Thornbeck College
Using technology to support learning

The Enhancement of Learning Support (ELS) project – Using Technology to support Learning

This case study was produced by Thornbeck College as part of the ELS project with the aim of further promoting the use of technology across the lifelong learning sector. It has been supported by JISC TechDis, a leading advisory service on technologies for inclusion and accessibility. It explores the use of software and relatively inexpensive high street technology such as the Archos Android Tablet to support learning and promote independence.

Thornbeck College

Thornbeck College is part of the North East Autism Society (NEAS), which has recently re-located to accommodation within the grounds of East Durham College. In addition to Thornbeck College, NEAS offers other services such as day and residential adult provision, domiciliary care and supported living. In 2012 the college had nine full-time learners aged 19 to 25. All learners have autism, associated learning difficulties and/or disabilities and varying levels of challenging behaviour.

The college delivers its provision in a range of settings, including a city centre shop, community based workshops and work placements with employers. All learners are funded as day placements by the Young People's Learning Agency (YPLA). The College's mission is to '*work in partnership to achieve outstanding personalised services for people with autism'*.

East Durham College

Thornbeck College occupies a site within the grounds of East Durham College. In addition to their own learners they provide curriculum content for 8 East Durham College partnership learners on a range of subjects. Curriculum areas for the current cohort of learners 2011-2012 currently covered by Thornbeck staff are, retail, production and IT. Specialist input is continuous, from initial assessment and on-going throughout learners' programmes. In addition Thornbeck staff provide in-depth information for review reports.

Communication

The college is justly proud of their team effort in putting the communication needs of their learners high on the list of priorities.

They work across a variety of areas including sensory processing, planning, sequencing and organisation as well as inputting into life skills and self-care skills. The curriculum is founded on practical skills in a range of subjects including, horticulture, catering, business administration and textiles. Many of the products sold in the organisation's commercial retail outlets are made within the college by the learners.

A major format for communication is the use of symbols for signage, printed instructions or information. They provide information for the various processes and procedures that are integral to the vocational skill based courses at the college. These processes can be anything from daily routines to work related tasks. Traditionally these have been achieved using college made laminated booklets which have proved to be expensive in terms of staff time and unwieldy to update.

Using technology to support learning

Communicate: In Print

The college make great use of the software which creates symbol resources on a mainstream Personal Computer (PC). Communicate: In Print 2 is a desktop publishing program for creating symbol-supported resources for printing.

Curriculum Resources

Traditionally the curriculum resources the learners need were in the form of laminated books detailing the procedures to be followed for various tasks. These vary and could be anything from recipes to instructions on how to plant a seedling or photocopy document. As any aspect of these instructions changed every booklet detailing the procedures had to be dismantled and amended.

Central Repository

The college needed to be able to create and add to existing resources to allow the learners to access the symbol based sequences. A central position would ensure that the content could be added and updated only once eliminating the need to dismantle and recreate paper or laminated instruction sheets.

Sequence Slider

The e-Learning Champion developed a simple to use system using 'Easy Slider'. This enables sequences to be displayed in a simple and effective manner. It includes

- auto slide
- continuous sliding
- "go to first" and "go to last" button
- hiding controls
- optional wrapping mark-up for control buttons
- vertical sliding

- multiple sliders on one page

This has worked really well with our students, and may be of value to your learners too, so you may want to [find out more](#) about it.

With this system in place the resources are now held centrally on a server within college and only one amendment needs to be made to a central resource which will then be transferred to all relevant devices.

Devices

The College chose to use the Archos Android Tablet for the learners to use inside the college building and outside for subjects such as horticulture and farm work. The tablets are basic and simple to use and relatively inexpensive. They have a simple to use touch screen allowing the users control. They can be updated and synchronised centrally.

Adding Resources

Using the Communicate: In Print software the business administration vocational course started to produce resources for different curriculum areas. The students created the symbol instructions. These are then converted to image files and uploaded to the application on the server. The learning support staff were given full training by the e-learning tutor. They were therefore able to support the learners to create their own resources thus creating personalised resources when relevant.

Sharing

Staff at Thornbeck also act as tutors for learners within the targeted provision for learners with learning difficulties and or disabilities at East Durham College.

The learners there have embraced the use of the sequencer for their travel training. The learning support staff have worked with the learners themselves to take photos of the relevant landmarks they encounter on their regular journeys to college or into town. They have then incorporated them into their own personal routes. This is an important aspect of the system for

adults with autistic spectrum conditions (ASC) as a landmark which a support worker or tutor may think significant may have no relevance to someone with ASC.

It has meant that individuals have their own travel guidance to hand at all times and they can access the information at an appropriate time and in a way in which is meaningful to them.

Summary

The sequencing system has proved to be very successful in a number of ways.

The implementation of the system has increased learners' independence in a number of areas from horticulture to travel training. It is accessible, simple and effective and allows a level of personalisation which would not be possible in a paper based system.   The simple visuals give all the information that the learners need.

The initial concept and implementation was done with consideration for learner need and sustainability. The learners liked the system and were able to use it efficiently and with ease. The responsibility for resource creation was passed to a cohort of learners as part of their business administration course. This reduced the burden on the teaching and support staff. Providing training for learning support staff to support the learners to do this made the process easier to manage and achieve. It also increased the skills and confidence of the Learning support staff to suggest other resources which would be suitable for converting to this format. It has ensured that the resources can continue to be developed by staff other than the e-Learning Champion.

Future Plans

The college plan to continue to build on this relevant and rich collection of digital resources to ensure that all the college learner processes are sequenced and rendered in this way. The college has a very practically based curriculum which lends itself perfectly to this method for their learners.

It demonstrates that simple ideas well executed can have a significant effect on both the experience and the learning of students and including the support staff in the implementation gives it both depth and sustainability.
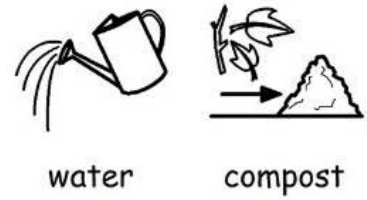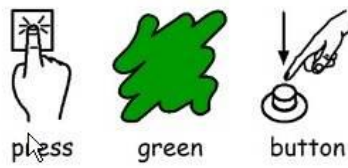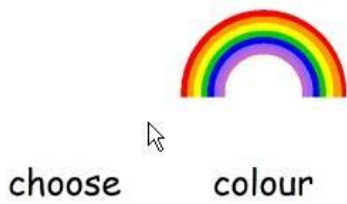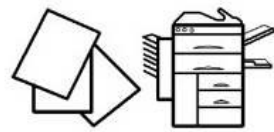
References

http://ne-as.org.uk/

http://cssglobe.com/post/4004/easy-slider-15-the-easiest-jquery-plugin-for-sliding

Appendix

Images showing examples of symbols used in the sequences.

choose   colour

press green button

water compost
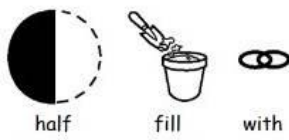
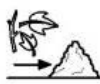Using the photocopier

place paper in photocopier
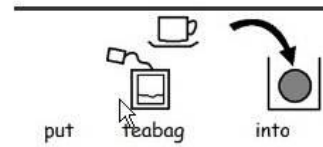
put teabag into

cup

half fill with

compost

Planting a seed

press power button