



THE UNIVERSITY *of* EDINBURGH

# CALL Scotland

Communication, Access, Literacy and Learning



Annual Report  
2009 – 2010

**C**ALL Scotland





# **CALL Scotland**

## **Annual Report**

### **April 2009 to March 2010**

CALL Scotland provides services and carries out research and development projects, working with all those involved in meeting the needs of people who require augmentative communication and/or specialised technology use, particularly in education.





# CALL Scotland 2009-2010

The 2009-10 Annual Report describes another busy and productive year for CALL Scotland. The introduction of Curriculum for Excellence has prompted us to consider how we can contribute to helping children and young people access the new curriculum.

Curriculum for Excellence aims to “enable each child or young person to be a successful learner, a confident individual, a responsible citizen and an effective contributor.”

How can you be a:

- \* *Successful learner - if you can't read books and learning materials?*
- \* *Confident individual - if you depend on others to read or write for you?*
- \* *Responsible citizen - if you don't have access to information?*
- \* *An effective contributor - if you can't communicate?*

These questions form a manifesto for CALL. Assistive Technology and Alternative and Augmentative Communication can have a real impact on young people's ability to access the curriculum.

For example:

- \* Books for All is helping print-disabled pupils to read books and learning materials.
- \* Digital Question Papers enable pupils to sit exams independently, without having to rely on readers or scribes.
- \* CALL's Assessment and Support and Equipment Loan services help young people to try out technology to help them read, write and communicate.

This year's Annual Report shows how CALL's work continues to have an impact both for young people individually and on policy and practice in Scotland.

# Strategic Partnerships and Contributions



## Key Points about Strategic Partnerships in 2009-10

CALL works in partnership with a number of organisations and government agencies to develop policies aimed at supporting pupils with additional support needs in schools in Scotland.

- CALL works with other members of Augmentative Communication in Practice: Scotland to improve services and social opportunities for children and adults who use augmentative and alternative communication in Scotland;
- CALL has supported Learning and Teaching Scotland in the development of the Books for All Scotland Database, providing accessible books and resources for pupils who need them;
- CALL has worked with different publishers and the Scottish Book Trust to make books available in accessible formats for pupils in schools in Scotland;
- CALL's work in partnership with the Scottish Qualifications Authority to create accessible digital exam papers enabled 425 candidates throughout Scotland to request 1,166 accessible papers in 2009. The use of these papers increases the independence of pupils and can lead to financial savings for schools
- CALL has encouraged Learning and Teaching Scotland to improve access to the Glow intranet for pupils with additional support needs.

## Augmentative and Alternative Communication (AAC)

### Scottish Government and AAC - Short Life Working Group on Augmentative and Alternative Communication

CALL contributed to the discussions, data collection, and to the draft report and recommendations which were accepted by Health Minister Shona Robison in 2009. Sadly since then the project has stalled and the original intended outcome has not yet been achieved - i.e. publication and circulation of the Final Report as a 'Chief Executive' guidance note to education, health and social care agencies and others with responsibility for AAC provision.

CALL is currently campaigning to re-boot the process, as the 'post-code lottery' situation for people who need AAC in Scotland has not improved since the Working Party was set up in 2008 and urgently needs to be addressed on a national basis.

## Augmentative Communication in Practice: Scotland

CALL Scotland is a leading member of the Scotland-wide network of specialist AAC centres and services called Augmentative Communication in Practice: Scotland (ACiP:S).

One aim of this group is to provide CPD opportunities in AAC for professionals in Scotland. On 11th May 2009, CALL and ACiP:S collaborated with the UK national organisation Communication Matters and commercial company Inclusive Technology, to bring US AAC expert Caroline Musselwhite over to present a very popular Study Day on *Language, Literacy, Learning & Emergent Writing for Students with Disabilities*.

This year, CALL and ACiP:S have actively promoted opportunities for people who use AAC to meet and network with others across Scotland and keep up with what is happening in the field of AAC and technology in general.

## Strategic Partnerships and Contributions



Caroline Musselwhite demonstrating eye-pointing at the ACiP:S Study Day.

CALL and ACiP:S have developed a newsletter for people who use AAC, called *ContAACt*. The first two issues of this were circulated in 2009, and it will continue as a biannual publication. The newsletter is distributed to individual PWUAAC as well as to specialist AAC centres and services across Scotland to pass on to users, through their networks. See <http://www.callscotland.org.uk/Resources/Newsletters/ContAACt>.

The new newsletter encourages input from PWUAAC, with the latest issue featuring quotes and pictures of individuals, and an article on 'Places we like' in Perth, sent in by people who use AAC at Capability's Upper Springland Centre in Perth.



In addition, a Facebook page has been set up for people who use AAC to make new friends and chat. The page is called 'AAC Scotland' and is another way of letting 'friends' know about AAC news and events. The page is monitored by CALL and any relevant questions or points raised by individuals who use AAC can be passed on to other professionals at the specialist AAC centres and services across Scotland to make sure questions are answered. It is primarily to enable PWUAAC to network socially and is not aimed at professional use. There are currently 11 AAC friends of the AAC Scotland page, who post comments and photos and can keep in touch with each other.

### Communication Forum Scotland

Representing both CALL and ACiP:S, CALL has been hosting and Chairing Communication Forum Scotland (CFS) throughout the year. CFS is an informal alliance of organisations with a primary interest in promoting and/or providing for the needs of people of any age who have communication support needs (CSN) in Scotland. The current 'flagship project' of CFS is the dynamic and successful 'Civic Participation Network' project funded by the Equality Unit. CALL has contributed (re: AAC in particular) to the *Talk for Scotland* toolkit, available at <http://www.communicationforumscotland.org.uk>.

### Books for All

Much has happened since CALL was asked by Scottish Government to consider how many



pupils in Scotland could benefit from books being made available in alternative accessible formats. CALL's ground-breaking report, *Books for All: Accessible Curriculum Materials for Pupils with Additional Support Needs* (2007), sets out a plan of action to make Scotland a world leader in providing books to pupils with visual impairment or other print disabilities in the format of their choice.

A first step, carried out in 2008 in partnership with City of Edinburgh's visual impairment service, was to prepare a pilot set of 165 books in alternative formats and load them up in the Books for All Scotland Database, allowing teachers to search, locate and download the book in the format of their pupil's choice from within Scran or via Glow.

In April 2009 Learning and Teaching Scotland took over project management for developing the database and increasing the number of resources on it. CALL's role was limited to providing in-depth training on producing books in accessible alternative formats.

CALL developed and ran a comprehensive 4-day course for local authority producers of accessible formats. The course was received positively, being repeated in February and March 2010.

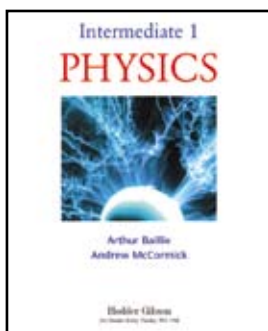
## Strategic Partnerships and Contributions



Books for All training, Stirling 2010

CALL also developed a series of 1-day courses on various aspects of Books for All. A CALL also developed a series of 1-day courses on various aspects of Books for All. A CALL presentation on Books for All was well received at the Scottish Learning Festival 2009, stimulating a great deal of interest.

CALL has been delighted to work closely with Hodder, a major Scottish textbook publisher. Through this partnership Hodder supplies CALL with electronic PDF files to adapt them for pupils with physical disability, dyslexia or visual impairment and list on the Books for All web site (<http://www.books4all.org.uk>). A teacher looking for an accessible version of a Hodder title can check on the site and if the book is available, request it from CALL. Everyone's happy and it's such a great model we'd like to develop it even further.



CALL's Books for All website has many links to sources of accessible books (including the Books for All Scotland Database). It also has information on making and adapting books and a regularly updated blog.

CALL worked with the Scottish Book Trust and publishers to create accessible digital versions of the shortlisted titles for the 2009 Royal Mail Children's Book Awards.

Other developments include:

- Helping class teachers to make their materials more accessible using

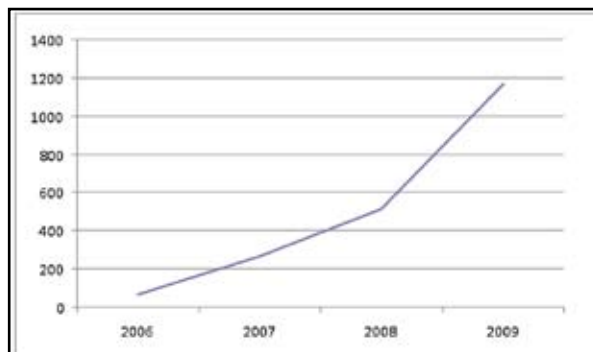
*Accessible Text: Guidelines for Good Practice*, written by Paul Nisbet and Fran Ranaldi of Perth & Kinross and downloadable from the CALL website.

- Extending the number of local authorities with CLA-VIP licences to fifteen.

### SQA Digital Question Papers

CALL has been working with the Scottish Qualifications Authority for several years to develop digital examination papers for candidates with disabilities and additional support needs.

In 2009, the number of candidates and requests for adapted digital papers more than doubled to 1,166 requests for digital papers on behalf of 425 candidates from 73 centres. Digital papers were used in schools in 29 out of 32 local authorities, and also in FE Colleges and independent schools.



The number of requests for digital exam papers grew significantly in 2009.

In most cases schools who used papers in previous years requested more papers for more candidates in 2009, demonstrating that schools are finding the papers to be of value. Pupils like digital papers because they find them less stressful and they have greater confidence and independence. Staff choose digital papers because they increase pupils' independence and reduce the number of staff and separate rooms required for reading or scribing. This can provide direct savings for the school: in 2008, for example, one school saved £1,000 by using digital papers instead of reader/scribes. It is nationally estimated that £1 million plus is spent on reading, scribing

## Strategic Partnerships and Contributions

and invigilating for pupils in examinations. Digital papers can significantly reduce this cost to the public purse.

Candidates with reading difficulties can use text-to-speech software to have the paper read to them by the computer. CALL brokered a licence for *PDFAloud*, which we regard as the best text-reader for digital papers, between TextHelp and LTS, so that Scottish schools can buy the software for £295 for a site licence. (The full *TextHelp*

*Read and Write Gold* program costs £1995 for a secondary school site licence. LTS have sold 92 *PDFAloud* licences so far: if schools had to buy *Read and Write Gold* it would have cost Scottish Education £156,400 more.)

This work is another excellent example of how CALL works collaboratively with national and local authority partners to both develop a practical, cost-effective solution and support its implementation.

### Comments from staff who used digital papers in 2009

- 'Feedback from the pupil extremely positive.' - *King's Park Secondary*
- 'Increases candidates' feelings of independence and control over their speed of progress. Helps with confidence to face next step, eg college, work.' - *Aberdeen Grammar School*
- 'Help cut down the number of readers/scribes and invigilators... a significant cost saving for the centre.' - *Mearns Academy*
- 'Very worthwhile - provide increased independence and a real sense of achievement which the ethos of Assessment for All would promote.' - *St Columba's, Gourock*
- 'Thank You - I can only guess at the amount of time, effort and energy that has gone into getting the option of digital papers up and running as smoothly as it is.' - *Aboyne Academy*

### Glow

Since the inception of Glow, CALL Scotland has been concerned over the accessibility of this national intranet to pupils with additional support needs. CALL was first asked by Learning and Teaching Scotland in December 2006 to report on the accessibility of the site and the report for this was written in January 2007 highlighting particular issues including the lack of themes that were flexible to suit visually impaired users and a text reader for print disabled pupils to be able to access the text. An update report was written in July 07 highlighting the same issues.

In October 2009 LTS asked CALL to give input to the design of a new 'accessible theme' for Glow. CALL advised that three 'accessible' themes were required: high-contrast for pupils with visual impairment; large font for pupils

with visual impairment; and one designed for dyslexic pupils. LTS chose to provide only one theme for all of these pupils, which in our view is not accessible for some pupils with disabilities. There is still a need to investigate the accessibility of Glow with users to ensure pupils with disabilities and ASN can access the national intranet.

One of the recommendations in the original report was to investigate the use of a text to speech reader to allow print impaired pupils to use the site. CALL Scotland organised a trial of Browse Aloud in Glow which proved not to be successful for Mac users. This issue of text to speech has still to be resolved.

# Staffing and Finance



## Steering Group, 2009 - 2010

There were a number of changes to the CALL Steering Group during the course of the year. We would particularly like to thank Professor Martyn Roebuck. He has been a most valuable Chairperson, but retired as Chair in 2009. Martyn was commissioned by the Scottish Executive Education Department to review CALL's work in 2003 and agreed to become Chair of the Steering Group the following year to help implement some of the developments suggested in his report. We are delighted to welcome Stuart Robertson as the new Chair of the Steering Group.

- Professor Martyn Roebuck (Chair, until August 2009)
- Stuart Robertson (Chair, from August 2009)
- David Seaman, Scottish Government Schools Directorate (until March 2010)
- Rachel Sunderland, Scottish Government Schools Directorate (from March 2010)
- Margaret Cooper (ADES representative), Education Officer, East Dunbartonshire Council (until January 2010)
- Allan Cowieson, Quality Improvement Officer (ASL), North Ayrshire Council
- Marie Dougan, Director of Learning and Technology, Learning and Teaching Scotland
- Grant Douglas, ICT User representative
- Marie Foley, Manager, St Flannan's School, East Dunbartonshire (from August 2009)
- Sheila Riddell, Professor of Inclusion and Diversity, Moray House School of Education
- Lorraine Sanda, Parents' representative
- Janis Sugden, Coordinator, Scottish Sensory Centre
- Mary Turnbull, Head of Speech and Language Therapy, NHS Forth Valley.

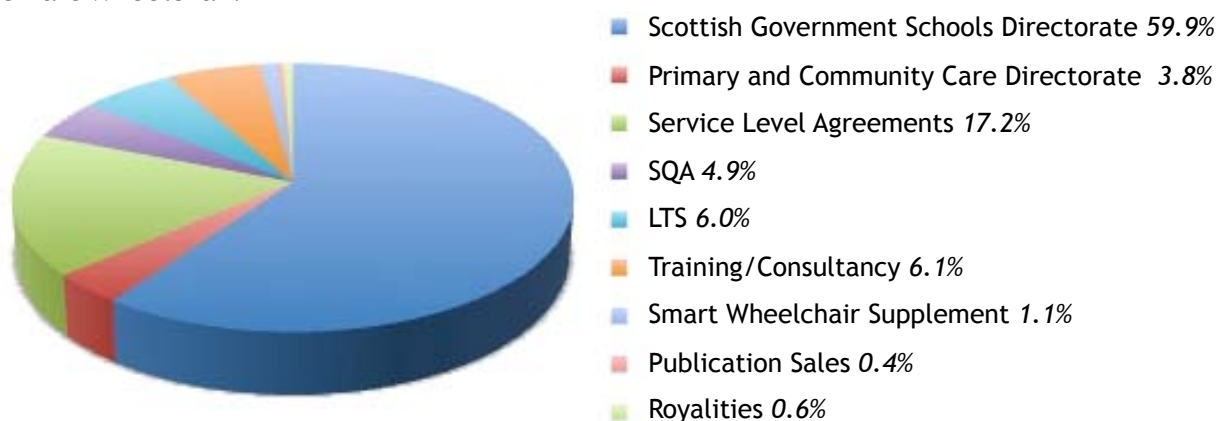
## Staffing

There were no changes in CALL staffing during 2009-10:

- Sally Millar, Specialist Speech and Language Therapist & Joint Coordinator
- Paul Nisbet, Engineer, Educational Technologist & Joint Coordinator
- Stuart Aitken, Psychologist & Visual Impairment Specialist
- Sandra O'Neill, Teacher & Training Services Coordinator
- Joanna Courtney, Specialist Speech and Language Therapist (from Jan. 2009)
- Allan Wilson, Information Coordinator
- Robert Stewart, Technology Support Officer
- Sarah Marjoribanks, Administrator
- Rebecca Gow, Resources Editor/Assistant Administrator.

## Finance

The Scottish Government Schools Directorate Support for Learning Division provided core funding for CALL until March 2010, which was then extended for a further year until March 2011. CALL also has a small core funding grant from the Scottish Government Primary and Community Care Directorate until March 2011. There have been modest increases in income generated by CALL from Service Level Agreements and Partnerships with local authorities and from publication sales, but income from training and royalties have both decreased slightly. Other main sources of income have been for ongoing project work for the SQA on digital exams and through work with Learning and Teaching Scotland to develop and provide training for the Scottish Books for All Database. There was also a small amount of money from The University of Edinburgh's Knowledge Transfer Fund for software development for the CALL Smart Wheelchair.



# Assessment and Support



## Key Points about Assessment and Support in 2009-10

- CALL provided assessment and support for 80 pupils across 17 local authorities during the year, 12 more than in 2008-2009;
- CALL received 34 new referrals in 2009-10, 5 more than in 2008-09;
- 41 pupils received a comprehensive assessment for ICT/AAC;
- 95 assessment and/or support sessions were delivered in schools;
- 11 Service Level Agreements (SLA) - otherwise called Partnership Agreements - were agreed with local authorities for 2009-2010: Argyll and Bute, Clackmannanshire, Dumfries & Galloway, Falkirk, Highland, North Ayrshire, Perth & Kinross, Shetland, South Lanarkshire, Stirling, Western Isles;
- CALL also worked in partnership on a less formal basis with 6 other local authorities: Angus, Dundee, East Dunbartonshire, Orkney, South Ayrshire, North Lanarkshire, Renfrewshire;
- CALL has links with grant-aided schools. This year, a CALL assessment, with associated training, has been carried out in collaboration with the Royal Blind School, for a child from a local authority with whom CALL has an SLA.

## Assessment and Support

Schools in Scotland can refer pupils with additional support needs, particularly those with complex communication support needs, to CALL Scotland for assessment and support. CALL staff will visit the school to carry out an assessment of if/how technology may be used to help the pupil to access the curriculum. A detailed report with advice and recommendations will be sent to the referrer and further support may include equipment loans for trial; training for staff and family; and follow-up as needed.

Most assessments are carried out through an ongoing funded 'Service Level' or 'Partnership' Agreement with the local authority. Such agreements allow for development of an ongoing relationship between CALL and the authority, resulting in a more integrated and effective service. If an authority does not have an Partnership Agreement with CALL and wishes to 'sample' the CALL service prior to setting up a service level agreement, they can request a single free assessment. This permits a school visit for assessment plus

and indicative report, funded by the Scottish Government.

## CALL Assessments

CALL assessments are 'formative' and practical, not 'summative'. In other words, they are not about making a 'diagnosis' nor are they about 'testing' against standardised norms. Rather, they are about finding workable solutions and achieving effective outcomes for each individual pupil referred (and also for the school staff team around the pupil, and their parents/family). Assessments are collaborative, with the local team of professionals and the family. Full assessments are seldom 'single events', and are usually supported by loan and trial of equipment over a period, to ensure that technology recommended is appropriate and works well for the pupil others in their own setting.

## Impact of new equipment?

Technology is constantly moving on. There can be unintended consequences for pupils with additional support needs. For example,

the flood of interactive whiteboards into every classroom, while positive in the group interactivity they have supported, has led to less individual use of computers, which can be a negative outcome for pupils with complex additional support needs who may need to rely on a computer more than other children in the group, throughout their education, and who therefore require time to trial and practise a special access system. This year, considerable attention has been focused on the burgeoning numbers of 'Apps' for the iPod, iPhone and iPad that are geared to support literacy and communication. These are exciting in that they are new, appealing - and cheap! One result is that many parents are buying such devices and hoping that schools and CALL will support and develop their use. However the emphasis on these may be misleading in that they are not suitable for all children, especially those who need to use switch access.

Another new and exciting development is the advent of 'eye gaze technology'. This highly sophisticated - and very expensive

- technology raises a number of very fundamental issues for both service providers and users. It may take some years of building up experience of use of such systems with different kinds of users, before we have clear answers to some questions. In the meantime, CALL is still saving up in order to be able to afford an eye gaze assessment kit....

### Assessment Reports

There is always a tension, with report writing. We seek to keep matters clear and easy to read, but at the same time we know from the feedback received that it is the specialist detail (as opposed to 'general information') that make CALL assessments valuable. As part of the report we often try to provide not only advice and equipment recommendations, but also a record of what technology a child has tried, why certain choices and decisions were made, and a step-by-step 'Action Plan' for staff to follow, to help them implement the recommendations. So CALL reports can end up pretty long!

### Evaluation and Feedback

The CALL assessment service is monitored as part of the support service itself. When the client is formally discharged, an evaluation form is sent to the referrer.

In between times, informal feedback tells us whether we are on the right track:

- 'Just to say thanks very much for your report. You are an amazing report writer Sally, your reports are so comprehensive and clear and helpful, and we look forward to moving all these things on.' - *Parent*
- 'The report Paul Nisbet has sent was absolutely fantastic. It was so thorough that I have spent the whole morning with our IT person saying "well Paul Nisbet says...".' - *Principal Teacher, Support for Learning*

## Case Study

Michael is a seven year old boy with cerebral palsy who attends a mainstream primary school. He is a particularly able pupil academically and the challenge for Michael, his parents, staff and CALL, is to find ways to help him overcome some of the barriers to learning which arise as a result of his physical disability.

### Assistive Technology for access, reading and writing

Michael cannot hold books or turn pages by himself, and he has difficulty using a pen or pencil and so he needs to use a computer to read digital books and for writing. A comprehensive assessment of keyboard and mouse alternatives showed that the best access method was a joystick which Michael controls by hand.



Michael cannot manage most computer joysticks because they require good fine motor skills, but he is very effective with a large joystick that has four slots to help guide the stick. With this joystick Michael has full control over the computer - he can start programs and access menus, and click and drag by pressing a small 'Specs' switch with his head. Michael has one joystick in school for his laptop computer in class and another at home. For writing, Michael uses the *Clicker 5* on-screen keyboard. This particular joystick is no longer made and so CALL has been investigating ways of making an equivalent device: until we do, Michael will keep the two joysticks on loan.

### Augmentative and Alternative Communication

Michael uses his speech to communicate with familiar people, but finds it harder to make himself understood by people who do not know him well and those who are not tuned into his speech.

When we first assessed Michael for augmentative and alternative communication he tried out a *SpringBoard Lite* digitised (recorded voice) device with 8 buttons and a key-guard to help him select the buttons. The small number of buttons, and their large size, meant that he could access them directly with his fingers and hands. Michael used the device well in small group settings in school and to relay news between school to home. However, his excellent language skills meant that he needed a more complex device with a larger vocabulary, to meet his communication needs. This also meant using a different access method, as he could not manage to operate more buttons with his fingers. We trialled a *Dynavox V* device with Michael, which has a synthesised (text to speech) voice.

As Michael was already using a head switch to help him click the mouse button on the computer, we tried 'scanning' with him. Blocks, then rows and columns of the screen are highlighted in sequence and Michael presses the switch with his head at the right time to select messages. This has been a very successful and physically less demanding access method for Michael when he is communicating with people. He now uses a combination of his switch joystick to access digital resources on his laptop, a joystick-controlled power-drive wheelchair and a head switch to access his communication aid, which is mounted on his power drive chair. This enables an integrated approach to communication, independence and mobility for Michael.



# Information and Advice

## Key Points about Information and Advice in 2009-10

- 540 significant enquiries were received during the course of the year. This was a 9% increase over the figure for last year. 2008-09;
- Three new information sheets, on Switch Accessible Games, Reading the Web and Using the *Tap to Talk* App on the Nintendo DS were completed. Further Information Sheets eg. on iPod Apps for Communication are in preparation. A number of new CALL Quick Guides were added to the already substantial list of resources;
- Two issues of the new ContAACt newsletter for people who use Augmentative and Alternative Communication were produced by CALL in conjunction with Augmentative Communication in Practice: Scotland;
- 177 CALL publications were sold, compared with 144 last year. Personal Communication Passports (69 copies) is still selling well;
- The new CALL Scotland web site received 43,504 visits during the year. The WordTalk mini-site proved to be even more popular with 54,557 visits. The other four CALL mini-sites received a further 55,905 visits;
- A Facebook page was set up through which young people who use AAC can keep in touch with each other.

## Information and Advice

The CALL Information service responds to enquiries about the use of specialist assistive technology and software in education that come primarily by email or by phone. This year has seen a significant number of enquiries from people seeking advice on iPod/iPhone apps suitable for children and on the use of text to speech software to support reading and writing.

In addition to responding to enquiries, CALL acts proactively, making information on topics of interest available through publications, information sheets, talks to other organisations and the various CALL web sites.

Another important part of the information service is the monitoring of relevant national and international discussion groups and resources on augmentative communication, assistive technology and education. Information on new developments is disseminated to others working in our field through the CALL Blog and emailings and the New in CALL newsletter.

## The CALL Scotland Web Sites

The new CALL Scotland web site, launched in December 2009 has now become a well-established resource for people interested in augmentative communication and assistive technology in education. The main developments over the past year have been:

- The CALL Blog (see below);
- An online version of the Loan Bank database, allowing people to see pictures and basic information about equipment they may wish to borrow;
- Access to information about publications in the CALL Library.

CALL also hosts a number of 'mini sites', associated with individual projects. Of these, the WordTalk site is particularly notable, attracting an average of 4,500 visitors every month. There are now more than 1,200 other web sites with a direct link to the *WordTalk* site.

## Visits to the CALL Web Sites

Website	Visits 2008-09	Visits 2009-10
CALL Scotland <a href="http://www.callscotland.org.uk">http://www.callscotland.org.uk</a>	25,962	43,504 (41,358 resources downloaded)
WordTalk <a href="http://www.wordtalk.org.uk">http://www.wordtalk.org.uk</a>	9,079	54,557 (15,042 copies downloaded)
The Scottish Voice <a href="http://www.thescottishvoice.org.uk">http://www.thescottishvoice.org.uk</a>	11,162	17,482 (459 downloads of Heather)
Books for All <a href="http://www.booksforall.org.uk">http://www.booksforall.org.uk</a>	9,500	16,909
Communication Passports <a href="http://www.communicationpassports.org.uk">http://www.communicationpassports.org.uk</a>	8,519	15,530
Adapted Digital Exams <a href="http://www.adapteddigitalexams.org.uk">http://www.adapteddigitalexams.org.uk</a>	9,578	5,984
<b>Total visits</b>	<b>73,800</b>	<b>153,966</b>

## The CALL Blog

The CALL 'Blog' (short for 'web log') was launched in May 2009 to provide a space where CALL staff can provide information and stimulate discussion on new developments in the use of ICT and communication technology to support pupils with additional support needs. It is often used as an online notebook where a member of staff who sees something interesting can immediately record details and make information available to the wider education community.

The Blog has been used to disseminate information on new communication aids, interesting developments in applications

available for the iPhone/iPod, updates to CALL projects, particularly Books for All and many other topics.



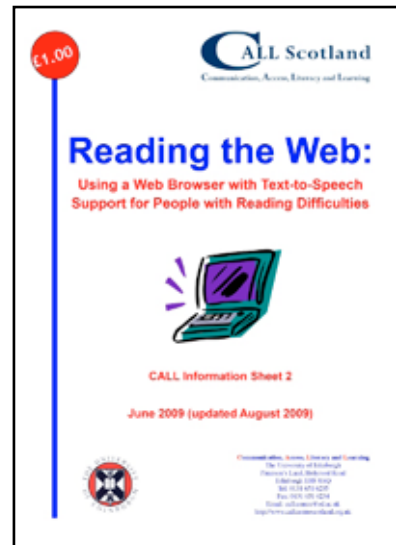
### Case Study: Producing an Information Sheet

CALL occasionally produces information sheet on topics where we have some expertise and where there is evidence of wider demand for information. An information sheet is much more than a single piece of paper with key facts on a subject.

The production of the *Reading the Web* information sheet (actually 24 pages long) illustrates the work that can be involved. During 2008 and the early part of 2009 several enquiries were received seeking advice on text to speech software, particularly relating to use with web browsers. We made suggestions on the basis of existing knowledge and brief research, but we felt there was a need for more comprehensive research to find and compare different options.

We compiled a list of around 25 different options and made a separate list of desirable features that could be included. We examined each of the programs in detail and published initial findings, with recommendations, on the CALL web site. Two developers then approached us requesting that we also consider their products. One of these products was interesting, but had a number of flaws that made it difficult for a person with reading difficulties to use. We suggested various alterations to the program, which the developer was happy to implement.

Since initial publication, the information sheet has been updated once and has been downloaded over 400 times from the CALL web site. Allan Wilson was invited to write an article for the *e-quality* magazine, produced by the JISC Regional Support Centre in Edinburgh, and has given presentations on related subjects at ICT and Inclusion and to branches of Dyslexia Scotland.



### Evaluation and Feedback

Evaluation forms are sent on a monthly basis to a sample of people who have used the information service. Additional feedback is received on an informal basis. 57 evaluation forms were sent out in this period, with a response rate of 51%. Various questions are asked about relevance, timeliness and usefulness of information provided and the overall quality of the service, on a score from 1 (poor) to 5 (excellent). The Information Service was given an overall rating of 4.2 during this period.

- 'This is awesome! Thank you so much. It is the most thorough information I have been able to find or have been directed to regarding this subject.'  
- *Education/Assistive Technology Consultant on 'Guide to Picture and Symbol Sets for Communication'*
- 'Blimey! This is brilliant, great job! Can I use it for the next newsletter or can you do a summary? And can I pass it around to other colleagues?'
- - *e-Learning Advisor on Information Sheet on 'Reading the Web'*

# Loans and Technical Services



## Key Points about Loans in 2009-10

- 154 new equipment loans, with an aggregated value of £52,000, were issued to clients in 22 local authorities;
- 36% of loans were issued for use by CALL assessment clients;
- 10% of loans were provided for use by children in pre-school settings; 79% of loans went to pupils in schools; 11% were used by adults with disabilities;
- CALL added 179 devices or software products with a total value of just over £33,000 to the Equipment Bank during the year. (Actual expenditure was less than half that, as some suppliers provide free evaluation copies of software and significant discounts on other equipment for CALL to use in its role as an assessment centre.

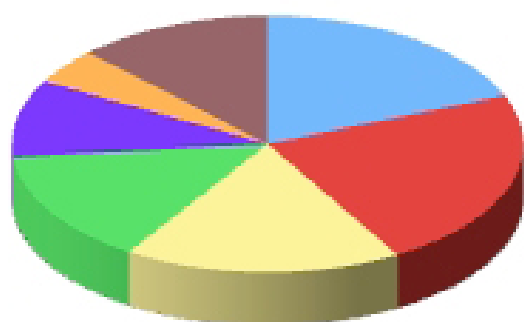
## The CALL Loan Bank of Equipment and Resources

The Loan Bank allows children and adults with disabilities in Scotland to try a piece of specialist equipment to see if it meets their needs. Loans are free and generally last for up to two months, allowing evaluation of the device. Loans to CALL assessment clients generally last for up to three months or sometimes more. As part of this service, CALL will often configure software and prepare resources (eg. symbol vocabularies, examples of curriculum exercises) and occasionally adapt hardware to meet individual needs.

Loans and technical support of equipment are a significant 'best value' service, representing a substantial saving to schools and local authorities by ensuring that they buy only suitable and successfully trialled equipment and reducing the likelihood of them making inappropriate purchases.

It is becoming increasingly difficult for CALL to keep its Loan Bank of Equipment up to date, especially in the light of current reductions in funding (in real terms).

## Nature of Equipment Borrowed from CALL in 2009-2010

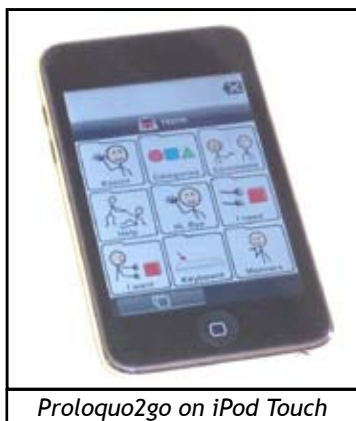


Communication Aids	19%
Switches, Interfaces	23%
Keyboards, mice, etc	18%
Mounts	14%
Toys	10%
Laptop / Notetaker	4%
Others	12%

## New Additions to the Equipment Bank

Equipment purchased in 2009-10 included:

### Apple iPod Touch and Nintendo DS Lite



*Proloquo2go on iPod Touch*

The past year has seen a number of developments in the use of 'mainstream' technology, such as the iPod and the DS Lite, to assist people with communication difficulties. The widespread use of the iPhone/iPod has seen the remarkable growth of developers producing software applications to run on these devices. An ever increasing number of 'apps' has been developed (often by parents) to support communication. These include simple free or very low cost systems such as *TapSpeak Button* (£5.99), which can record and play back a single message, and a much more sophisticated app, *Proloquo2Go*, which provides a huge vocabulary and access to many language functions. Most of the new apps have been designed for the iPod, but one communication app, *Tap to Talk* has been developed also for Nintendo DS games consoles.

The small screens and requirement for manual dexterity of the iPod and DS Lite mean that the devices are certainly not suitable for every person with a communication difficulty, but the iPod, in combination with *Proloquo2go* offers a very useful affordable communication tool for many people. CALL has purchased an iPod with *Proloquo2go* and a DS Lite with *Tap 2 Talk* and made them available to clients. There is high interest in these systems.

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### DynaVox Xpress and M3

CALL purchased a new DynaVox Xpress communication aid for use with clients. The Xpress uses a modernised version of DynaVox

software, in a highly portable device. CALL also took advantage of an offer from the supplier to exchange old devices for a new M3 digitised voice communication aid. This has proved very useful for assessment purposes as it can quickly be made accessible for users with even the most complex difficulties, eg. who may need to use a single switch and auditory prompting.



*DynaVox Xpress communication aid*

### Netbooks

The new 'breed' of netbooks - mini laptops - offers a lot of exciting possibilities for young people with (and without) disabilities. Netbooks are smaller, lighter, cheaper and often have a longer battery life than standard laptops and are therefore more practical in schools. We have a small stock of Asus netbooks, and this year bought some Toshiba machines through the Procurement Scotland system. These have been very popular and the entire stock is almost always out on loan.



*Toshiba NB300 / NB305 netbook*

### Software

CALL negotiated an assessment centre arrangement with the Bli group, allowing us to get new copies of software from SEMERC, Sherston and TAG for training, demonstration and use with assessment pupils. Similar arrangements are in place with a number of other suppliers including Inclusive Technology, Crick Software and Widgit.

## Loans and Technical Services

We also secured licenses for the FX Science and Maths packs from Efofex Software, an Australian company that provides accessible curriculum software for pupils with disabilities.

### Technical Support

83 instances of technical support were recorded, including support with configuring communication aids, troubleshooting

software problems, liaising with developers on improvements to products. This is a substantial increase compared to previous years (47 in 2008-09; 31 in 2007-08; 48 in 2006-07). Part of the increase reflects the support provided for pupils using high tech communication aids that require configuration and programming. A number of people required assistance with setting up the new version of *WordTalk* that was released in December 2008.

### Evaluation and Feedback

Borrowers are asked to complete a feedback form when returning equipment. There was feedback on the outcome of a loan for 58 of the 155 loans returned during this period.

- 79% of borrowers felt that the equipment borrowed met the needs of their clients;
- 41% of borrowers who provided feedback would try to purchase the equipment borrowed; 38% wished to try something else;
- “What a difference this simple machine has made to her self esteem. She thought it was wonderful and made her schoolwork easier to cope with. She no longer thought people called her “thick” because she was previously slow to finish her work.” - *Learning Support Teacher on loan of AlphaSmart portable writing aid*
- “Very useful service offered by CALL given the cost of equipment to buy - not knowing if it will meet child’s needs before buying, therefore loan service ideal.” - *Parent on loan of Tech Talk communication aid*
- “Equipment met and exceeded our expectations. Child benefited from the ease of use. ” - *Teacher on loan of touch screen*



# Continuing Professional Development

## Key Points about Continuing Professional Development in 2009-10

- CALL Scotland is a registered provider of Continuing and Professional Development through the CPD Find web site <http://www.ltscotland.org.uk/cpdscotland/cpdfind>;
- 14 CALL courses and 4 supplier-led Software Information Days were held at CALL. These were attended by 239 teachers, therapists and others;
- 48 CALL INSET courses were delivered to 813 members of staff in schools and centres across Scotland;
- CALL staff gave 7 conference presentations and exhibited at 8 conferences and events;
- CALL developed and delivered 2 4-day training events on Books for All, attended by 41 staff from across Scotland;
- CALL's ICT and Inclusion Roadshow visited Dingwall, Edinburgh and Glasgow and attracted nearly 400 participants;
- The Family Technology Fun Day, organised with Augmentative Communication in Practice: Scotland (ACiP:S) attracted 189 children and parents;
- The Adult Technology Discovery Day, also organised with ACiP:S, was attended by 24 adults along with carers and family members.

## Continuing Professional Development

As in previous years CALL continues to offer an annual programme of CPD and a variety of other training events. In addition to the courses run at CALL a wide range of INSET courses are successfully provided for schools and authorities across Scotland. Some of these are included in the 'menu' of courses provided to all local authority staff, others are specifically selected and customised by a school or authority to suit the needs of their staff and pupils. CALL can provide up to 24 laptops for hands on training at any venue and cover full day, half day, twilight and even Saturday sessions.

CALL also organises, or collaborates in the organisation of a number of other events, such as the annual ICT and Inclusion roadshow, the Augmentative Communication in Practice: Scotland annual Study Day and events for people who use augmentative and alternative communication and their families.

## The CALL CPD Programme

With the advent of Curriculum for Excellence CALL has ensured that the courses it offers are relevant and realistic. The CPD offered is very much based on good practice and is practical in its format. One of the strengths of the training is the 'hands on' aspect of almost all courses offered and this comes across in the course evaluations where this aspect is, time and again, picked out as what was liked best about a course. In addition, the support of experienced and knowledgeable staff during the training is regularly highlighted as being a strength of CALL courses.

CALL continues to be a registered provider of Continuing and Professional Development and the courses are on the LT Scotland CPD Find web site <http://www.ltscotland.org.uk/cpdfind> as well as being available to book on the CALL Scotland site <http://www.callscotland.org.uk/Training/Book-Training-Event>.

## Continuing Professional Development

Last year the grouping of the training under a few main themes proved successful and was continued for the 2009 -2010 courses. The courses were offered under the following five main themes:

- *Books for All*
- *SQA and Digital Exams*
- *Glow for All*
- *Technology and Software in Schools*
- *Accessible and Inclusive Communication*

This year saw a new course developed in conjunction with the Scottish Sensory Centre - Technology to Support Learning and Teaching of Pupils with Complex Sensory and learning Disabilities. This course was advertised through both centres and organised by CALL with a good uptake by participants.

Another new course for CALL was Creating Communication Friendly Schools. With Inclusion high on schools' agenda this course offered participants strategies, methods and

resources to help them create an environment that would be inclusive to all, including pupils with language and literacy difficulties.

Some of these courses have been developed specifically following requests from a school or authority. One school requested a course on 'Social Stories' which we developed for them with a particular ICT slant as 'Multimedia Social Stories'. This course was different from many of the others on offer so is now included in the CALL 2010 - 2011 programme of CPD.

### Software Days and Masterclasses

As well as the CALL-based courses there were four software information days provided by 2Simple, Crick, Inclusive and Texthelp. In addition to these more general days we hosted 'Masterclasses' for Widgeit software and *Boardmaker*. These particular days were for invited participants from a number of centres and some staff with a local authority remit supporting ICT for pupils with additional support needs. These companies are all at the forefront of education technology for pupils with additional support needs and these days

### INSET Courses provided for Schools and Local Authorities

There was a slight increase in the number of INSET courses provided in schools and centres from 47 in 2008-09 to 48 in 2009-10. Courses were provided in 18 different local authorities across Scotland. The CALL laptops were in great demand for this but the training was also delivered in local authority training rooms and school ICT suites where available.

Type of Training	2008-09	2009-10
Specific software ( <i>Boardmaker, Clicker</i> etc)	12	10
Accessibility and Inclusion	2	4
Accessible Adapted Digital Exams	10	6
AAC /Communication	1	4
Audio Resources	2	3
Books for All	7	12
CALL Services	1	2
Early Years Software	2	1
Listening to Children	6	0
Routes for Learning	2	1
Other	2	5

## Continuing Professional Development

provide CALL staff and all other participants with in depth knowledge of what is available and are also able to feedback to companies new ideas to develop and if any 'localisation' of the product would be beneficial for Scottish education. We also had our first 'webinar' provided by Dolphin and open to anyone who wanted to join in.

### ICT and Inclusion

The Annual CALL ICT and Inclusion Roadshow was held in June 2009, visiting Dingwall, Edinburgh and Glasgow. Up to 20 suppliers and organisations were represented in the exhibition at the heart of each day. Just under 400 teachers, therapists, parents, HE

and FE staff and other interested people attended one of the days. The 2009 Roadshow was organised in conjunction with the JISC Regional Support Centres based in Glasgow and Edinburgh. This collaboration made the days more relevant to staff from HE and FE,



### Evaluation and Feedback

All events and courses, whether in CALL or out on site, are routinely evaluated through a CALL or local authority evaluation form. 83% of the people attending courses within CALL were 'very satisfied with the course, while the remaining 17% were 'satisfied'. Local authority evaluation forms are all different, but where it was possible to measure overall satisfaction with courses held in schools and other centres, 71% of participants were 'very satisfied' with the course and 29% were 'satisfied'. We now carry out a 'long term' impact evaluation for a sample of courses each year, inviting participants to complete a short online survey, or a paper form, with questions aimed at measuring the impact of each course. Feedback was obtained on five courses several months after they took place. Overall, participants gave an average score of 4.74 (out of 5) for the courses increasing their subject knowledge and 4.18 for impact on their professional practice.

- 'This course is fantastic. We all felt this course is so worthwhile. What an excellent resource for all teaching staff. This is all so relevant for inspiring ways to deal with VI pupils, and pupils who have difficulty with reading and writing in the learning centre. There were great ideas in the day's inservice which I will put into practice.'  
- *Teachers on Books for All: Microsoft Word INSET*
- 'Superb course - will be interested in attending future courses with 'CALL'. Really helpful and knowledgeable staff.' - *VI Support Teacher*
- 'Great advice and ideas about using technology in practical sense. Good to share ideas with others attending the course.' - *Speech and Language Therapist on ICT and Early Years course*
- 'Well organised. I really enjoyed the day and am full of enthusiasm to go forward - 2 weeks from end of session - that's amazing!' - *Teacher on ICT and Inclusion*

# Research, Development & Knowledge Transfer



## Books for All



CALL's two 4-day specialist training courses in developing accessible alternative formats offered an excellent opportunity to evaluate not just how useful the training content was but also to analyse whether local authority systems were in place and ready to implement systems for making and distributing resources to pupils with print disabilities in the authority.

### Findings included:

- Most staff currently involved in producing materials in accessible formats address the needs of pupils with visual impairment which is a relatively low incidence disability, in comparison to for example those with physical disability or dyslexia.
- Relatively little sharing of resources, skills, structures or equipment takes place. This is true within authority services as well as across authorities.
- There is a lack of awareness of copyright exemption options.
- Current production workflow patterns are neither cost efficient nor cost effective. This applies within schools, within an authority and across authorities. There are potential savings to the public purse.
- There is a clear need to address the strategic context for producing accessible formats.
- Hands-on training from experts in the field was recognised as essential.

While these and other findings were somewhat disappointing, for CALL they were not surprising having been signalled as key to bringing about change in the 2007 Books for All

report. We hope in the coming year to work with LT Scotland, the Scottish Government and local authorities to influence the direction of change.

### Other areas of R&D in Books for All:

- Developing cost-effective procedures with DDSR, a document imaging firm in Wishaw, to scan textbooks into digital format.
- The development of the service with Hodder Education to provide accessible digital textbooks (see Strategic Leadership section).
- The Books for All web site was extended and revised and the "Finding Books" page offers links to many sources of accessible books. Currently over 2,000 visitors use the site every month.
- Collaboration with the Right to Read Alliance's eBook Working Group to create a user requirements specification for eBook readers and software.

### In 2010-11 we aim to:

- further develop mechanisms to create and distribute accessible formats;
- generate funds to work with CereProc to create a male Scottish computer voice;
- investigate how provision of accessible books impacts on pupils' opportunity to access the curriculum.

## Digital Papers



Over the past year CALL and SQA have continued to develop the digital papers themselves, and also to develop support materials for staff and pupils. In

November 2009 CALL hosted a Focus Group day for staff from schools; several improvements to papers were identified and SQA made these changes for the 2009 diet.

The work on digital papers has been disseminated both within and outside Scotland through presentations at conferences, articles and media reports and as a result of this the University of Birmingham engaged CALL to provide consultancy to an international study on accessible formats for examination papers for pupils with visual impairment.

There will be changes to SQA assessments as a result of Curriculum for Excellence and so SQA have asked CALL to research and prepare a report on the potential of Communication and Assistive Technologies to increase access to the new National Qualifications at SCQF levels 3, 4 and 5.

The digital papers can be magnified and resized for candidates with visual impairments; the text can be read out by the computer for those with dyslexia or visual impairment; and pupils with physical disabilities or handwriting problems can navigate the paper and type their answers on screen. There is also some evidence that the 'PDFaloud' text-to-speech, with highlighting as the text is spoken, can help candidates with hearing impairments. In a new development, SQA has asked CALL to advise on embedding video clips of British Sign Language translations of questions into the digital papers.

## Smart Wheelchair

Funding was provided from the University of Edinburgh IKT fund to develop new hardware and software to improve the track-following capability of the Smile Rehab Smart Platform. The new track following system adds two extra track sensors and improves detection at junctions. The Platform was developed by Smile Rehab and is essentially a mobile base fitted with Smart electronics. The advantage of the Platform over a Smart Wheelchair is that pupils do not need specially adapted seating: they can be wheeled on to the Platform in their own manual chairs or buggies



*HRH Prince Philip examining the Smart Wheelchair at a University of Edinburgh event to mark 40 years of commercialisation of research.*

and immediately experience the benefits of augmentative mobility.

## CALLtalk

CALLtalk is a communication vocabulary (or a 'page set') designed for pupils in school, available on a variety of different hardware and software platforms. CALLTalk continues to sell steadily (via the suppliers of specialised communication aids) in small numbers.

## Personal Communication Passports

Although it is now almost twenty years since the first Personal Communication Passport was devised by Sally Millar, there is a continuing steady flow of interest in Passports. Passports still provide one of the best possible ways to elicit and present core person-centred information, and as such can have a valuable role to play in the new national strategy on self-directed care.

There are requests from all over the world for permission to reproduce or otherwise use CALL's published work on Passports in other publications, guidelines, training materials etc. (and many other examples spotted of unacknowledged reproduction of CALL's work!)

A few courses are requested and delivered each year - this year both in Scotland and to Social Work staff in London. New developments in the training include the introduction of

## Research, Development and Knowledge Transfer

'E-Passport' possibilities - although many agree that the old-fashioned basic way is the best!

Nonetheless, CALL's emphasis at the moment is on developing the possibilities of a Passports 'App' for iPod/iPad, which would allow parents

and family an affordable and practical way to update the Passport frequently, make it attractively 'multimedia' which is a good way to engage the Passport holder him/herself, and make it highly 'portable' between settings.

### Papers, Articles and Conferences

#### Papers and articles

- Douglas, G., McCall, S, Pavey, S., Nisbet, P.D. (2009) *Summary report on international systems of exam access for visually impaired pupils*. Report for RNIB. Visual Impairment Centre for Teaching and Research (VICTAR), University of Birmingham.
- Millar, Sally (2009) *Meaningful Technology for Early Level Learners* publ. in *The SLD Experience*, No 53, Spring 2009 BILD
- Millar, Sally (2009) *Getting Started with Symbols for Communication and Writing* publ. in *e-quality*, No 6, Autumn/Winter 2009 JISC RSC Scotland N & E.
- Wilson, Allan (2009) *Reading Web Pages* publ. in *e-quality*, No 6, Autumn/Winter 2009 JISC RSC Scotland N & E.

#### Conference Presentations

- Nisbet, P.D. & Aitken, S. (2009) *Books for All*. ICT & Inclusion. 16-17 June 2009. <http://www.ictandinclusion.org.uk/>
- Millar, S. & Courtney, J. (2009) *Communication Friendly Schools*. ICT & Inclusion. 16-17 June 2009. <http://www.ictandinclusion.org.uk/>
- Wilson, A. (2009) *Text-to-speech and Web Browsers*. ICT & Inclusion. 16-17 June 2009. <http://www.ictandinclusion.org.uk/>
- Millar, S. (2009) *Communication Friendly Schools* Scottish Learning Festival, 23-24 September 2009.
- Nisbet, P.D. & Aitken, S. (2009) *Accessing Curriculum for Excellence through the Books for All Scotland Database*. Scottish Learning Festival 23-24 September 2009.
- Nisbet, P.D., O'Neill, S., & Aitken, S. (2009) *Are your Glow Materials Accessible?* Scottish Learning Festival 23-24 September 2009.
- Millar, S. (2009) *Communication Friendly Schools* HMIE/LTS National Conference on Autism, 20 November 2009.

#### • Media reports

- *Celebrating 25 years of assisting learning*. Infinite Issue 8. Edinburgh Research and Innovation, <http://www.research-innovation.ed.ac.uk>.

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CALL Scotland provides services and carries out research and development projects, working with all those involved in meeting the needs of people who require augmentative communication and/or specialised technology use, particularly in education.