

Technology Innovation in the Classroom

James Shryane
Assistant Headteacher
Oxfordshire Hospital School

Technology to enhance learning



Google Expeditions



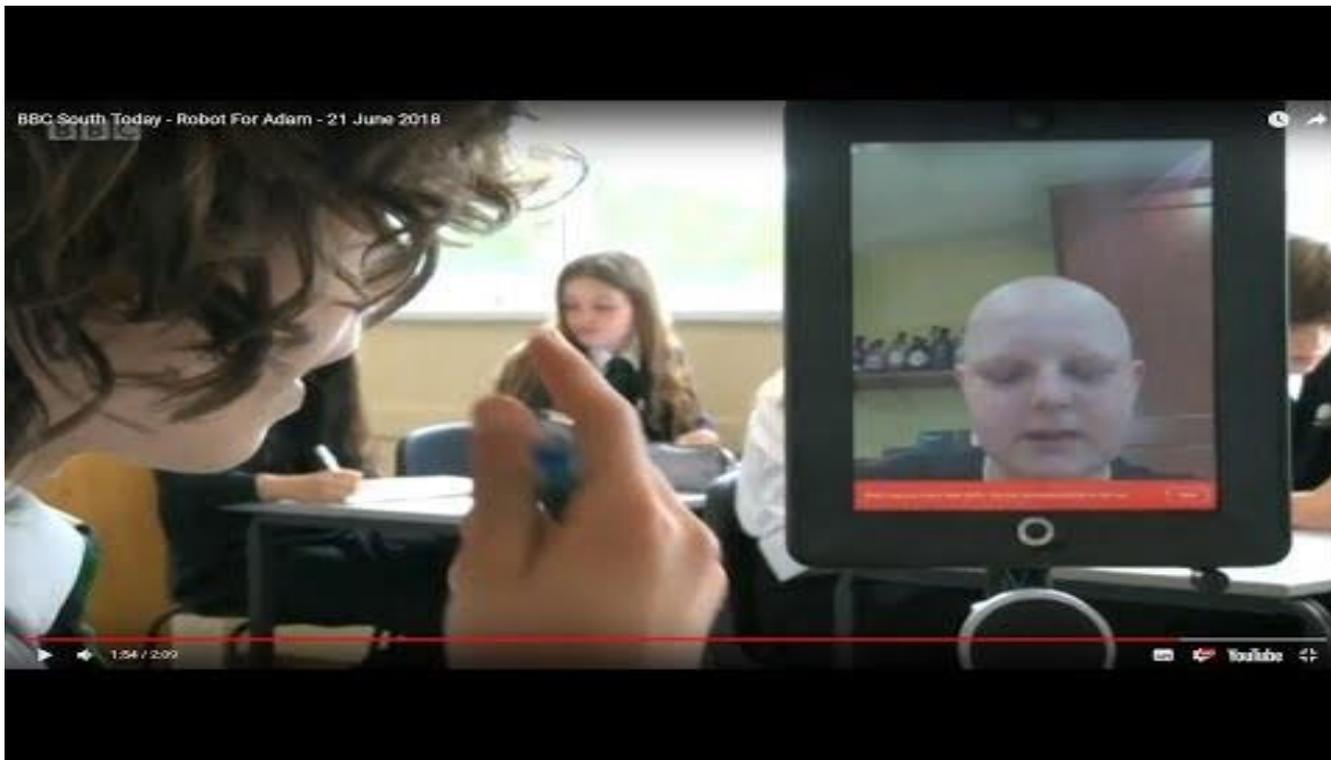
Telepresence Robots



The project:

- aims to enable children to stay connected with their teachers, peers and home school curriculum while they are unable to attend school in person due to their medical condition and related treatment
- focused on children undergoing cancer treatment
- initially two robots
- third pupil starting tomorrow

Telepresence Robots



What does the research say?



Children with cancer “miss more school than healthy controls or those with other chronic conditions”

(Vance and Eiser, 2002)

Telepresence robots can reduce social isolation and increase educational attainment

(Newhart, Warschause and Sender, 2016) and (Soares, Kay and Craven, 2017)

Initial findings from our project



Problems before we started working with the children:

- Social interaction
- Linking with home school

“It was really quite problematic, to be honest, because there was no obvious point of contact at the school.”

Benefits

- Happiness

“It felt like she was there and playing tag, interacting with the children. It was lovely because all I heard was B just giggling which was something she hadn’t done for some weeks” - B’s mother.

“Me and my friends were really excited about it, especially the first day I bought it in, that was really funny, everybody was really like ‘oh my god there’s a robot in school” – A.

Benefits



- Normalcy

Research suggests an important benefit of hospital education is to provide a feeling of normalcy (Capurso and Dennis, 2017).

“...just seeing, being in school, being able to move around his school, was quite exciting, when you weren’t able to get there for weeks, months at a time” – A’s mother.

Benefits



- Virtual Inclusion (Newhart et al, 2016)

As well as participating in lessons, the robots have been used to attend:

- tutor period
- assembly
- an evening lecture

We hope to facilitate a museum visit soon.

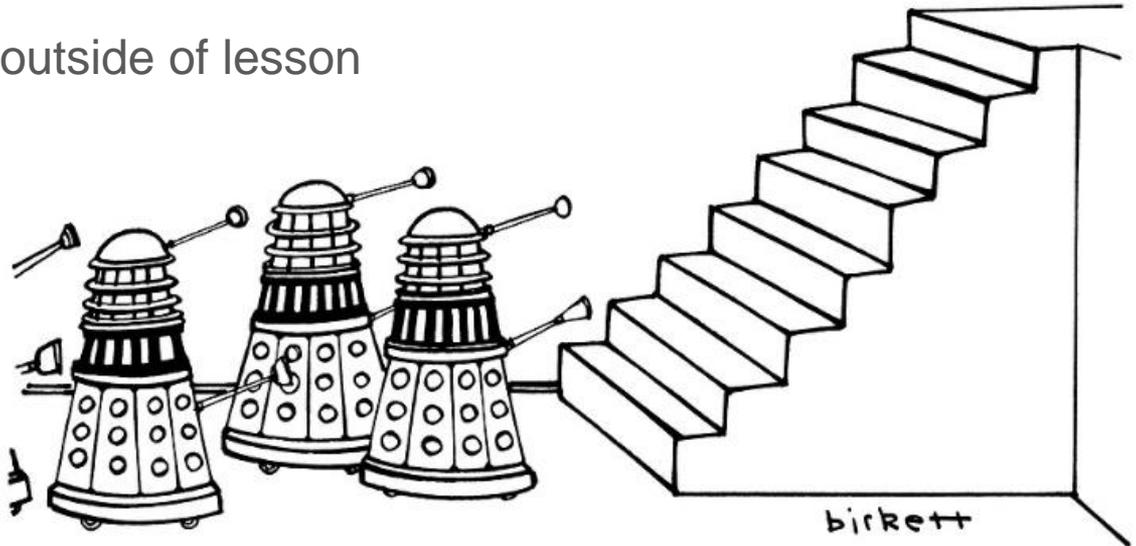
Unexpected Benefits



- Dispelling stigma and misinformation among pupils
- Improving communication channels between home and school
- The school benefited from attendance marks

Problems

- Technical issues caused distress for the younger participant
- Problems with social talk outside of lesson
- Doors / stairs



“Well, this certainly buggers our plan to conquer the Universe.”

International Uptake

Home > Actualités

La Région déploie sa flotte de robots pour les lycéens malades

2 juillet 2018 9:41



22 July 2018 French region deploys 57 telepresence robots for sick pupils.

<https://voxaura.org>

A recent pilot in Canberra, Australia is using 75 telepresence robots.

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The future?



More info on our website



A screenshot of the Oxfordshire Hospital School website. The header is teal and contains contact information (01865 957480, office@ohs.oxon.sch.uk) and social media icons (Facebook, Twitter, Instagram). The main navigation bar is white with links for "About Us", "Key Information", "News", "Information for Schools", and "Contact Us". The "Information for Schools" link is highlighted in orange. The main content area features a large heading "Robots in School Project" and a sub-heading "We are using telepresence robots to help children undergoing cancer treatment stay connected to their home schools". Below this is a paragraph of text and a link to a press release. A video player is visible at the bottom left. On the right side, there is a search bar and a list of navigation links including "Individual Health Care", "Plan and Model Template", "OCC Policy - Education of children with medical needs", "MNIP - Medical Needs", "Inreach Project", "Outreach Teaching", "Robots In School Project", and "Arts July".

- <https://drive.doublerobotics.com/>