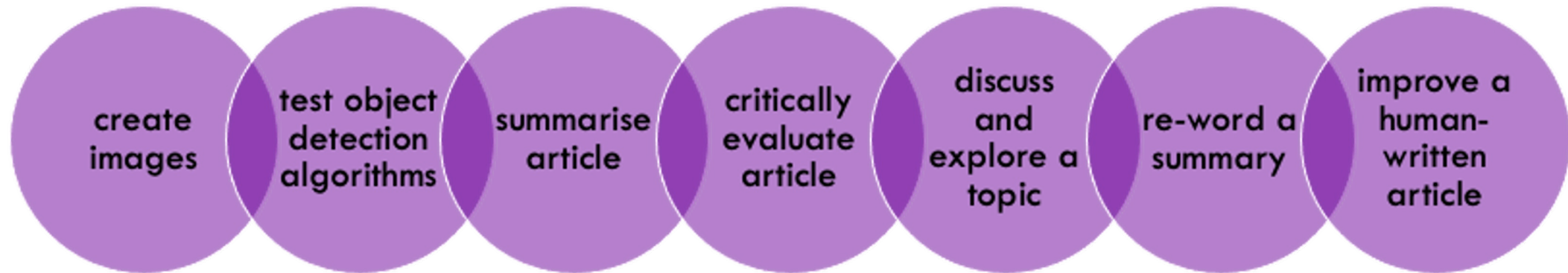
Positives

- “very **fair**”
- “was **useful**”
- “we wouldn’t change anything about it.
- “gives us a **formal** and **ethical** way of utilising the AI tools”
- “is very thorough in explaining the procedure and **cautionary** guidelines [...]”
- “is detailed and complete enough, and also worked well as an instruction.”
- “Rules in the code of conduct seem **reasonable**.”
- “Most of the instructions on how to reference AI generative tools were clear”
- “Overall I agree with the Code of Conduct.”

Suggestions for improvements:

- “Could be improved by including information about **when** something like ChatGPT actually needs to be cited”
- “Could be more reassuring to also show us examples of cases where the AI tool **has not been referenced correctly**, or cases where it has been used without quoting it directly.”
- “Although artificial intelligence can provide us with a lot of information and ideas, it is important to **think critically** about this information and incorporate it into our **own thinking and learning**.”

WORKFLOW - HOW DID YOU USE IT?



*"We used ChatGPT and asked it for **five points we could discuss and explore further to do with analysing the article.** We then went on to further research and expand on the initial five points that ChatGPT came up with. [...] asked ChatGPT to "evaluate this article critically and give out some points" these points were very brief and so we then took two each combined them and expanded upon them to further analyse the article using the points ChatGPT came up with as **a starting point** to then continue on from."*

"The points given by the AI did not provide much depth in comparison to our analysis"

*"We used tools to know the advantages of AI in legal cases. However, we think that it gives more **basic answers** and similar answers so we didn't go forward with it."*

OUTCOMES AND REFLECTIONS

Outcomes:

1. Revisit and improve the **AI Code of Conduct**: Positives, negatives and suggestions for improvements to the Code of Conduct, where suggested by students following their evaluation of its use for an assignment.
2. Co-creation of an **AI Ethics framework** to be used in conjunction with the AI Code of Conduct
3. Expand current **regulations** and workflows to cover use of AI-generative tools in students learning experience.

Reflections:

Student **awareness of the limitations** of Generative AI tools has fostered a **critical approach** to their use. This approach in conjunction with the code of conduct, encouraged **transparency**, adherence to guidance on plagiarism, and awareness of proper research and referencing.

According to feedback from this study, students themselves state that they do not want to compromise their learning and education, are cautious about the use of GEN-AI tools, and particularly keen to ensure that technology does **not substitute proper teaching and learning practices**. Rather than this technology replacing human decision making and work, it instead **fostered a more critical and thoughtful approach by students**, with an emphasis on proper and transparent use of quality information sources.

Can we reframe the way that we perceive and use these technologies now so that their positive potential is realised? What lessons can we apply to current practice and policy?

NEXT STEPS AND FUTURE PLANS

Educators perspectives on the use of AI-gen tools in education
https://www.qualtrics.manchester.ac.uk/jfe/form/SV_cwqgMsmjy0NqN8

AI and assessment project:

Exploring the attitudes and perceptions on the use of AI in assessment in HE. The study will consult groups of students, staff and employers in order to answer the following three questions:

- ❓ What factors influence perceptions of fairness in the use of AI in assessment?
- ❓ How might AI be acceptable in different forms of assessment (i.e. formative and summative)?
- ❓ How might AI and assessment impact a student's transition to, and performance in, the professional workplace?

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QUESTIONS?

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