

Workshop: Understanding and Using AI Effectively

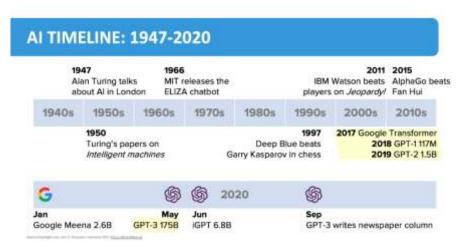
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• Why do we need to understand AI?

To those who have no sense she says,
"Stolen water is sweet;
food eaten in secret is delicious!" – Prov 9:17

Understanding AI

- Definition: "The capacity of computers or other machines to exhibit or simulate intelligent behaviour; the field of study concerned with this. In later use also: software used to perform tasks or produce output previously thought to require human intelligence, esp. by using machine learning to extrapolate from large collections of data." – Oxford English Dictionary
- Narrow ('Weak') AI vs General ('Strong') AI
- A brief history of AI



- All modern AI systems utilise what is known as "deep learning" and "deep neural networks" that simulate how the human brain learns.
 - "I have always been convinced that the only way to get artificial intelligence to work is to do the computation in a way similar to the human brain."
 - Geoffrey Hinton (British computer scientist)
- How do ChatGPT and other Large Language Models (LLMs) work?
 - Predicting the most probable next word, e.g. "I am tired, I am going to _____"
- Implications
 - o LLM's are *not* "magic" nor are they "conscious"
 - o LLM's *are* powerful tools for generating and interpreting language

Using AI Effectively

A few initial pointers

- Experiment with LLM's so that you are aware of their capabilities and limitations.
- *Make students aware* that you are familiar with LLM technologies: ChatGPT, Gemini, etc.
- *Design your assessments* in a way that recognises that students will increasingly use LLM's unless you can strictly control it (e.g. exam conditions).
- *Clarify your expectations* with regard to how you expect students to use AI in assessments, but recognise that these boundaries will often be blurred.

i	NO AI	The assessment is completed entirely without Al assistance. This level ensures that students rely solely on their knowledge, understanding, and skills. Al must not be used at any point during the assessment.
2	AI-ASSISTED IDEA GENERATION AND STRUCTURING	Al can be used in the assessment for brainstorming, creating structures, and generating ideas for improving work. No Al content is allowed in the final submission.
3	AI-ASSISTED EDITING	Al can be used to make improvements to the clarity or quality of student created work to improve the final output, but no new content can be created using Al. Al can be used, but your original work with no Al content must be provided in an appendix.
4	AI TASK COMPLETION, HUMAN EVALUATION	Al is used to complete certain elements of the task, with students providing discussion or commentary on the Al-generated content. This level requires critical engagement with Al generated content and evaluating its output. You will use Al to complete specified tasks in your assessment. Any Al created content must be cited.
5	FULL AI	Al should be used as a "co-pilot" in order to meet the requirements of the assessment, allowing for a collaborative approach with Al and enhancing creativity. You may use Al throughout your assessment to support your own work and do not have to specify which content is Al generated.

"AI assessment scale" by Leon Furze

Some ways to help theological students become better stewards of AI technology

- Demonstrate potential uses and limitations of AI to students
 - o *Clarifying* a difficult concept or paragraph in a reading
 - o *Translating* a text into a native language for better comprehension
 - o *Summarising* a text or important concept, e.g. "What was Karl Barth's view of revelation?" or "Please summarise E.P. Sander's work on Paul?"—more detail is better
 - o *Interacting* with Greek or Hebrew through translation, parsing, answering grammatical questions, producing tables of conjugations etc.
 - o Listing key scholarly works relevant to a particular passage or topic
 - o Interpreting the textual apparatus when doing textual criticism
 - o Critiquing your writing grammatically, stylistically, and conceptually
 - *Checking* referencing and citations
 - Demonstrate the dangers of AI getting it wrong, "hallucinating," i.e. making up nonexistent references etc.
- The bottom line: LLM's are good servants but poor masters