Expanding the “teacher function”: speculative work on bots

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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

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.
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."

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/
Good Morning Caitlin, let's get ready for your day.

14 March 2018
Wednesday

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>all day</td>
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<td>9 am</td>
<td>164/378 Mariner Invertebrates</td>
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<td>10 am</td>
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<td>11 am</td>
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Improvement starts with conversations

Welcome to a new era of feedback handling.

https://hubert.ai/
Mobile Teacher Training: Onboarding and Orientation

1. Welcome to the teacher training course. Let's begin by asking a series of easy questions. What is your name?

2. Thank you. Have you ever taught before? This includes tutoring or informal teaching. Please answer yes or no.

3. If you answered yes, we'd like to understand that answer. Please answer yes or no or type a short answer if you want to speak to someone directly.

4. If you answered no, we'd like to know your age. Are you a child, teenager, adult, or other?

5. Where are you currently located? Please let us know the name of the city, town, or village and the country.

https://textit.in/
http://www.teacherbot.ed.ac.uk/
Part 1: Virtual Assistant Function
What this is

A virtual assistant (bot) to support the students in their journey at the university. What school are they based at? Where can I find information, resources etc.
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?"
Part 2: The Teacher Function and Contested Space
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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