Expanding the “teacher function”: speculative work on bots

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Centre for Research in Digital Education & Learning, Teaching, and Web

Near Future Teaching

Distance Learning at Scale (DLAS)

MSc in Digital Education

Centre for Research in Digital Education

Digital Education with Cara (Syrian refugee academics)

UKRI GCRF Urban Disaster Risk Hub

Digital Education in Nigeria, Tanzania, Uganda

Digital Education in Nepal

UN Habitat

The World Bank

GSMA

USAID

DfID

Gates Foundation

British Council

BBC Media Action

GIZ

CIPE

MOOCs

Course Design

Emerging technologies

Digital pedagogy

Children and technology

Datafication

Open education

SDGs

Mobilities

D+E RESEARCH IN DIGITAL EDUCATION

https://www.de.ed.ac.uk/ https://www.ed.ac.uk/information-services/about/organisation/learning-teaching-web

What this is

This is about a discussion with the university community about the 'teacher function'.

This is speculative and meant to stimulate discussion.

This is not proscriptive.

Image from iconcheese

Where this emerged

"...the ‘teacher function’ might become less a question of living teacher presence and more an assemblage of code, algorithm and teacher–student agency"

"The teacherbot explicitly worked with the idea that teacher automation does not have to be about rationalism and instrumentalism: ‘botty’ was not intended to ‘solve’ any productivity deficits in teachers, or to replace teachers, but rather to explore how an assemblage of teacher-student-code might be ***pedagogically generative***."

Bayne, S. (2015). Teacherbot: interventions in automated teaching. *Teaching in Higher Education*, *20*(4), 455-467.

The driving questions

What is pedagogically generative in this space (and what might generative look like across disciplinary boundaries)?

What does an expanded 'teacher function' look like?

What impact might this have on transactional distance (Moore 2013)?

What role might this serve in redefining the student experience?

What are the ethical complications?

Where does this sit in our near future?

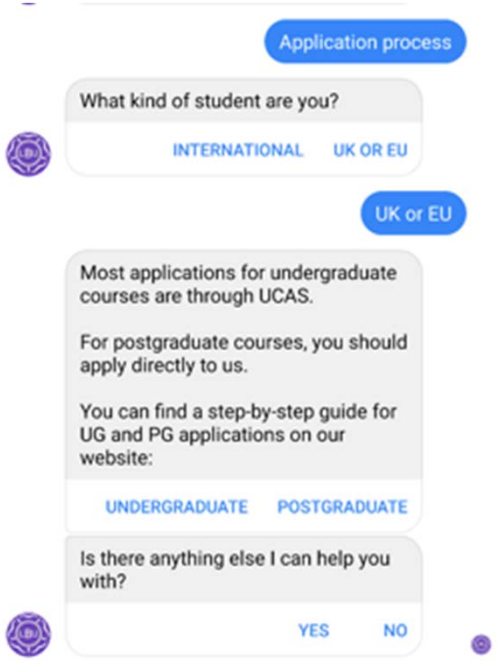
Use appropriate technology, including AI-supported methods, to enable peer assessment, self assessment and timely formative feedback.

Critically evaluate and build capacity for high quality automated assessment and feedback appropriate to disciplines, as a way of augmenting and supporting human assessment.

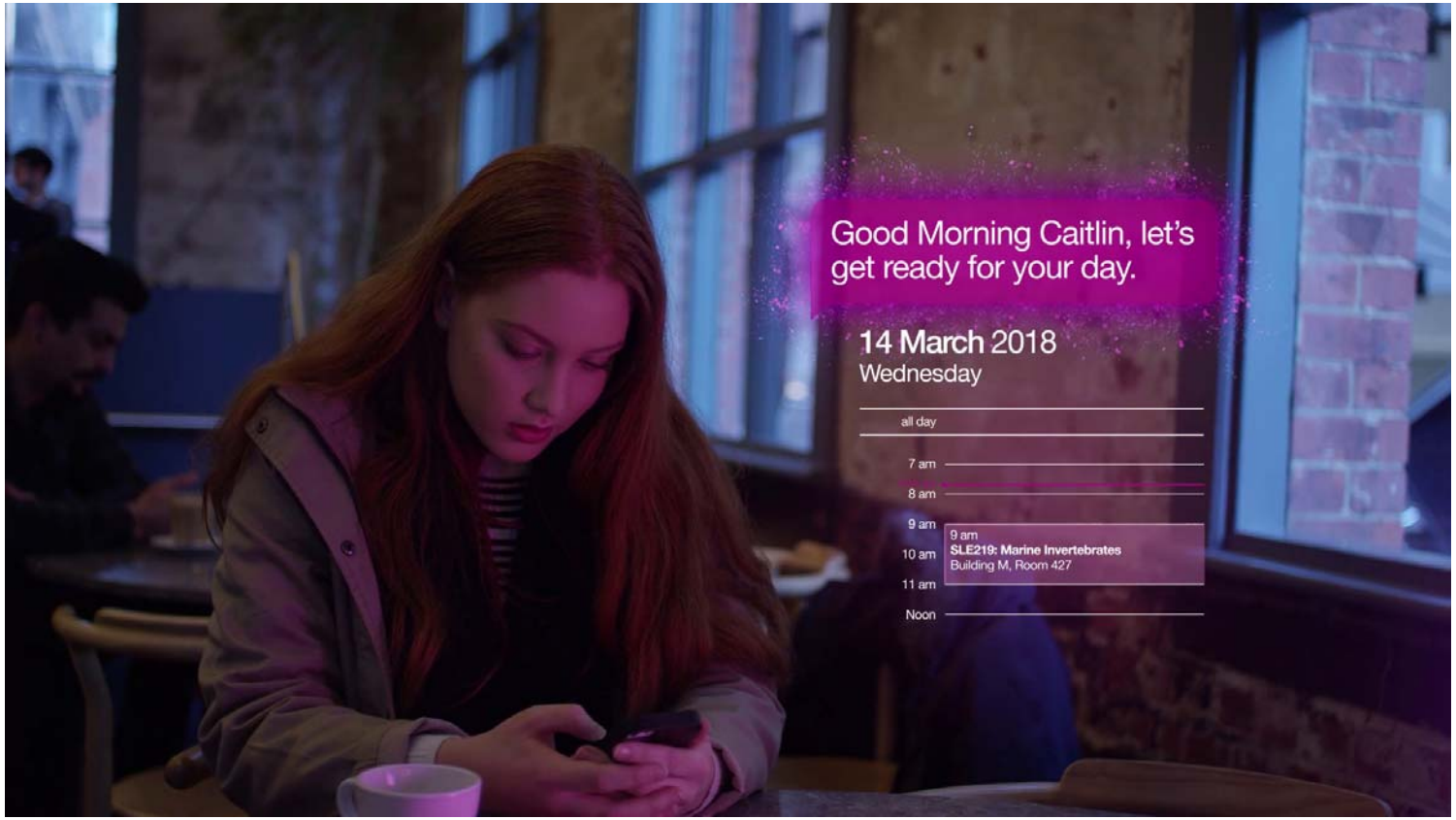
https://www.nearfutureteaching.ed.ac.uk/

What are chatbots?

- provide users with a response to a query or statement working from a knowledge base of predefined statements/answers
- can leverage aspects of AI (Natural Language Understanding, Natural Language Processing, machine learning)
- Omni Channel
- Voice or text



https://www.nearfutureteaching.ed.ac.uk/



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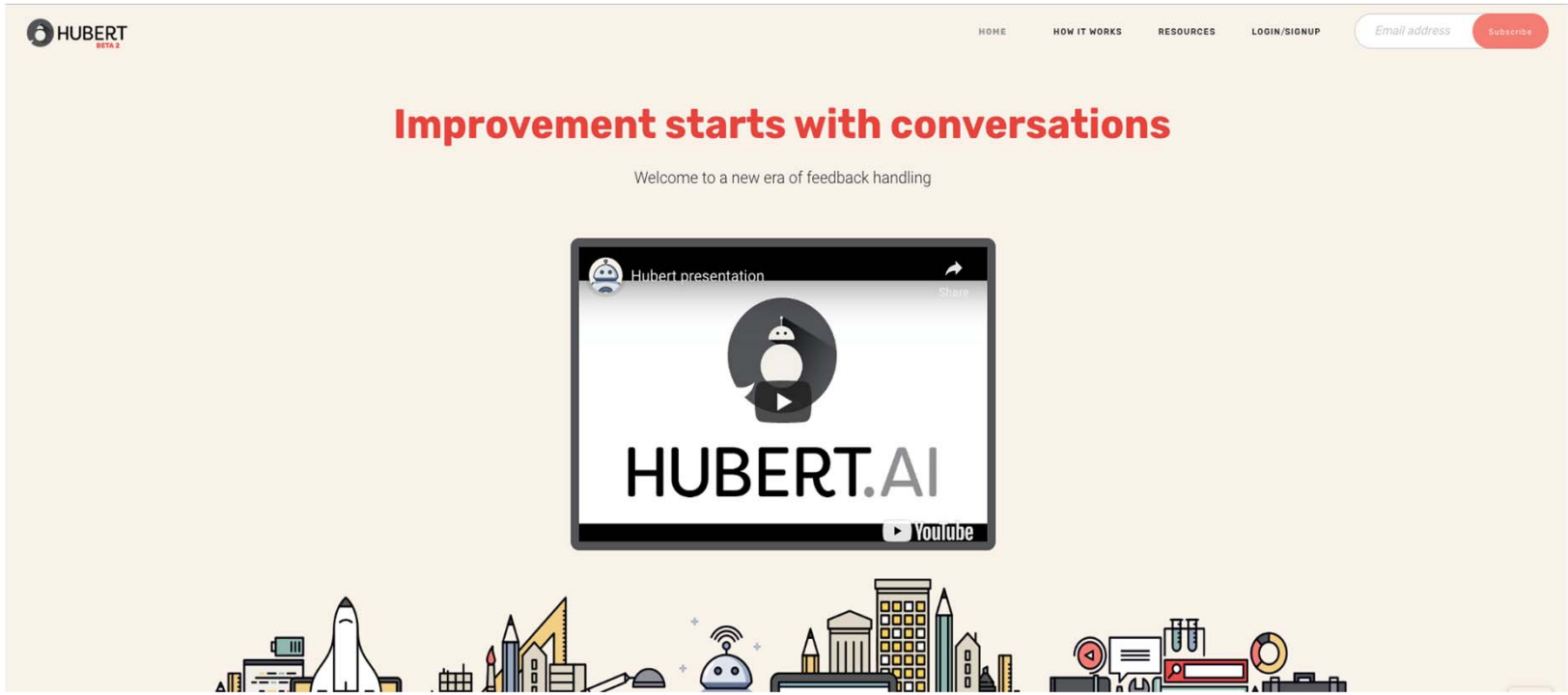
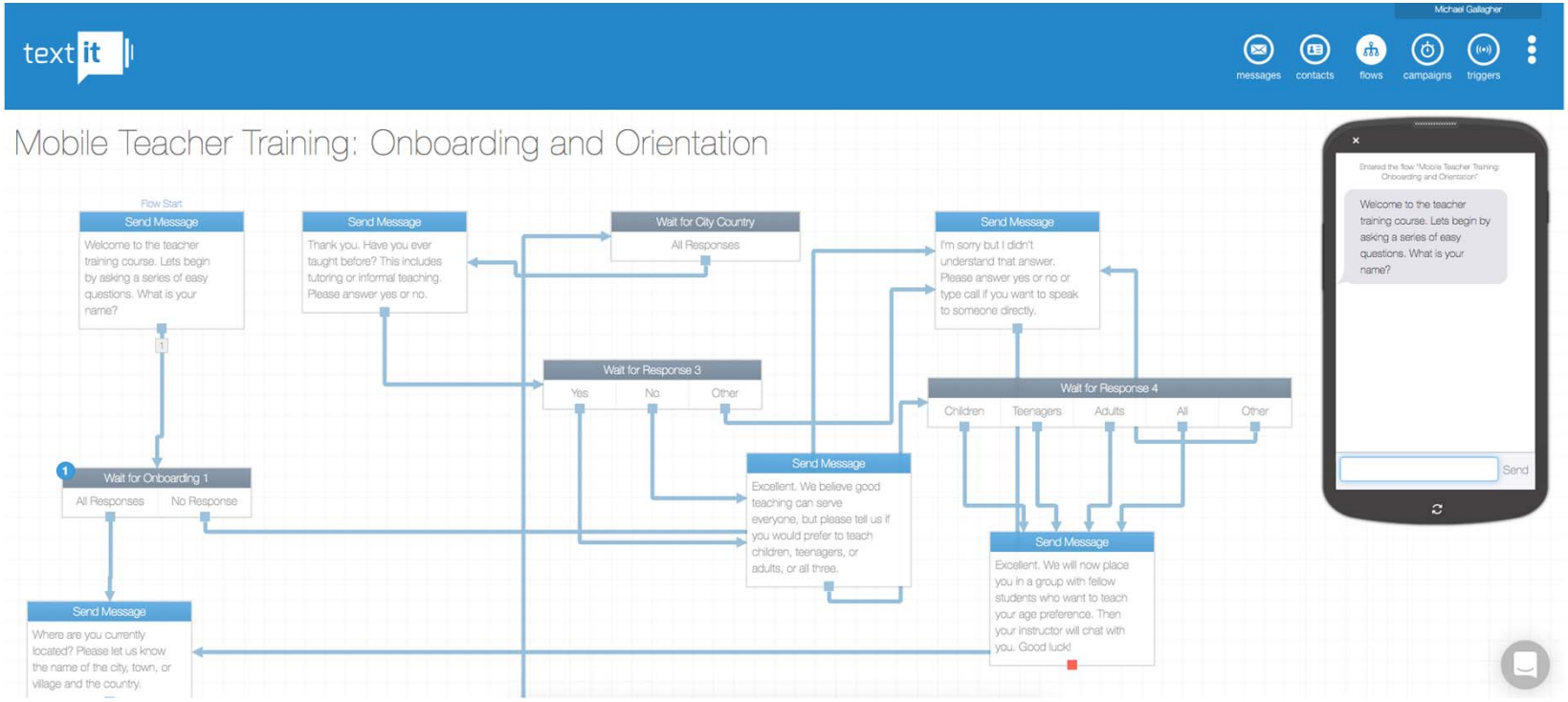
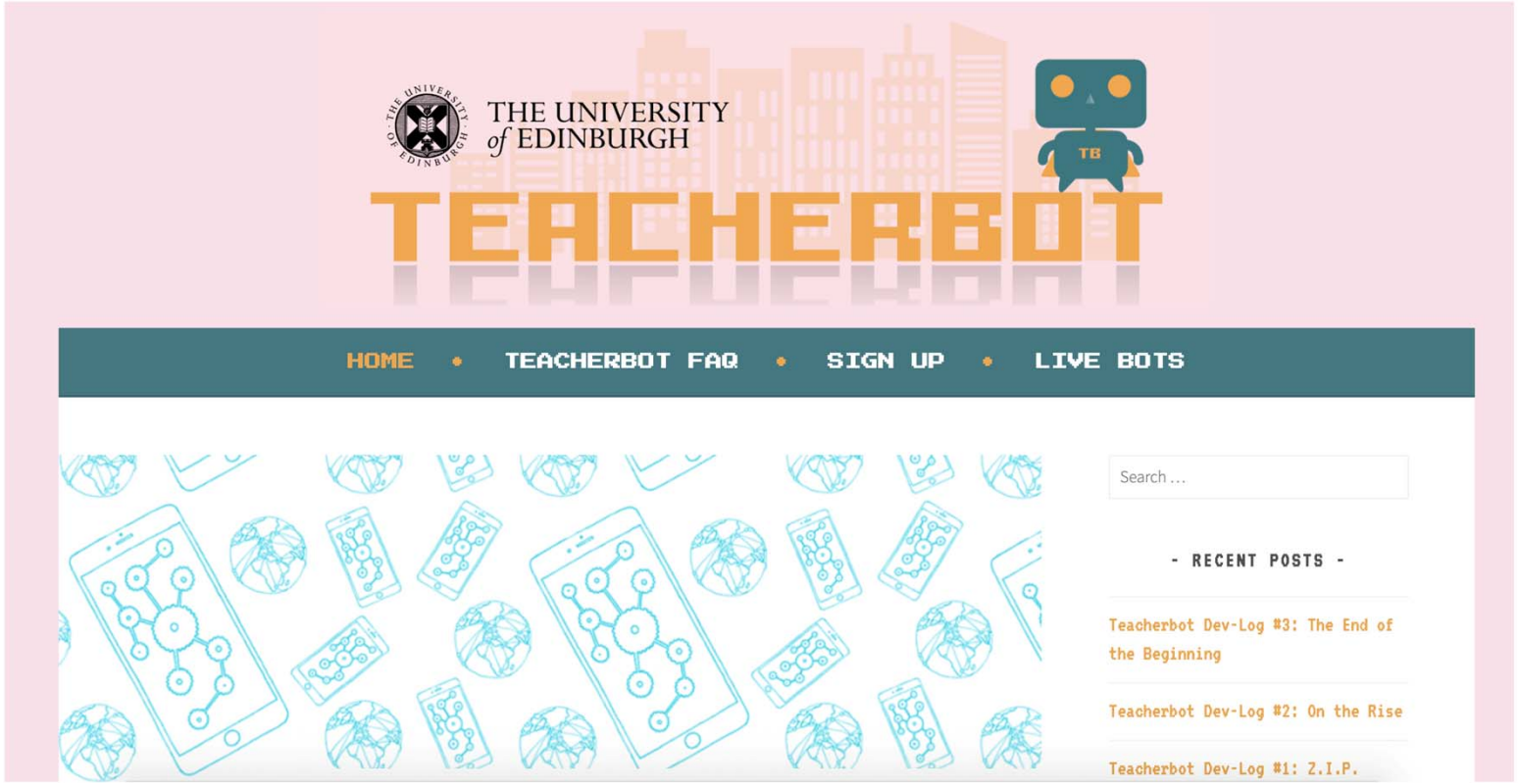


https://hubert.ai/



https://textit.in/



http://www.teacherbot.ed.ac.uk/

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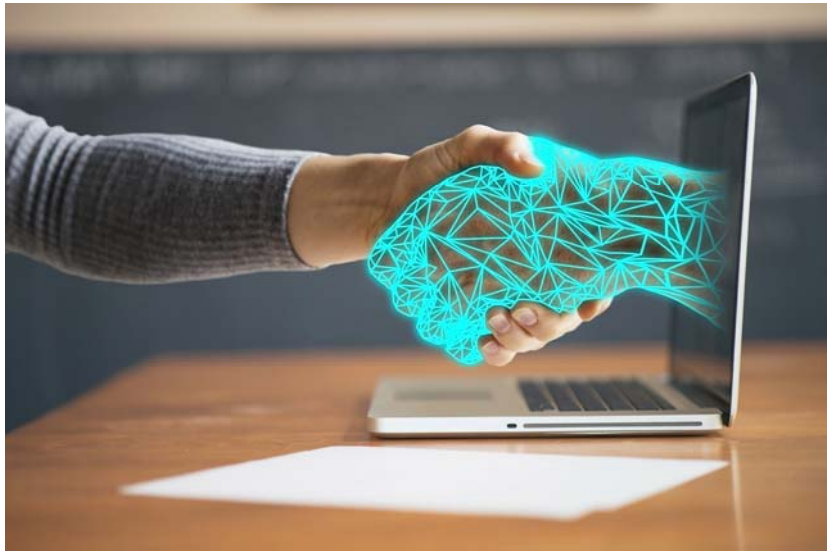
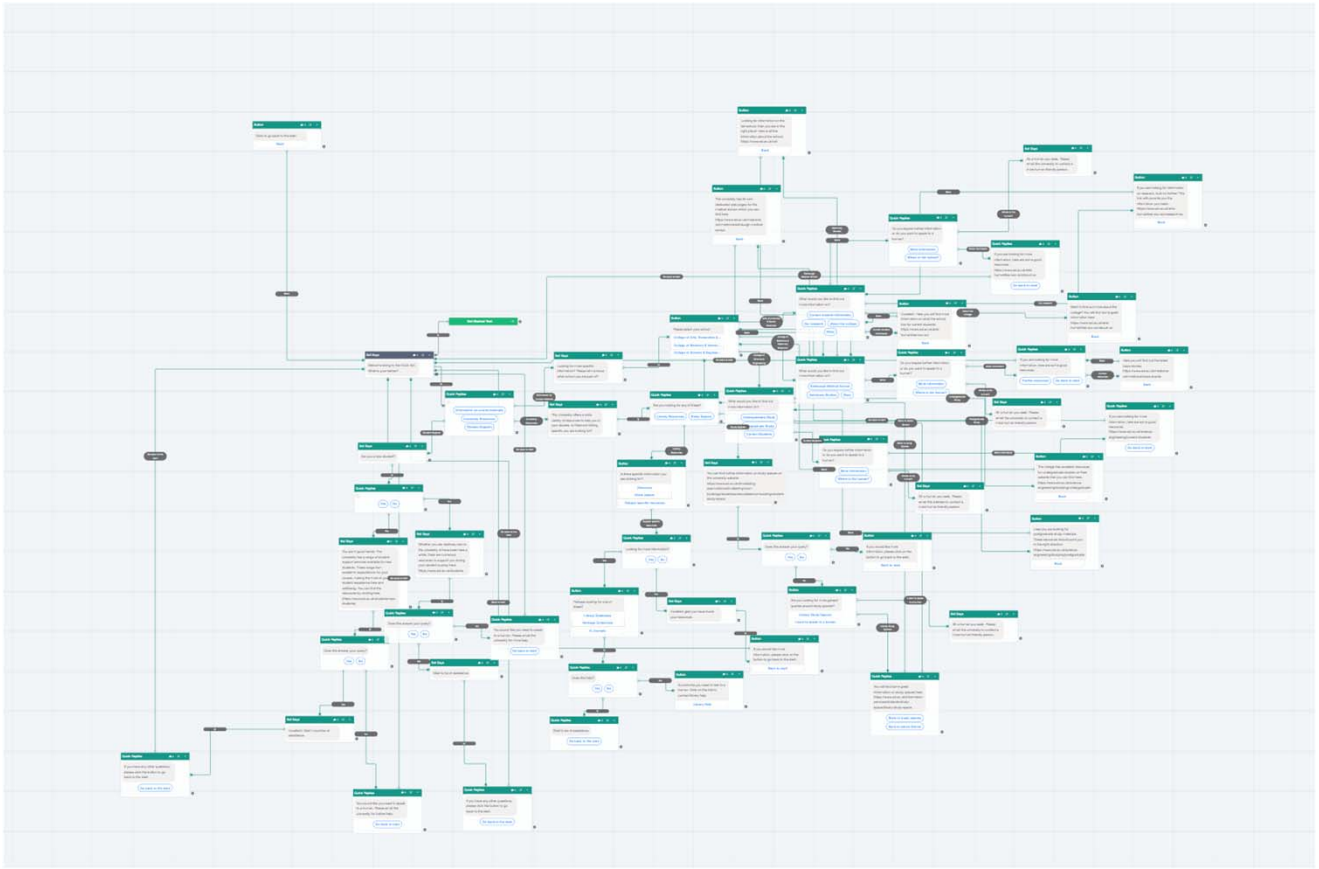


Technology by kiquebg, Pixabay, licensed under CC0

Bot 1: Virtual Assistant

http://bit.ly/virtualbot1



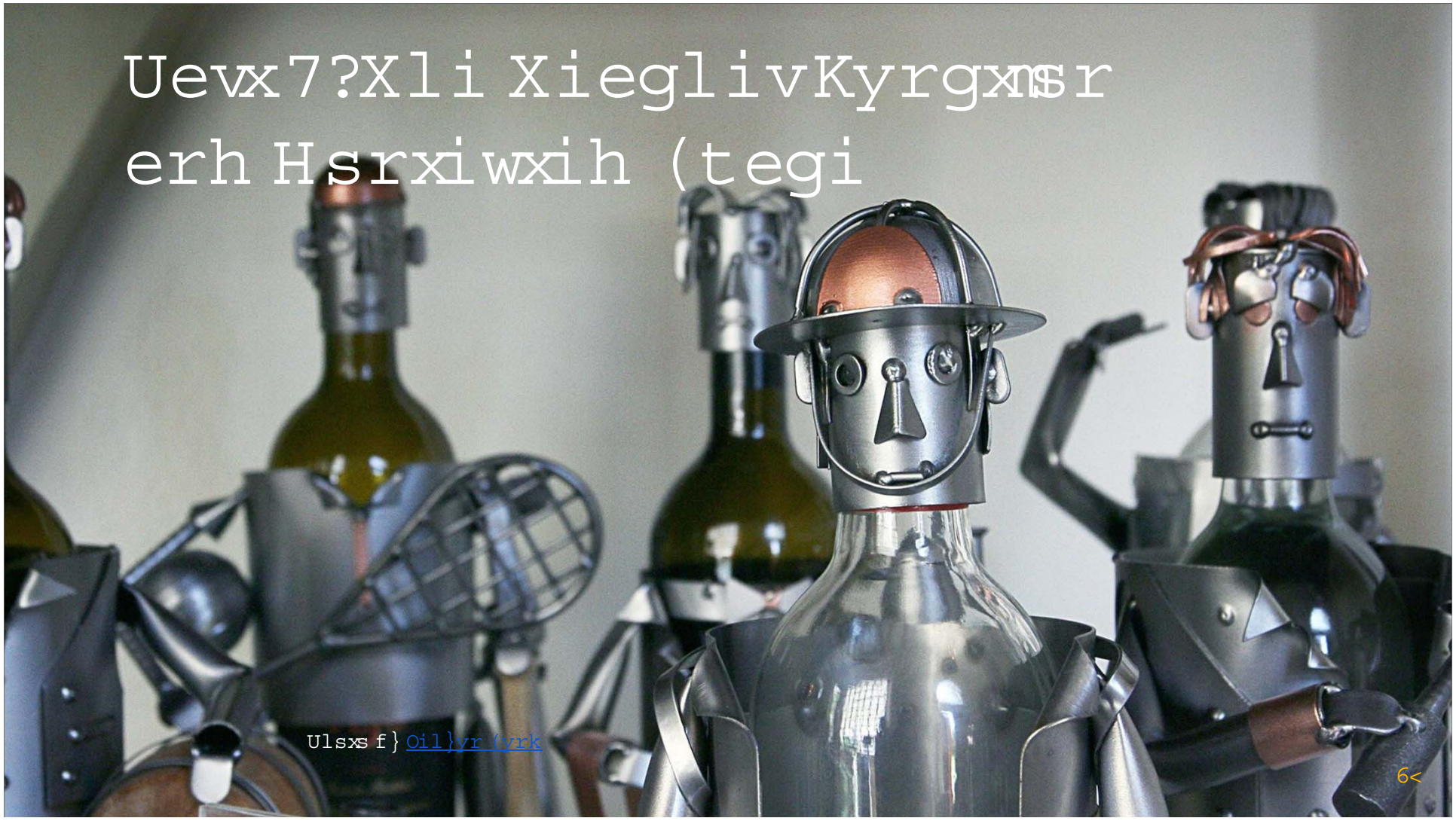
Bot 1: Takeaways

Pros

- Quickly direct you to answers
- Multi-platform
- 24hr access to queries
- Audio or text based
- Repetitive queries
- "No need to speak to a human!"

Cons

- Limited in how much it can answer
- Reliant on internet
- Difficulty in dealing with complex dialogue
- Loops, loops and more loops!
- Ambiguity
- "Where is the human?"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What this is

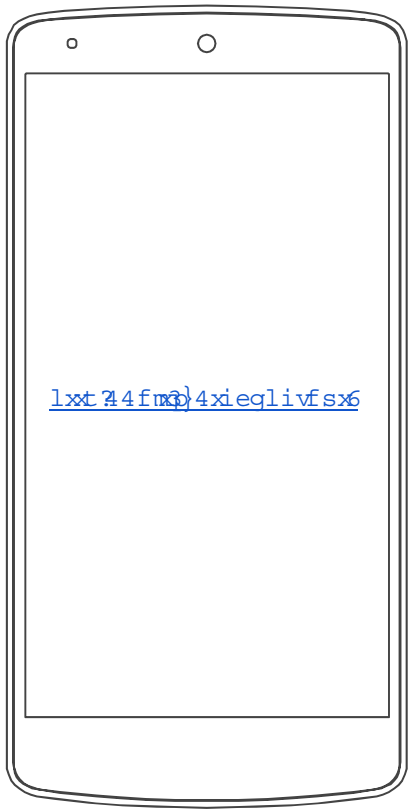
- An ongoing programme of work to engage the University of Edinburgh community (students and staff) around emerging technologies in education and their role in teaching and learning through speculative methods
- An ongoing series of events and workshops both online and off to begin to develop a shared vision of what we want these emerging technologies to provide
- An ongoing body of evidence and research emerging and being actioned

Proposed outcomes

- Some indication of where the pedagogically generative spaces are
- Some ideas around what post digital pedagogies are
- An evolving methodological approach towards values-based education
- Some indication of whether or not we want to pursue this further

Bot 2:

Teaching Space



Bot 2: Takeaways

Takeaways

- ?

If you want us to run an event with you, we are happy to do so. Please reach out.

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