

## Grasping the Nettle: Embracing Artificial Intelligence in Higher Education

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# Grasping the Nettle: embracing AI in HE

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- AI in HE What is it?
- AI in HE barriers and dilemmas
- Is it safe to use ChatGPT for your task? (Tiulkanov, 2023)
- Examples of practice

## Al in HE – What is it?

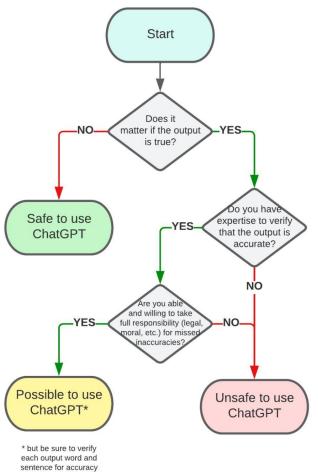
- AI has more potential change than any other technological advance in HE (Bates et al, 2020)
- Al is not new and has been around in many guises for decades.
- Some current examples are:
  - ChatGPT/Llama2
  - CoPilot
  - Dall-e
- Constantly changing so we need to keep informed on developments.

## Al in HE – barriers and dilemmas

- Data Protection (UNESCO, 2022)
- Reliance on and misuse of available tools e.g ChatGPT, Llama2
- Ethics (Cotton et al., 2023)(Sabzalieva & Valentini, 2023)
- Academic Anxiety (Crawford et al., 2023)

#### Is it safe to use ChatGPT for your task?

Aleksandr Tiulkanov | January 19, 2023



and common sense



(Tiulkanov, 2023)

# Examples of practice

#### **Example 1 SIOE**

 Personalised assessment – tailoring assessment to be based on individual / personal experience e.g. from work based learning / reflections / individual projects that cannot be easily generated by some one else

#### **Example 2 SIOE**

 Using generative tools e.g. ChatGPT for assessment – generate a response to assessment task, check relevant sources / against module readings and theories – analyse and use to produce own assessment – so use as a starting point and tailor appropriately – submit both assignments highlighting changes (Lebihan, 2023)

# Examples of practice

#### **Example 3 – Computing - Students**

- Students analyse faulty code and propose relevant resolutions.
- They then use AI tools (CoPilot) to do the same task.
- Students are then asked to critically evaluate their findings.

#### **Example 4 – Computing - Academics**

- Academics use AI to automate marking.
- This can be used to increase consistency and remove bias.

# And finally...

- We can't escape the development and presence of Al
- How can we tailor AI in our learning, teaching and assessment to be discipline specific, relevant and supportive?



- Questions?
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## References and Further Information

- https://aitoolsdirectory.com/
- Bates, T., Cobo, C., Mariño, O., & Wheeler, S. (2020). Can Artificial Intelligence Transform Higher Education? *International Journal of Educational Technology in Higher Education*, 17(1). https://doi.org/10.1186/s41239-020-00218-x
- Cotton, D. R., Cotton, P. A., & Shipway, J. R. (2023). Chatting and cheating: Ensuring academic integrity in the era of chatgpt. *Innovations in Education and Teaching International*, 1–12. https://doi.org/10.1080/14703297.2023.2190148
- Crawford, J., Cowling, M., & Allen, K.-A. (2023). Leadership is needed for ethical chatgpt: Character, assessment, and learning using Artificial Intelligence (AI). Journal of University Teaching and Learning Practice, 20(3). https://doi.org/10.53761/1.20.3.02
- Felix, C. V. (2020). The role of the teacher and AI in Education. *Innovations in Higher Education Teaching and Learning*, 33–48. <a href="https://doi.org/10.1108/s2055-364120200000033003">https://doi.org/10.1108/s2055-364120200000033003</a>
- Lebihan, J. (2023). Ai Misuse Continuum. Retrieved August 23, 2023, from <a href="https://sheffieldhallam-my.sharepoint.com/:i:/g/personal/mm7888">https://sheffieldhallam-my.sharepoint.com/:i:/g/personal/mm7888</a> hallam shu ac uk/ESIqJDmFaudKmx7GP45TZjgBxx 1uH2DWlvusasEV69XRg?e=qxMY7r.
- Ocaña-Fernández, Y., Valenzuela-Fernández, L. A., & Garro-Aburto, L. L. (2019). Artificial Intelligence and its Implications in Higher Education. *Propósitos y Representaciones*, 7(2). https://doi.org/10.20511/pyr2019.v7n2.274
- Sabzalieva, E., & Valentini, A. (n.d.). CHATGPT and Artificial Intelligence in higher education: Quick start guide: IIEP UNESCO etico: Platform on ethics and corruption in Education. Etico. <a href="https://etico.iiep.unesco.org/en/chatgpt-and-artificial-intelligence-higher-education-quick-start-guide">https://etico.iiep.unesco.org/en/chatgpt-and-artificial-intelligence-higher-education-quick-start-guide</a>
- Tiulkanov, A. (2023, January 19). A simple algorithm to decide whether to use chatgpt. Aleksandr Tiulkanov on LinkedIn: A simple algorithm to decide whether to use ChatGPT, based on my recent... | 83 comments. <a href="https://www.linkedin.com/posts/tyulkanov">https://www.linkedin.com/posts/tyulkanov</a> a-simple-algorithm-to-decide-whether-to-use-activity-7021766139605078016-x8Q9/
- Turovsky, B. (2023, February 2). Framework for evaluating Generative AI use cases. LinkedIn. <a href="https://www.linkedin.com/pulse/framework-evaluating-generative-ai-use-cases-barak-turovsky">https://www.linkedin.com/pulse/framework-evaluating-generative-ai-use-cases-barak-turovsky</a>
- UNESCO. (2022). Recommendation on the Ethics of Artificial Intelligence. Unesdoc.unesco.org. <a href="https://unesdoc.unesco.org/ark:/48223/pf0000381137">https://unesdoc.unesco.org/ark:/48223/pf0000381137</a>

# References and Further Reading Continued

- Mick Marriott Radio Appearances:https://shorturl.at/bjCYZ
  - BBC Radio Sheffield. (2023, June 3). Kat Cowan Radio show. Kat Cowan radio show. broadcast, Sheffield.
  - BBC Radio Sheffield. (2023, June 13). Howard Pressman Radio show. Howard Pressman radio show. broadcast, Sheffield.
  - BBC Radio Sheffield. (2023, April 20). Toby Foster Breakfast show. broadcast, Sheffield.