

Using mainstream lower-cost home automation

United Kingdom (Lancashire) – Connect to Control (Scope, Beaumont College)

SUMMARY OF PROJECT

The British Telecom (BT) and Scope Beaumont College technology project “Connect to Control/Mind the Gap” centres on the use of Environmental Control Systems (ECS) and how equipment from the mainstream home automation market can be used and made accessible and affordable to students/service users with disabilities. A key factor that adds value to the BT partnership is that colleagues in services, policy, and fundraising have genuinely collaborated on project outcomes.

“We have now built a prototype system that is based on mainstream equipment to provide a proof of concept.”

—Rohan Slaughter, Assistant Principal, Scope Beaumont College

FACTS & FIGURES

- 23 ECS systems have been installed over the life of the project: 19 at Beaumont College where 19 students have taken part in the project; and 4 in community living houses.
- A report (“Enabling Technology”) has been published and the whole project has had wide exposure: presented at two conferences, one journal paper, and one public lecture at the Royal Society, London
- The approaches taken in the prototype system have now been developed into a commercial product called SmartHub, produced by Therapy Box (www.therapy-box.co.uk).

PROBLEMS TARGETED

The main barrier is that “normal” equipment from the smart home market is not accessible to people with complex needs due to poor interface design. Therefore, the following criteria have been set:

1. to make a mainstream, off-the-shelf communication and environmental control system accessible to disabled people;
2. to reduce the price of enabling technology;
3. to increase the functionality and range of technologies available to disabled people;
4. to explore why mainstream technology does not meet the needs of disabled people; and

5. to influence the development plans of environmental control suppliers.

SOLUTION & METHODOLOGY

A working prototype (based on the Vera 2 'Z-Wave' hub) has been demonstrated to a number of age and disability focused ECS companies, which has in some cases influenced their development plans as a result. The prototype's method of using mainstream equipment and standards has been commercialized in the SmartHub product. A co-designed report that makes a number of recommendations to improve the design of products and services for the disabled has been produced, and this has value to the assistive technology and mainstream markets as well as to the technology product and service development communities that build such products. To date, 23 ECS systems have been installed, with 23 students directly using and benefiting from such. Note that students were able to choose the ECS elements that they were most interested in using at the start of the process. This is a person-centred model that focuses on choice, empowerment, and control. For example one student at the college decided to prioritise the control of her music and access to her door, windows, blinds, and lights, so these elements were addressed first.

OUTLOOK & TRANSFERABILITY

The barrier to be overcome is how such ECS systems are specified and installed. To meet this, Scope has developed an internal pilot of a regional assistive technology service which, if successful, Scope will seek to bring to scale.

Photo: Yes

CONTACT

Mr. Rohan SLAUGHTER

rohan.slaughter@scope.org.uk

Scope

Slyne Road, Lancaster

United Kingdom

Tel: +44 1524 54 14 00