

Telepresence to support online learning

George Haughie

Lecturer in Business English and Technology Enabled Learning

Ab8858@coventry.ac.uk

Session Overview

- The Online Student
- Telepresence Robot Demo
- Creating technology supported sessions
- Use of the robots outside the classroom

The Online Learner

- Selfish
- need a reason
- Expect Feedback
- Are only interested in real people - especially the teacher/academic

The Online Learner

- So we should provide
- Relevance
- Feedback
- Real Presence

The Online Learner

- Lazy
- Browse other sites
- Resist active learning

The Online Learner

- So we should...
- Follow conventions
- Build commitment, prompt, guide

The Online Learner

- Ruthless
- We know that students
- Skim
- Scan
- Leave
- Surprise you

The Online Learner

- So we should provide..
- scannable text
- short text
- pro presentation
- research attention

The Telepresence Robots



Telepresence Robots Introduction

- The robots have been described as ‘an evolution of a skype call’
- Also ‘facetime on steroids’
- Simply they allow a user to have a ‘presence’ in a location which they can control.
- This allows them to interact with the environment

Telepresence Robots Demonstration

- The robots can be accessed from any device around the world that has an internet connection
- They take a little time to get used to – although the new model have ‘mixed reality’ driving aids
- They offer a fantastic and unusual way to engage staff and students

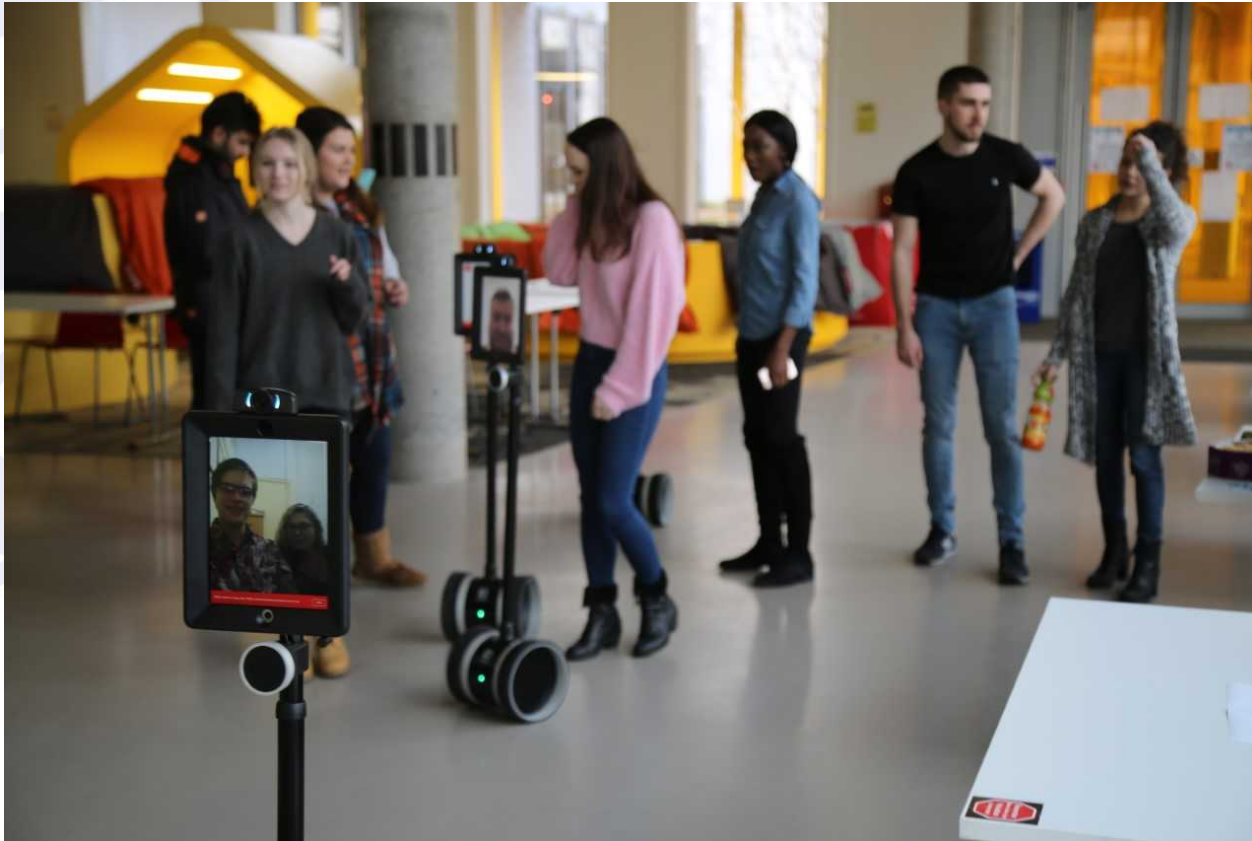
The Story of the Robots

- The robots were purchased by the Faculty of Business and Law in late 2017 to assist with a joint advocacy project with Stellenbosch University
- This was led by Alan East, who has run this project successfully since then.
- This project allows students in South Africa to work with students in CU law school
- These students interview clients at the Coventry law centre and jointly prepare legal advice

The Story of the Robots

- Recognising the potential for using the robots, FBL bought a small fleet to provide opportunities to support staff and students worldwide
- We have spent the time since then using the robots to support a variety of projects across the faculty, engaging staff and students from around the world.
- My role has been to help encourage and support staff to incorporate the robots into their projects when and where appropriate

Sample Projects



Meetings

- We have been able to use the robots to provide support for various projects for staff and students across the faculty
- One of the simplest ways we have found is to improve international meetings, and also improve staff presence while abroad.



Remote data collection

- The robots allow a clear presence in a place, which allows students opportunities to approach people they would otherwise have difficulty contacting
- This can allow groups to collect data and conduct surveys remotely.



Staff Training and collaboration

- A robot can improve the way staff can remotely attend active training sessions.



Inviting Industry experts

- Industry experts are often limited by time availability, so it is often much easier for them to attend seminar discussions via a robot.



International Communication

- The robots provide opportunities for students to control how they interact with an environment.
- They control what they can see and who they approach.
- With a clear focus and goal, this gives students a great educational or cultural experience

International Communication



Developing Appropriate uses for the Robots

- Technology can be a fantastic tool to support learning
- The use of technology should, however, be used where it is necessary to support a stated learning outcome
- It may be attractive to build sessions around a piece of technology, however this can lead to ignoring more appropriate methodologies.

Developing Appropriate uses for the Robots

- The robots are designed for the workspace, not the classroom.
- They are best used for small-scale interactions
- They facilitate two-way communication rather than a static, one-way process
- Understanding the fundamental purpose of the tech is vital in ensuring it is being used appropriately, and is the best way to enhance the learning.

Case Study – IELTS Speaking Preparation

- In supporting our partner universities in China, I help support teachers to prepare their students for the IELTS exam
- One often reported issue from Chinese students is the lack of opportunities to interact with native speakers – often the first native speaker they meet is their examiner!
- The learning objective here, therefore is to increase opportunities for interaction between students from China and in the UK.
- There are many ways to do this, through social media, VLEs, Skype, facetime, Zoom, etc. However each of these require volunteer native speakers in controlled sessions

Case Study – IELTS Speaking Preparation

- To help the Chinese students, my goal is to increase their interaction with students here, so I often try to work with teachers across China to deliver interactive sessions
- One such session with Beijing foreign Studies university (BFSU) included a teacher preparing a group of 20 students to create questions for UK students.
- The robots were placed in the hub under supervision and the Chinese students were able to approach CU students and engage them in conversation. These were controlled by groups of students in China.

Case Study – IELTS Speaking Preparation



Case Study – IELTS Speaking Preparation

- Feedback from this session was very positive, with students reporting that they found the session engaging and enjoyed learning the new technology
- It was interesting for me to observe the behavior of the students as they seemed to be able to overcome their shyness using the robot in ways that I have not seen students do in person

Response to robot Use

- We have been collecting feedback from many of the robot sessions, and have received much positive feedback, with comments including;
- *I have used the robots many times and had a positive experience each time.*
- *That was an amazing experience. I have never had an opportunity to use such robots. The only thing I would improve is connectivity as at the beginning there were some problems to connect with Korean students*
- *Very interactive and interesting. I would be happy to try that again.*

Limitations for Robot Usage

- The limiting factor for using the robots has generally been the connectivity. While we have good Wi-Fi here, many of our partners do not have reliable connections.
- *Fundamentally they could work well - it was just the connectivity issues which spoilt the experience. There may have been an issue with the partner overseas and their wi fi too. If the connection issues are sorted then it could be a very useful experience indeed to use the robots*
- *We had some communication issues. But as we fixes that problems the communication was good and we did good progress.*

Using the robots outside of the classroom

- There are other factors that can be considered for choosing to use a telepresence robot.
- Robots can help students with accessibility issues – whether they are health issues preventing a student from attending seminars.
- The robots can also be used to look at ways in which businesses can make use of the internet in different ways in the future.
- Remote coaching and consulting is an area that has already provoked some interest.

Using the robots outside of the classroom



What questions do you have for me?

- Contact me -
- Ab8858@coventry.ac.uk